

DR. D. Y. PATIL VIDYAPEETH

PUNE - 411 018

GLOBAL BUSINESS SCHOOL AND RESEARCH CENTRE

TATHAWADE, PUNE

SYLLABUS FOR MASTER OF BUSINESS ADMINISTRATION (M.B.A)

Academic Year: 2021-2022



ABOUT INSTITUTE:

Global Business School & Research Centre (GBSRC) situated at Tathwade, Pune is the flagship institute of Dr. D Y Patil Vidyapeeth, Pune. It was established in 2006. In a span of 15 years, the Institute has carved a name for itself amongst the top business schools of the country.

The Government of India, Ministry of Human Resource Development, on the advice of UGC, declared Dr. D. Y. Patil Vidyapeeth, Pune as deemed-to-be university comprising of Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pimpri, Pune vide its notification dated 11th January, 2003.

The Dr. D. Y. Patil Vidyapeeth, Pune has been Re-accredited by NAAC with a CGPA of 3.62 on a four point scale at 'A' grade on 3rd March, 2015, valid up to 2nd March 2020. The Dr. D. Y. Patil Vidyapeeth, Pune is also an ISO 9001: 2015 Certified University.

Under National Institutional Ranking Framework (NIRF) 2020, conducted by Ministry of Human Resource Development (MHRD), New Delhi, the Dr. D. Y. Patil Vidyapeeth, Pune has ranked 3rd in Dental Category, 24th in Medical Category, 46th in University Category and 75th in Overall Category in India.

Name of the Programme: Master of Business Administration (MBA)

Nature of the Programme: MBA is TWO YEAR FULL TIME Post-Graduate Degree Programme approved by AICTE with an intake of 240 students.

The revised curriculum for MBA is developed to bring into line the programme structure and course contents with student aspirants and corporate expectations. There was a need for revision of the curriculum in view of the global aspects of businesses and economies, vigor in the industry practices, developments in technology, appearance of new business and organizational Contents s and the developing prospects of key stakeholders viz. Students, Industry and Faculty members at large.

Exclusively the following expertise place are in focus:

- 1. Problem Definition and Analytical Skills
- 2. Relevance of Technology Tools
- 3. Quantitative Aspects
- 4. Ability to Work in groups
- 5. Communication Skills
- 6. Reading and Listening Skills
- 7. Cross-Cultural Skills

MBA Programme Education Objectives: The objective of the MBA programme is to educate and prepare a varied group of aspirants with the knowledge, analytical ability and management perspectives and skills needed to provide leadership to organizations competing in a world increasingly characterized by diversity in the workforce, rapid technological change and a severely competitive global marketplace. It displays competencies and knowledge in key



business functional areas including accounting, finance, marketing, human resource, operations, logistics, supply chain, international business, anaytics etc.

Specifically the objectives of the MBA programme are:

- 1. Demonstrate global and cross cultural understanding for exploring **innovative business practices** to enhance profitability.
- 2. Exhibit **leadership skills** in diversified and multidisciplinary areas.
- 3. Practice analytical and problem solving competencies in various facets of management.
- 4. **Communicate effectively** with all stakeholders of the organization and society.
- 5. Exhibitentrepreneurial skills.
- 6. Take **ethical decisions** in day to day activities.

Pattern: The Programme comprises of 4 semesters and adopts the Choice Based Credit System (CBCS) and Grading System. Each semester includes the core subjects and also value added activities like Personality development, Corporate Grooming; Skill Developments etc.

Semester	Credits
I	27
II	27
III	31
IV	19
Total	104



COURSE STRUCTURE: SINGLE SPECIALIZATION

SEMESTER: I

Course	(ourse lifte		Marks	Total	Credits	_ ~	o. o		Total Sessions				
Code	000220 23020	Internal	External	2 0 0002	0100108	L	T	P	(hrs)				
MB101	Principles And Practices of Management	50	50	100	3	40(5		45				
MB102	Organizational Behavior	50	50	100	3	40	5	-	45				
MB103	Accounting for Business Decisions	50	50	100	3	40	5	-	45				
MB104	Managerial Economics	50	50	100	3	40	5	ı	45				
MB105	Basics of Marketing	50	50	100	3	40	5	-	45				
MB106	Business Law	50	50	100	3	40	5	-	45				
MB107	Statistics and Quantitative Techniques	50	50	100	3	40	5	ı	45				
MB108	Business Communication	50	50	100	3	40	5	-	45				
MB109	Domain Elective -I (Only 1)		\supset				•						
I	Introduction to Agribusiness Management												
II	Introduction to Finance	>											
III	Personnel Administration and Documentation												
IV	Introduction to Pharmaceutical Business Environment												
V	Introduction to Life Sciences, Biotechnology and Bioinformatics	50	50	100	2	25	5	-	30				
VI	Introduction to IT												
VII	Introduction to International Business												
VIII	Healthcare and Hospital Management												
IX	Introduction to Operations and Supply Chain Management												
X	Introduction to Business Analytics												
MB110	Disaster Management	_	_		1	10	3	2	15				
	Total			900	27								



SEMESTER: II

Course	Course Title	Ma	nrks	Total	Credits		o. o		Total Sessions
Code		Internal	External			L	T	P	(hrs)
MB201	Marketing Management	50	50	100	3	40	5	-	45
MB202	Financial Management	50	50	100	3	40	5		45
MB203	Human Resource Management	50	50	100	3	40	5	()	45
MB204	Operations Management	50	50	100	3	40	5	-	45
MB205	Research Methodology for Managers	50	50	100	3	40	5	-	45
MB206	Data Analytics	50	50	100	3	40	5	-	45
MB207	Emotional and Spiritual Intelligence for Managerial Effectiveness	50	50	100	3	40	5	ı	45
MB208	Entrepreneurship Development and Project Management	50	50	100	3	40	5	-	45
MB208A	Entrepreneurship Development		50	100	3	40	5	-	45
MB209	Domain Elective -II (Only 1)								
I	Management of Agriculture and Allied sciences	7							
II	Financial Markets and Services								
III	Training and Development								
IV	Pharmaceutical Management								
V	Application and Methodology of Biotechnology	50	50	100	2	25	5	_	30
VI	IT in Business Management		30	100		23			30
VII	Export and Import Management								
VIII	Hospital Administrations								
IX	Production and Operations Management								
X	Applications of Business Analytics								
MB210	Industry Sectoral Analysis	-	-	-	1	10	3	2	15
	Total			900	27				



SEMESTER: III

Course	Course Title	Ma	Marks Total Credit		Credits		o. o ssior		Total Sessions
Code		Internal	External			L	T	P	(hrs)
MB301	Strategic Management	50	50	100	3	40	5	-	45
MB302	Start Up and New Venture Management	50	50	100	3	40	5		45
	Choice of any	6 Courses	from MB30	3 To ME	3309			\	
MB303	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB304	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB305	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB306	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB307	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB308	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB309	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45
MB310	Introduction to Cyber Security	(-)	-	1	1	10	3	2	15
MB311	Summer Internship Project (SIP)	50	50	100	6	-	-	-	60 Days
	Total			900	31				

SEMESTER: IV

Course Course Title		Ma	Marks		Credits	No. of Sessions			Total Sessions	
Code		Internal	External	Total		L	T	P	(hrs)	
	Choice of any 5 Courses from MB401 To MB407									
MB401	Specialization Paper Cases in Management (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45	
MB402	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45	
MB403	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45	



Course	Course Title	Ma	Marks		Credits	No. of Sessions			Total Sessions	
Code		Internal	External			L	T	P	(hrs)	
MB404	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45	
MB405	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	1	45	
MB406	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5		45	
MB407	Specialization Paper (A/B/C/D/E/F/G/H/I/J/K)	50	50	100	3	40	5	-	45	
MB408	Business Ethics	_	-	-	Î Î	10	3	2	15	
MB409	Design Thinking	50 50		100	3	40	5	-	45	
	Total			600	19					



GRADUATE ATTRIBUTES

Management Graduates are expected to have the following attributes:

- 1. Professional with comprehensive knowledge of Management Sciences and competence in business sustainability, profitability, entrepreneurship and commercializing new business/products.
- 2. Problem solver with critical thinking and decision making skills to identify, analyze and solve complex business problems.
- **3.** Effective communicator with professional colleagues and society at large.
- **4.** Researcher with ability to conduct management research of highest standards and make significant contribution to innovative management practices.
- **5.** Ethical and professional in conduct of research and accountability towards community and profession.
- **6.** Leader who works in teams, exhibits leadership qualities, soft skills and technical skills to enhance business performance, including multidisciplinary settings.
- 7. Socially responsive with ability to recognize and respond to community problems and need for improving management practices, particularly healthcare/agricultural/corporate sectors.
- **8.** Action oriented and active contributor to environment conservation and sustainability practice through innovation and best practices.
- **9.** Lifelong learner who learns new knowledge and skills in a continuous self directed manner and as per need of the time.

PROGRAMME OUTCOMES (POs)

The management gratuates will be able to:

POs	Attributes	Statement/Definition
1	Knowledge and Skills	Acquire managerial knowledge and skills for effective decision making.
2	Planning and Problem Solving abilities	Exercise planning for accomplishing organizational goals and develop problem solving abilities in the functional areas of management.
3	Communication	Develop effective business communication with the use of advanced technology.
4	Research Aptitude	Develop research aptitude for developing solutions to business problems.
5	Professionalism and Ethics	Acquire professional approaches and understand ethical responsibilities in business organizations.
6	Leadership	Demonstrate leadership qualities that maximize the use of diverse skills of team members towards attainment of the goals.



POs	Attributes	Statement/Definition				
7	Societal Responsibilities	Learn and accept social responsibilities and working for the welfare of the society at large.				
8	Environment and Sustainability	Understand the effect of organizational interventions in environmental contexts and the acquaintance for sustainable development.				
9	Lifelong Learner	Engage in life-long learning in order to upgrade self-knowledge, skills and experience for enhancement of outcomes.				

PROGRAM SPECIFIC OUTCOMES (PSOs)

The management gratuates will be able to:

	lagement gratuates v	
PSOs	Attributes	Statement/Definition
1	Proficiency	Demonstrate proficiency in specialized areas of management such as a) Marketing Management b) Agribusiness Management c) Financial Management d) Human Resource Management e) Pharmaceutical Management f) Biotech and Bioinformatics Management g) IT and Systems Management h) International Busienss Management i) Hospital and Healthcare Management j) Operations and Supply Chain Management k) Búsiness Analystics
2	Multidisciplinary Knowledge	Inculcate the ability for acquisition of multidisciplinary knowledge through simulated problems, case studies, projects-based learnings, internships, corporate sessions, seminars, conferences and choice based credit system.

EVALUATION SYSTEM

Pattern of Examination:

The 'Evaluation Scheme' comprises of Concurrent (Continuous) Evaluation & University Evaluation. The 'Evaluation Scheme' for '2 Credit', '3 Credit', and '6 Credit' courses will be as follows:

Sr. No.	Course	Concurrent Evaluation (Internal)	University Evaluation (External)	Total Marks
1	2 Credit	50%	50%	100
2	3 Credit	50%	50%	100
3	6 Credit	50%	50%	100



Project Evaluation:

Sr. No.	Courses	Duration	Assessment of Project Work & Report	Viva Voce	Total Marks
1	Project	2 months (60 Days)	50 Marks	50 Marks	100 Marks

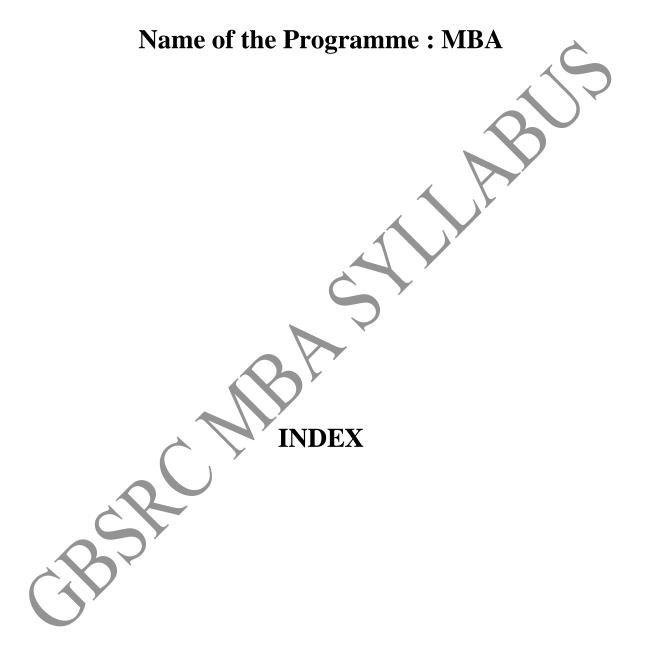
ACADEMIC RESULT AND GRADING SCHEME:

Passing Percentage:

The passing criteria comprises of the following:

Every student must secure minimum 40% marks in both internal evaluation and external evaluation independently.







SINGLE SPECIALIZATION

COURSE CODE	COURSE NAME	PAGE NO.
	SEMESTER: I	
MB101	Principles and Practices of Management	23
MB102	Organizational Behavior	25
MB103	Accounting for Business Decisions	27
MB104	Managerial Economics	29
MB105	Basics of Marketing	31
MB106	Business Law	33
MB107	Statistics and Quantitative Techniques	35
MB108	Business Communication	37
MB109	Domain Elective I (Only 1)	
I	Introduction to Agribusiness Management	39
II	Introduction to Finance	41
III	Personnel Administration and Documentation	43
IV	Introduction to Pharmaceutical Business Environment	45
V	Introduction to Life Sciences, Biotechnology and Bioinformatics	47
VI	Introduction to IT	49
VII	Introduction to International Business	51
VIII	Healthcare and Hospital Management	53
IX	Introduction to Operations and Supply Chain Management	55
X	Introduction to Business Analytics	57
MB110	Disaster Management	59
AX	SEMESTER: II	
MB201	Marketing Management	62
MB202	Financial Management	64
MB203	Human Resource Management	66
MB204	Operations Management	68
MB205	Research Methodology for Managers	70
MB206	Data Analytics	72



COURSE CODE	COURSE NAME	PAGE NO.
MB207	Emotional and Spiritual Intelligence for Managerial Effectiveness	74
MB208	Entrepreneurship Development and Project Management	76
MB208A	Entrepreneurship Development in Agri sector (Only for ABM Specialization instead of MB 208)	78
MB209	Domain Elective II (Only 1)	
I	Management of Agriculture and Allied sciences	80
II	Financial Markets and Services	82
III	Training and Development	84
IV	Pharmaceutical Management	86
V	Application and Methodology of Biotechnology	89
VI	IT in Business Management	91
VII	Export and Import Management	93
VIII	Hospital Administrations	95
IX	Production and Operations Management	96
X	Applications of Business Analytics	98
MB210	Industry Sectoral Analysis	100

SEMESTER III

MB301	Strategic Management	102	l
MB302	Start Up and New Venture Management	104	l

MARKETING MANAGEMENT SPECIALIZATION

	Select Any 6 Courses from MB303 To MB309	
MB303A	Specialization Paper (A): Sales & Distribution Management	106
MB304A	Specialization Paper (A): Digital Marketing	108
MB305A	Specialization Paper (A): Product & Brand Management	110
MB306A	Specialization Paper (A): Consumer Behaviour	112
MB307A	Specialization Paper (A): Integrated Marketing Communications	114
MB308A	Specialization Paper (A): Marketing Research	116
MB309A	Specialization Paper (A): Rural Marketing	118



AGRIBUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	COURSE NAME	PAGE NO.
	Select Any 6 Courses from MB303 To MB309	
MB303B	Specialization Paper (B): Current Trends in Agri Business Management	120
MB304B	Specialization Paper (B): Livestock Management and Fodder Technology	122
MB305B	Specialization Paper (B): Management of Agricultural Engineering Business	124
MB306B	Specialization Paper (B): Marketing of Agri -Inputs & Outputs	126
MB307B	Specialization Paper (B): Post-harvest technology & Management	128
MB308B	Specialization Paper (B): Agri Import & Export Management	130
MB309B	Specialization Paper (B): Emerging Trends in Organic Farming	132

FINANCIAL MANAGEMENT SPECIALIZATION

	Select Any 6 Courses from MB303 To MB309		
MB303C	Specialization Paper (C): Advanced Corporate Finance	134	
MB304C	Specialization Paper (C): Fixed Income Securities	136	
MB305C	Specialization Paper (C): Financial Derivatives	138	
MB306C	Specialization Paper (C): Taxation	140	
MB307C	Specialization Paper (C): Security Analysis & Portfolio Management	142	
MB308C	Specialization Paper (C): Analysis of Financial Statements	144	
MB309C	Specialization Paper (C): Financial Technology	146	

HUMAN RESOURCE MANAGEMENT SPECIALIZATION

	Select Any 6 Courses from MB303 To MB309		
MB303D	Specialization Paper (D): Human Resource Planning	148	
MB304D	Specialization Paper (D): Talent Acquisition and Staffing	150	
MB305D	Specialization Paper (D): Human Resource Development	152	
MB306D	Specialization Paper (D): Performance & Compensation Management	154	
MB307D	Specialization Paper (D): Labour Laws	156	
MB308D	Specialization Paper (D): Strategic HRM	158	
MB309D	Specialization Paper (D): HR Analytics	160	



PHARMA MANAGEMENT SPECIALIZATION

COURSE CODE	COURSE NAME	PAGE NO.
	Select Any 6 Courses from MB303 To MB309	
MB303E	Specialization Paper (E): Anatomy, Physiology and Health Education	162
MB304E	Specialization Paper (E): Management of Multinational Pharmaceuticals	164
MB305E	Specialization Paper (E): Business Leadership in Pharma	166
MB306E	Specialization Paper (E): Pharma Product & Brand Management	168
MB307E	Specialization Paper (E): Pharma Sales, Distribution & Retail Management	170
MB308E	Specialization Paper (E): Pharmaceutical Manufacturing & regulatory Affairs	172
MB309E	Specialization Paper (E): Pharmaceutical Management Information System	174

BIOTECHNOLOGY AND BIOINFORMATICS SPECIALIZATION

Select Any 6 Courses from MB303 To MB309		
MB303F	Specialization Paper (F): Principles of Immunology	176
MB304F	Specialization Paper (F): Computational Biology and Bioinformatics	178
MB305F	Specialization Paper (F): Intellectual Property rights and Technology Transfer in Biotechnology	180
MB306F	Specialization Paper (F): Food technology and fundamentals of production planning	182
MB307F	Specialization Paper (F): Ethics, biosafety and hazard management in biotechnology	184
MB308F	Specialization Paper (F): Environmental biotechnology and environment management	186
MB309F	Specialization Paper (F): Fundamentals of Nanotechnology	188

IT AND SYSTEMS MANAGEMENT SPECIALIZATION

	Select Any 6 Courses from MB303 To MB309		
MB303G	Specialization Paper (G): Cloud Computing	190	
MB304G	Specialization Paper (G): Software Quality Management	192	
MB305G	Specialization Paper (G): E-Business and Business Intelligence	195	
MB306G	Specialization Paper (G): E- Commerce & Social Media Marketing	197	
MB307G	Specialization Paper (G): Database Management System	199	



COURSE CODE	COURSE NAME	PAGE NO.
MB308G	Specialization Paper (G): Supply Chain Management Information Systems	200
MB309G	Specialization Paper (G): Software Project Management	202

INTERNATIONAL BUSINESS MANAGEMENT SPECIALIZATION

	Select Any 6 Courses from MB303 To MB309	5
MB303H	Specialization Paper (H): International Business Environment and Trade Institutions	204
MB304H	Specialization Paper (H): International Business Economies	206
MB305H	Specialization Paper (H): Emerging Trends in International Business	208
MB306H	Specialization Paper (H): International Trade, WTO & Trade Policy issues	210
MB307H	Specialization Paper (H): Intellectual Property Rights	212
MB308H	Specialization Paper (H): International Banking	214
МВ309Н	Specialization Paper (H): International Logistics & Supply Chain Management	216

HOSPITAL AND HEALTHCARE MANAGEMENT SPECIALIZATION

HOSTITAL AND HEALTHCARE MANAGEMENT SI ECIALIZATION		
Select Any 6 Courses from MB303 To MB309		
MB303I	Specialization Paper (I): Medical Tourism and Transnational Healthcare	218
MB304I	Specialization Paper (I): Management of Mediclaim and TPAs in Hospitals	220
MB305I	Specialization Paper (I): Essentials for Training & Development for Healthcare Professionals	222
MB306I	Specialization Paper (I): Community Health Management	224
MB307I	Specialization Paper (I): Laws Related to Hospital & Medical Services	225
MB308I	Specialization Paper (I): Management of Hospital information System	227
MB309I	Specialization Paper (I): Quality & Accreditation in Healthcare Sector	229

OPERATIONS AND SUPPLY CHAIN MANAGEMENT SPECIALIZATION

Select Any 6 Courses from MB303 To MB309		
MB303J	Specialization Paper (J): Inventory Management	231
MB304J	Specialization Paper (J): Quality Management	233



COURSE CODE	COURSE NAME	PAGE NO.
MB305J	Specialization Paper (J): Service Operations Management	235
MB306J	Specialization Paper (J): Operations Research & Management	237
MB307J	Specialization Paper (J): Logistics Management	239
MB308J	Specialization Paper (J): Supply Chain Management	241
MB309J	Specialization Paper (J): Operations Strategy	243

BUSINESS ANALYTICS SPECIALIZATION

MB303KSpecialization Paper (K): Workforce Analytics245MB304KSpecialization Paper (K): Analytics for Marketing248MB305KSpecialization Paper (K): Retail Analytics251MB306KSpecialization Paper (K): Analytics for Business Functions253MB307KSpecialization Paper (K): Performing Analytics with Python255MB308KSpecialization Paper (K): Machine Learning with R Programming257MB309KSpecialization Paper (K): Descriptive Analytics and Data259	Select Any 6 Courses from MB303 To MB309		
MB305K Specialization Paper (K): Retail Analytics 251 MB306K Specialization Paper (K): Analytics for Business Functions 253 MB307K Specialization Paper (K): Performing Analytics with Python 255 MB308K Specialization Paper (K): Machine Learning with R Programming 257 MB309K Specialization Paper (K): Descriptive Analytics and Data 259	MB303K	Specialization Paper (K): Workforce Analytics	245
MB306K Specialization Paper (K): Analytics for Business Functions 253 MB307K Specialization Paper (K): Performing Analytics with Python 255 MB308K Specialization Paper (K): Machine Learning with R Programming 257 MB309K Specialization Paper (K): Descriptive Analytics and Data 259	MB304K	Specialization Paper (K): Analytics for Marketing	248
MB307K Specialization Paper (K): Performing Analytics with Python 255 MB308K Specialization Paper (K): Machine Learning with R Programming 257 MB309K Specialization Paper (K): Descriptive Analytics and Data 259	MB305K	Specialization Paper (K): Retail Analytics	251
MB308K Specialization Paper (K): Machine Learning with R Programming 257 MB309K Specialization Paper (K): Descriptive Analytics and Data 259	MB306K	Specialization Paper (K): Analytics for Business Functions	253
MB309K Specialization Paper (K): Descriptive Analytics and Data	MB307K	Specialization Paper (K): Performing Analytics with Python	255
MRAIIUK I - 1 /39	MB308K	Specialization Paper (K): Machine Learning with R Programming	257
visualization (Osing Tableau)	MB309K	Specialization Paper (K): Descriptive Analytics and Data Visualization (Using Tableau)	259

MB310	Introduction to Cyber Security	262
MB311	Summer Internship Project (SIP)	264

SEMESTER IV MARKETING MANAGEMENT SPECIALIZATION

	Select Any 5 Courses from MB401 To MB407		
MB401A	Specialization Paper (A): Cases in Management (Marketing)	268	
MB402A	Specialization Paper (A): Services Marketing	270	
MB403A	Specialization Paper (A): B2B Marketing	272	
MB404A	Specialization Paper (A): Retail Management	274	
MB405A	Specialization Paper (A): International Marketing	276	
MB406A	Specialization Paper (A): Strategic Marketing	278	
MB407A	Specialization Paper (A): Marketing of Financial Services	280	



AGRIBUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	COURSE NAME	PAGE NO.
	Select Any 5 Courses from MB401 To MB407	
MB401B	Specialization Paper (B): Cases in Management (Agribusiness)	282
MB402B	Specialization Paper (B): Agricultural Economic	284
MB403B	Specialization Paper (B): Framework of ICT in Agribusiness. Management	286
MB404B	Specialization Paper (B): Rural Credit & Urban Finance for Agriculture	288
MB405B	Specialization Paper (B): Procurement and Warehouse Management	290
MB406B	Specialization Paper (B): Management of Agri Cooperatives	292
MB407B	Specialization Paper (B): Agricultural Risk Management and Crop Insurance	294

FINANCIAL MANAGEMENT SPECIALIZATION

Select Any 5 Courses from MB401 To MB407		
MB401C	Specialization Paper (C): Cases in Management (Finance)	296
MB402C	Specialization Paper (C): Corporate Financial Restructuring	298
MB403C	Specialization Paper (C): Equity Research	300
MB404C	Specialization Paper (C): Financial Modelling	302
MB405C	Specialization Paper (C): Insurance and Risk management	304
MB406C	Specialization Paper (C): Strategic Financial Management	306
MB407C	Specialization Paper (C): Behavioral Finance	308

HUMAN RESOURCE MANAGEMENT SPECIALIZATION

	Select Any 5 Courses from MB401 To MB407		
MB401D	Specialization Paper (D): Cases in Management (HR)	310	
MB402D	Specialization Paper (D): Knowledge Management	312	
MB403D	Specialization Paper (D): HR Perspectives in Mergers & Acquisitions	314	
MB404D	Specialization Paper (D): Organizational Change & Development	316	
MB405D	Specialization Paper (D): International HRM	318	
MB406D	Specialization Paper (D): Talent Retention & Employee Engagement	320	
MB407D	Specialization Paper (D): Competency Mapping and Career Development	322	



PHARMA MANAGEMENT SPECIALIZATION

COURSE CODE	COURSE NAME	PAGE NO.
	Select Any 5 Courses from MB401 To MB407	
MB401E	Specialization Paper (E): Cases in Management (Pharma)	324
MB402E	Specialization Paper (E): Advertising and Service Management in Pharmaceutical Industry	326
MB403E	Specialization Paper (E): Pharma and Healthcare Management	328
MB404E	Specialization Paper (E): Intellectual Property rights & Legal aspects in Pharmaceutical Industry	330
MB405E	Specialization Paper (E): Pharmaceutical Export Management	332
MB406E	Specialization Paper (E): Marketing strategy and product launch Dynamics	334
MB407E	Specialization Paper (E): Pharmaceutical Advance Human Resource Management	336

BIOTECHNOLOGY AND BIOINFORMATICS SPECIALIZATION

Select Any 5 Courses from MB401 To MB407		
MB401F	Specialization Paper (F): Cases in Management (Biotech &	338
1,12,1011	Bioinformatics)	
MB402F	Specialization Paper (F): Biotechnology Social, Legal and Ethical	340
WID4021	Issues	340
MB403F	Specialization Paper (F). Biotech Industry and Post Pandemic	2.40
MD403F	Resilience Management	342
MD404E	Specialization Paper (F): Fermentation Technology and Industrial	344
MB404F	Biotechnology	344
MD 405E	Specialization Paper (F): Advances in Biotechnology and	246
MB405F	Bioinformatics	346
MB406F	Specialization Paper (F): Agricultural Biotechnology	348
1112 1001		
MB407F	Specialization Paper (F): Biotechnology and Pharma Plant	350
	Management	220

IT AND SYSTEMS MANAGEMENT SPECIALIZATION

	Select Any 5 Courses from MB401 To MB407		
MB401G	Specialization Paper (G): Cases in Management (IT & Systems Management)	352	
MB402G	Specialization Paper (G): E- Governance and Framework of ICT	354	
MB403G	Specialization Paper (G): E-Learning Tools and Methods	356	
MB404G	Specialization Paper (G): Innovation and Technology Management	358	



COURSE CODE	COURSE NAME	PAGE NO.
MB405G	Specialization Paper (G): Marketing of Information Technology	360
MB406G	Specialization Paper (G): Knowledge Management System	362
MB407G	Specialization Paper (G): Enterprise Resource Planning	364

INTERNATIONAL BUSINESS MANAGEMENT SPECIALIZATION

Select Any 5 Courses from MB401 To MB407		
MB401H	Specialization Paper (H): Cases in Management (International	366
	Business Management) Specialization Paper (II): Legal Framework for International	
MB402H	Specialization Paper (H): Legal Framework for International Business	368
MB403H	Specialization Paper (H): Global Market Research	370
MB404H	Specialization Paper (H): International Marketing	372
MB405H	Specialization Paper (H): International Finance & Forex Management	374
MB406H	Specialization Paper (H): International Business Strategy	376
MB407H	Specialization Paper (H): Export Import Procedures & Documentation	378

HOSPITAL AND HEALTHCARE MANAGEMENT SPECIALIZATION

Soloot Any 5 Courses from MP401 To MP407		
Select Any 5 Courses from MB401 To MB407		
MB401I	Specialization Paper (I): Cases in Management (Hospital & Health Care Management)	
MB402I	Specialization Paper (I): Financial Management of Hospital and Healthcare Organizations 382	
MB403I	ISpecialization Paper (I): Introduction of Artificial Intelligence in Healthcare	384
MB404I	Specialization Paper (I): Management of Corporate Hospitals 385	
MB405I	Specialization Paper (I): Hospital Waste & Hygiene Management 387	
MB406I	Specialization Paper (I): Marketing of Hospital & Health Care Services	389
MB407I	Specialization Paper (I): Planning & Management of Hospital Clinical & Supportive Services	391

OPERATIONS AND SUPPLY CHAIN MANAGEMENT SPECIALIZATION

Select Any 5 Courses from MB401 To MB407		
MB401J	Specialization Paper (J): Cases in Management (Operations &	393
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COURSE CODE	COURSE NAME	PAGE NO.
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MB404J	Specialization Paper (J): Management of Manufacturing system	399
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MB406J	Specialization Paper (J): Innovation & R & D Management	403
MB407J	Specialization Paper (J): World Class Manufacturing	405

BUSINESS ANALYTICS SPECIALIZATION

Select Any 5 Courses from MB401 To MB407		
MB401K	Specialization Paper (K): Cases in Management (Business Analytics)	407
MB402K	Specialization Paper (K): Artificial Intelligence in Business Applications	410
MB403K	Specialization Paper (K): Supply Chain Analytics 412	
MB404K	Specialization Paper (K): Data Visualization for Managers 414	
MB405K	Specialization Paper (K): Security & Master Data Management 416	
MB406K	Specialization Paper (K): Internet of Things 418	
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GLOBAL BUSINESS SCHOOL AND RESEARCH CENTRE DR. D. Y. PATIL VIDYAPEETH, PUNE

(Re-accredited by NAAC with ACGPA of 3.62 on four point scale at 'A' grade)
An ISO 9001:2015 Certified University

Name of the Programme: MBA

Name of Semester: SEMESTER I

COURSE CODE	MB101
COURSE TITLE	PRINCIPLES AND PRACTICES OF MANAGEMENT
COURSE CREDITS	3

Students examine basic framework for understanding the role and functions of management and an explanation for the principles, concepts and techniques that can be used in carrying out these functions. Topics include planning, organizing, staffing, leading and controlling, as well as decision-making and managing change

Course Objectives:

- 1. To expose the students to basic concepts of management.
- 2. To enable them to gain appreciation for emerging ideas, techniques, procedures and practices in the field of management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to UNDERSTAND and
101.1	Understanding	communicate the management concepts and how it will
		affect future managers.
		The student will be able to EXPLAIN how organizations
101.2	Remembering	adapt to an uncertain environment and identify techniques
101.2	Remembering	managers use to influence and control the internal
		environment.
	Applying	The student will be able to PRACTICE the process of
101.3		management's four functions: planning, organizing,
		leading, and controlling.
101.4	Analyzing	The student will be able to ANALYZE leadership styles to
101.4		anticipate the consequences of each leadership style.
	Remebering	The student will be able to IDENTIFY and analyze social
101.5		responsibility and ethical issues involved in business
		situations and logically articulate own position on such
		issues.

Course Contents:

Unit 1: Introduction to Management

Definition of Management, Management: Science, Theory and Practice- Development of Management Thought Contribution of Taylor and Fayol Management and Society: The ExternalEnvironment, Managerialskills, Functions of Management, Business Ethicsand Social Responsibility - Global and Comparative Management.

Unit 2: Planning

Planning - Steps in Planning Process - Scope and Limitations - Short Range and Long Range Planning - Objectives, Setting Objectives, Flexibility in Planning ¬Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies - Scope and Formulation - DecisionMaking - Techniques and Processes.

Unit 3: Organising

Organising - Organisation Structure and Design - Authority and ResponsibilityRelationships - Delegation of Authority and Decentralisation - Interdepartmental Coordination - Emerging Trends in Corporate Structure, Strategy and Culture - Impact of Technology on Organisational design - Mechanistic vs Adoptive Structures - Formal and Informal Organisation-Departmentation, staffing – selectionprocess –techniques- HRD.

Unit 4: Directing and Controlling

Directing: Scope, HumanFactors, Creativity and Innovation, Harmonizing Objectives, Leadership styles, Types of Leadership Motivation, Hierarchy of Needs, Motivation theories, MotivationalTechniques, The System and Process of Controlling - Control Techniques and Information Technology - Requirements for effective control, The Budget as Control Technique, Productivity, Problems and Management, Control of Overall Performance, Direct and Preventive Control, Reporting.

Unit 5 : Management practices

Comparative Management Styles and approaches - Japanese Management Practices OrganisationalCreativity and Innovation - Management of Innovation - Entrepreneurial Management - Benchmarking - Best Management Practices across the world - Select cases of Domesticand International Corporations - Management of Diversity.

Suggested Readings:

- 1. Weihrich Heinz and Koontz Harold Management: A Global and Entrepreneurial Perspective (Mc Graw Hill, 12th Edition 2008).
- 2. Stoner, Freeman and Gilbert Jr Management (Prentice Hall of India, Latest Edition).
- 3. Bateman, Management (SIE), Tata McGraw-Hill PublishingCompany, New Delhi.
- 4. Fraidoon Mazda, "Engineering Management", Addison Wesley, 2000.
- 5. Hillier Frederick S. and Hillier Mark S. Introduction to Management Science: A Modeling and Case StudiesApproachwithSpreadsheets (Tata Mc Graw Hill, 2nd Edition 2008).
- 6. JAF Stomer, Freeman R. E and Daniel R Gilbert Management, Pearson Education, Sixth Edition, 2004.
- 7. Koontz Principles of Management (Tata Mc Graw Hill, 1st Edition 2008).
- 8. Massie, Joseph L., Essentials of Management, Pearson Education.
- 9. Robbins and Coulter Management (Prentice Hall of India, 8thEdition).
- 10. Robbins S.P. and Decenzo David A. Fundamentals of Management: Essential Concepts and Applications (Pearson Education, 5th Edition).
- 11. Tripathy PC and Reddy PN, "Principles of Management", Tata McGraw-Hill, 1999.

COURSE CODE	MB102
COURSE TITLE	ORGANISATIONAL BEHAVIOUR
COURSE CREDITS	3

This course serves as an introduction to the field of organizational behaviour (OB) and provides a foundation for other OB courses offered in the Faculty of Business. It covers a wide breadth of theories and applications dealing with such topics as perception, motivation, decision making, team dynamics, negotiation, conflict management, leadership, and organizational culture. Twelve lessons, covering twelve chapters in the textbook, are presented in a logical order to create a sense of progression for the students. Each lesson builds upon previous lessons by starting at the individual level, then moving on to a team level, and finally adopting an organization-wide level of analysis.

The goal of this course is to help you develop a conceptual understanding of OB theories and provide you with skills to put those ideas and theories into practice. Key techniques and processes designed to improve organizational efficiency and effectiveness are fully examined from the perspective of management, workers, and society at large.

Course Objectives:

- 1. To understand the concepts of organizational behavior and its application in managing people.
- 2. To understand individual behavior in organization including Personality, Attitude, Motivation.
- 3. To understand group behavior in organizations, including Group Dynamics, Teams, Conflict Management, stress management and change management.
- 4. To understand the basic concepts and functions of management.
- 5. To identify the key competencies needed to be an effective Manager.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to UNDERSTAND individual and
102.1	Understanding	group behavior, and understand the implications of
		organizational behavior on the process of management
		The student will be able to EXPLAIN organizational
102.2	Remembering	behavioral issues in the context of organizational behavior
) `	theories, models and concepts
	Y	The student will be able to PRACTICE critical thinking
102.3	Applying	when presented with managerial problems and express
102.5		their views and opinions on managerial issues in an
		articulate way.
		The student will be able to ANALYZE the importance of
102.4	Analyzing	the management process and identify some of the key skills
		required for the contemporary management practice.
102.5	A natrin a	The student will be able to PRACTICE organizational
	Applying	justice at workplace.

Course Contents:

Unit 1: Introduction to Organizational Behavior and Perception Process

Definition, Concept and Importance, Different models of OB - autocratic, custodial, supportive, collegial and SOBC, Models of OB, Nature and Importance, Relationship between management and organisational behaviour.

Unit 2 : Individual level behavioral variables – 1 (Personality, Perception)

Introduction, Personality- Definition and Determinants, Personality Traits, Personality Theories(Psychoanalytic Theory, Socio-Psychological Theory, Trait Theory, Self Theory). Perception: Nature and Importance, Perceptual Selectivity, Perceptual Organization, Social Perception.

Unit 3: Individual level behavioral variables – (Values, Attitudes Motivation and Learning):

Introduction, Values, Attitudes, Theories of Attitude(Cognitive-Consistency Theories Functional Theories, Social Judgment Theories) Definition and Importance of Motivation, Early Theories in Motivation (Maslow's Hierarchy of Needs Theory, McGregor's Theory X and Theory Y, Herzberg's Two-Factor Theory) Contemporary Theories in Motivation(ERG Theory, McClelland's Theory of Needs, Goal-Setting Theory). Introduction, Types of Behavioural learning, Learning and its Applications in Organizations.

Unit 4 : Group level behavioral (The group):

Introduction, Concept of Groups, Stages of Group Formation and Group Process, Definition and Overview of a Team, Seventeen Characteristics of an Effective Team, Conflict Management-Traditional vis-à-vis Modern view of conflict, Constructive and Destructive conflict, Conflict Process, Levels of Conflict, Strategies for Conflict resolution.

Unit 5 : Stress management, Change management:

Concept of stress, Sources of Stress, Effect of stress, Work life balance, Concept of Change, Forces Responsible for Change, Resistance to change, Change process, Lewin's Change model, Force Field Analysis.

Prescribed Books:

- 1. Harold Koontz and Heinz Weihrich, Essentials of Management, Tata McGraw-Hill, 6th Edition
- 2. Stephen P. Robbins, Organizational Behavior, Prentice Hall of India, 9th Edition,

Suggested Readings:

1. Jit S.Chand, Organisational Behavior, Vikas Publishing House Pvt.Ltd.Saxena., Principles and Practice of Management

COURSE CODE	MB103
COURSE TITLE	ACCOUNTING FOR BUSINESS DECISIONS
COURSE CREDITS	3

Accounting is the language of business. The performance of a business is evaluated by interpreting its financial statements. This course discusses the scope of accounting function and its role in modern business as a tool for decision making. The course emphasizes the construction of the basic financial accounting statements - the income statement, balance sheet, as well as their interpretation. Preparation of financial statements is taught both from the presective of sole trader and the company form of business. Topics on decision techniques such as PV ratio, BEP, and Budget are also included.

Course Objectives:

- 1. To understand systematic procedure of recording business transactions.
- 2. To understand comprehensive processof preparation of financial statements of a company.
- 3. To devlop the skills of peparation and presentation of information for management decision-making.
- 4. To interprete of accounting reports.
- 5. To demonstrate ability to comprehend Accounting and Costing concepts for decision making.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to UNDERSTAND the concepts
103.1	Understanding	gain through knowledge of all the economic terms and
		concepts.
103.2	Remembering	The student will be able to EXPLAIN different types of
103.2	Kememoering	cost for decision making process in an organization.
		The student will be able to PRACTICE new Financial tools
103.3	Applying	and techniques for management accounting in an
		organisation.
		The student will be able to ANALYZE accounting decision
103.4	Analyzing	making techniques for systematic decision making process
		in an organization.
103.5	Analyzina	The student will be able to ANALYZE whether the
103.5	Analyzing	decisions taken are ethical or unethical.

Course Contents:

Unit 1: Introduction to Accounting

Definition of Accounting, Scope of Accounting, Basic Accounting Terminologies, Accounting concepts and conventions, Users of Accounting Information, Accounting Equation (including problems), Financial A/c Vs Management A/c, Cost Accounting Vs Management Accounting.

Unit 2: Accounting Cycle

Classification of Accounts as per Modern Approach, Preparation of Journal, Ledger, Trial Balance and Final Accounts, Problems on Final Accounts of Sole Trader with adjustment entries.

Unit 3: Corporate Reporting

Preparation of Income Statement and Balance Sheet as per Schedule III of the Companies Act 2013. Analysis of Chairman's report.

Unit 4: Introduction to Cost Accounting

Limitations of Financial Accounting, Meaning of Cost, Cost Accounting, Cost classification, Special Cost for management decision making, Elements of cost, Preparation of cost sheet.

Unit 5: Decision Making Techniques

Meaning of Marginal costing, Characteristics of Marginal Costing, Calculation of: BEP, Margin of Safety, P/V ratio, Budgetary Control: Meaning, process, functional & flexible budgets. Problems on Cash Budget.

Prescribed Books:

- 1. Paresh Shah: Basic Financial Accounting For Management, Oxford UniversityPress.
- 2. Ramachandran, N. and Kakani, R.K. Financial Accounting for Management, Tata McGrawHill.
- 3. Bhattacharya, S.K, Accounting for Management: Text and Cases, Vikas Publishing House,
- 4. Bhattacharya, H., How to Read a Balance Sheet: Adapted to Indian laws and requirements Oxford and IBH Publishing Company Pvt.

COURSE CODE	MB104
COURSE TITLE	MANAGERIAL ECONOMICS
COURSE CREDITS	3

Managerial economics is a science that deals with the application of various economic theories, principles, concepts and techniques to business management in order to solve business and management problems. It deals with the practical application of economic theory and methodology to decision-making problems faced by private, public and non-profit makingorganizations

Course Objetives:

- 1. To gain knowledge of all the economic terms and concepts.
- 2. To understand the scenario of usage of the various concepts of economics.
- 3. To devlop ability to apply the various micro and macro-economic variables to solve business problems.

Course Outcomes: On successful completion of the course the students will be able to

CO N	GO N G W A PROPERTY OF THE COURT OF THE COUR		
CO No.	Cognitive Abilities	Course Outcomes	
104.1	Understanding	The student will be able to UNDERSTAND all the	
		important concepts of economics which are used in making	
		managerial decisions.	
104.2	Understanding	The student will be able to UNDERSTAND the	
		mechanisms of competition and their business implications	
		at Global level.	
104.3	Analyzing	The student is able to MATCH the required tools of	
		managerial economics with the business situations.	
104.4	Applying	The student will be able to APPLY the various micro and	
		macro-economic variables to solve business problems.	

Course Contents:

Unit 1: Nature and scope of Managerial Economics

Definition, nature and scope of Managerial Economics, Managerial Economics and Microeconomics, Managerial Economics and Macro-economics, Applications of Economics in Managerial decisions making. Fundamental Economic Concepts: Positive and normative approach, Optimization, Marginal analysis, Opportunity Cost, Economic Model, Static and Dynamics.

Unit 2: Demand Analysis and Supply

Determinants of Market Demand, Law of Demand, Elasticity of Demand, Measurement and its use, Demand Forecasting. Supply: Supply Analysis Law of Supply, Determinants of market supply. Production Function and Cost Theory: Meaning of Production Function, Costs and Cost Functions, Short Terms Costs and their use on decision making, Determinants of costs, Break EvenAnalysis.

Unit 3: Pricing and Market structures

Pricing decisions under different market forms like perfect competition, monopoly, oligopoly,

Pricing Methods - Pricing in Public Sector Undertakings and Cooperative Societies, Profit Concept, Theories of Profit.

Unit 4: Government and Business

Need for Government intervention in the market, Price Controls - Support Prices and Administered Prices, Prevention and control of monopoly, Protection of consumers' interest, Economic Liberalization, Process of disinvestments- Need and methods, Policy planning as a guide to overall business development.

Unit 5: National Income Accounting

Inflation, Money and Banking, Indian economy policy.

Prescribed Books:

- 1. Mote, Paul and Gupta, Managerial Economics, Tata McGraw-Hill, FirstEdition.
- 2. Warren E. Buffett, Fundamentals of Managerial Economics.

Suggested Readings:

- 1. R L Varshney and K L Maheswari, Managerial Economics, Sultan Chand and Sons, New Delhi, EighteenthEdition.
- 2. Reckie and Crooke, Managerial Economics, Prentice Hall; fourthEdition.
- 3. Samuelson, Paul, Economics, Tata McGraw-Hill, EighteenthEdition.



COURSE CODE	MB105
COURSE TITLE	BASICS OF MARKETING
COURSE CREDITS	3

This course is designed to provide students with an understanding of the principles of Marketing. There will be a focus on the management of the marketing activities and how marketing relates to overall organisational functioning, including the management of exchange processes between business units and consumers and between firms. It will include topics such as environmental analysis, industry and competitor analysis, objective setting, marketing strategies, market mix components, and finally implementation and control mechanisms. Additionally, the course will provide opportunities for the practical implementation of the concepts covered and the development of problem solving skills by means of face-to-face seminars and tutorials, online learning and a marketing practice simulation.

Course Objectives:

- 1. To introduce the marketing concept and how we identify, understand and satisfy the needs of customers and markets.
- 2. To distinguish between the specific nature of different markets, goods and services.
- 3. To understand the theories and practices behind the marketing mix variables.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
105.1	Understanding	The student will be able to UNDERSTAND the basic marketing concepts and elements of the marketing mix in context of gobal market.
105.2	Remembering	The student will be able to EXPLAIN marketing concepts and distinguish between the specific nature of different markets, goods and services.
105.3	Applying	The student will be able to APPLY the various marketing framework to evaluate marketing decisions and initiatives.
105.4	Creating	The student will be able to DEVELOP and practice an organization's marketing strategy.
105.5	Analyzing	The student will be able to DISTINGUISH between ethical and unethical marketing pactices.

Course Contents:

Unit 1: Marketing

Meaning, significance, Basic Concepts in Marketing - Need, Want, Demand, Customer, Consumer, Exchange, Markets, Marketing Segmentation, Marketing channels, Competition, Marketing Environment, Customer Value, Customer Satisfaction, Customer Delight. Market- its meaning and classification, Marketing Orientation towards Market Place. Production Concept, Product Concept, Selling Concept, Marketing Concept., Societal Marketing Relationship Marketing Concept, Holistic Marketing, Marketing Myopia.

Unit 2: Marketing Mix and Trends in Marketing

Concept of Marketing Mix, Traditional Marketing Mix – 4P's and 4C's, Extended Marketing Mix – 7P's, Trends in Marketing – Viral Marketing, Digital Marketing, Green Marketing, Guerilla Marketing, and Social Marketing, Marketing for the 21stCentury, The New MarketingRealities, Major Societal Forces.

Unit 3: Marketing Planning Process and Marketing Environment

Marketing Planning Process, Purpose and Scope of Marketing Environment Analysis, Concepts of Macro and Micro environment, Components of Macro environment, Components of Micro environment.

Unit 4: IdentifyingMarket Segments and Targets

Definitions – Segmentation, Market Targeting and Positioning, Market Segmentation: Need and Bases for Market Segmentation – Geographic, Demographic, Psychographic and Behavioral, Effective Segmentation Criteria Evaluating and Selecting the MarketSegments, Market Targeting: Target Market Selection, Market Targeting Strategies, Positioning: Differentiation and Positioning, USP, POP, POD.

Unit 5: New Product Development

Conceptand Need for new product development, Booz Allen and Hamilton Classification Scheme for New Products, The New Product Development Process- Idea Generation to commercialization, Principles of Success, Product Differentiation and Positioning strategies, New product development and introductionstrategies, Planned or unplanned strategy withdrawals / obsolescence, Contingency / alternative strategic planning.

Reference Books:

- 1. Marketing Management Philip Kotler, Kevin Lane Keller, Pearson, 15thEdition.
- 2. Marketing Management RamaswamyandNamakumari, Macmillan,4th Edition.
- 3. Marketing Management RajanSaxena, TMGH, 4th Edition.



COURSE CODE	MB106
COURSE TITLE	BUSINESS LAW
COURSE CREDITS	3

The aim of this course is to instill keen understanding and appreciation of the legal aspects of business. This course will provide an understanding of legal methodology and the main principles of law relating to business transactions. The course will also demonstrate how commercial law and business practice inter relate and often influence each other in shaping modern communication and industry. In particular, key legal topics will be explained and illustrated from businessperspective

Course Objectives:

- 1. To make the students familiar with the concept of law and various laws relating to business, understand and discuss core legal theories.
- 2. To introduce students to the laws and ethical standards that managers must abide by in the course of conducting business.
- 3. To get trained in supporting theoretical solutions with arguments in a systematic manner.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
106.1	Understanding	The student will be able to UNDERSTAND the concept of
		law & various laws related to business understanding.
106.2	Remembering	The student will be able to EXPLAIN laws and ethical
		standards that managers/ business leader must abide by in
		the course of conducting business.
106.3	Applying	The student will be able to DEMONSTRATE proficiency
		in finding and applying legal materials and methods in
		solving legal problems
106.4	Analyzing	The student will be able to ANALYZE legal issues in a
		business situation and evaluate the interrelationship
		between regulatory requirements and strategic decision
		making.

Course Contents:

Unit 1: The Contract Act, 1872

Introduction, Sources of Indian Business Law, Salient features of Indian Contract Act, 1872, Meaning of contract, Essential elements of a valid contract, Types of contract, Difference between void and voidable contract, difference between illegal and void agreement, Offer and Acceptance, Capacities of Parties to contract, Free Consent, Coercion, difference between coercion and undue influence, misrepresentation, fraud, essential elements of fraud, difference between fraud and misrepresentation, mistake, void agreements, Discharge of contract, Special Contracts – Contingent and Quasi Contract, Contract of indemnity and guarantee.

Unit 2: Sales of Goods Act, 1930

Introduction, Contract of Sale, Sale and Agreement to sell, Essential elements of a Contract of

Sale, Difference between sale and agreement to sell, classification of goods, Condition and Warranty, Difference between Condition and Warranty, Situations when condition is treated as warranty, express and implied warranties, caveat emptor, Unpaid Seller, Rights of an Unpaid seller.

Unit 3: The Consumer Protection Act, 2019

Genesis of Consumer Protection Laws Definitions, Consumer Protection Council, Redressal Machinery Under The Act – District Consumer Forum, State Commission, National Commission.

Unit 4: The Information Technology Act, 2000

Information Technology Act – Definitions, Important terms under Information Technology Legislation, Digital Signatures, Electronic Records, Certifying Authority, Digital Signature Certificate, Cyber Regulation Appellate Tribunal.

Unit 5: Companies Act, 2013

Company – Definition, Nature and Forms of Business (including One Person Company and Limited Liability Partnership), Concept of Corporate Personality, Corporate Veil, Promoters – Meaning, Position, Duties, Rights, Responsibilities and Liabilities, Formation of Companies, Memorandum of Association & Articles of Association, Doctrine of Ultra-Vires, Indoor Management.

Prescribed Books:

- 1.Business Laws S.S.Gulshan, Excel Books.
- 2. An Introduction to Mercantile Laws -N.D. Kapoor.

Suggested Readings:

In addition to above books, students are advised to refer to the monthly journals like Chartered Accountant, Chartered Secretary and All India Reporter for latest case laws.

COURSE CODE	MB107
COURSE TITLE	STATISTICS AND QUANTITATIVE TECHNIQUES
COURSE CREDITS	3

The basic knowledge of the Statistical and Quantitative Techniques is must for every management student and professional. The increased scale of business operations and growing competition has made the job of a management professional more challenging than ever before.SQT is an important knowledge that student should have for handling these competitive business situations.

Course Objetives:

- 1. To get Competency in use of Statistics and Statistical techniques in day to day business.
- 2. To build basic understanding of Probability and Probability distribution.
- 3. To equipping the students with essential tools for statistical analysis at Graduate level.
- 4. To build an understanding of Software and use of SPSS, Minitab and other software.
- 5. To forcast understanding through real world statistical applications.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
107.1	Understanding	The student will be able to UNDERSTAND basic statistical concepts such as Measures of Central Tendency,
		Measures of Dispersion, Decision Theory and Game Theory.
107.2	Remembering	The student will be able to EXPLAIN the various formulas and essential tools for statistical analysis.
107.3	Applying	The student will be able to APPLY various Statistical tools and techniques to solve Corporate problems.
107.4	Analyzing	The student will be able to ANALYZE existing business problems and business situations and application of Statistical tools.

Course Contents:

Unit 1: Introduction to Statistics

Statistics in Business Management, Statistical Terms and Concepts – Data, variable, Population, Sample, Random sample. Arranging data to convey meaning – Tables, Graphs and frequency Distribution - Measures of central Tendency and dispersion - Simple and Multiple Regression and Correlation - Association of Attributes.

Unit 2: Probability

Probability Distribution, Binomial Distribution, Poisson distribution. Normal Distribution.

Unit 3: Linear Programming

Formulation and Graphical solution to two variables assignment problem, Transportation problem.

Unit 4: Management Theories

Queuing Theory- Single server and Multi Server, Games Theory- 2 X 2 zero sum game with

dominance – Pure Strategy and Mixed Strategy, Decision Theory- 5 criteria of Decision-making. Markov Chain with simulation techniques- Monte Carle simulation.

Unit 5: Usage of MS-excel in statistics

Introduction to statistical packages - SPSS/SISSTAT/MATLAB.

Prescribed Books

- 1. Richard I. Levin and David S. Rubin, Statistics for Management, 7th edition, Prentice Hall of India Pvt. Ltd., NewDelhi.
- 2. David M. Levine, Timothy C. Krehbiel and Mark L. Berenson —Business Statistics: A First Coursel, Pearson Education Asia, 2nd edition, New Delhi, 2000.
- 3. Hooda, R.P., Statistics for Business and Economics, Macmillan India Ltd., 2nd edition.
- 4. David F. Groebner, Patrick W. Shannon, Phillip C. Fry and Kent D. Smith, —Business Statistics: A Decision making approach, 5th edition, Prentice Hall, 2001.
- 5. Chandan. J. S., Statistics for Business and Economics, Vikas Publishing House Pvt.Ltd.,



COURSE CODE	MB108
COURSE TITLE	BUSINESS COMMUNICATION
COURSE CREDITS	3

Global workplaces in the 21st century require employees who can communicate effectively in a range of challenging circumstances. This practical course offers you critical knowledge about the complexities of modern communication in organisations. You will have the opportunity to develop and practice their verbal, non verbal, written and digital communication techniques in a range of simulated workplace situations as well as through liaison with organisations. These skills will be particularly relevant for you as they transition to the world of work and advance in their careers.

Course Objectives:

- 1. To understand the concepts and acquire necessary communication skills that would help in shaping personalities.
- 2. To make students conversant with the basic forms, formats and techniques of business writing so that you will be thoroughly prepared to take part in real-world business fields.
- 3. To facilitate discussion of all relevant communicational theories so that students can apply this knowledge to a myriad of different communicational tasks and genres.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to UNDERSTAND basic concepts
108.1	Understanding	of communication skills that would help in shaping
		personalities.
108.2	Applying	The student will be able to FACILITATE discussion of all
106.2	Applying	relevant communicational theories and styles,
		The student will be able to COMMUNICATE clearly and
108.3	Applying	with impact by improving their verbal and non-verbal
		communication style.
108.4	Analyzina	The student will be able to DEAL with communication
108.4	Analyzing	barriers in a cross cultural enviornment.
		The student will be able to EXHIBIT good communication
108.5	Applying	skills required in meetings, group discussions, interviews,
		and presentations.
	Y	The student will be able to UNDERSTAND the "why" and
108.6	Understanding	"how" of our everyday interactions with others as a part of
		communication ethics

Course Contents:

Unit 1: Communication

Meaning and definition, Nature of Business Communication, Objectives and Importance of Business Communication, Limitations of Business Communication, Communication Process, Classification of Business Communication, Principles- 6 C's of Communication.

Unit 2: Forms of Communication and Listening Skill

Verbal and Non-Verbal Communication, Merits and Demerits of Oral, Writtenand Non Verbal Communication, Listening: Meaning, Importance, Types of listening, Tips for effective listening, Barriers for listening.

Unit 3: Presentation Skills and Meeting Managements

Profile of Good Speaker, Features of good presentation, Points to remember while delivering your presentation — stages of effective presentation, The use of visual aids to support your presentation. Conducting Meetings: Procedure — Preparing agenda, Minutes and Resolutions.

Unit 4: Written Communication

Format of Business Letters, routine letters - enquiries, customers' complaints, collection letters - Sales promotion letters, bad news and persuasing letters, job application letters - Report Writing - Structure of Reports - Long and Short Reports - Formal and Informal Reports.

Interviews: Types of Interviews, Interview Techniques, Frequently asked Questions at Interviews, Mock Interviews.

Unit 5: Effective Communication

Importance and Barriers to Effective Communications, Communication Skills, Influencing Techniques.

Cross Cultural Communication: The Cross Cultural Dimensions of Business Communication, techniques of electing response, probing questions, Observation, Business Etiquettes.

Prescribed Books:

1. Rao P. Subba, Kumar B. Anita and Bindu C. Hima, Business Communication, Cengage Learning, 2012.

- 1. Rajendra Paul and Korlahalli, Essential of Business Communication, Sultan Chand, 10th edition, 2004.
- 2. Lesikar, R.V. and Flatley, M.E. (2005), Basic Business Communication Skills for empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd., New Delhi.

DOMAIN ELECTIVES (Only 1)

COURSE CODE	MB109I
COURSE TITLE	INTRODUCTION TO AGRI BUSINESS MANAGEMENT
COURSE CREDITS	2

Course Description:

Course introduce the student regarding various types of Agro base industries, emerging trends in Agribusiness management & factor for production which will helps to increase GDP share & improve the Indian economy through various agro base business.

Course Objectives:

- 1. To understand farm business administration and business planning skills.
- 2. To give required skill to deal with the many factors facing agribusiness.
- 3. To understand modern practices used in agribusiness today.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109I.1	Understanding	The student will be able to UNDERSTAND and explain
		the fundamental principles of agribusiness.
109I.2	Remebering	The student will be able to ILLUSTRATE modern
1091.2		practices used in agribusiness in current business scenario.
109I.3	Applying	The student will be able to APPLY domain knowledge to
1091.3	Applying	develop agribusiness projects at operation level.
109I.4	Understanding	The student will be able to UNDERSTAND to ethical
		issues involved in Agribusiness Management

Course Contents:

Unit 1: Agribusiness

Agribusiness meaning, definition, structure and importance of agribusiness, Agricultural Economics –Definition, its share in GDP, consumption and wants, Importance and scope of agriculture in Indian Economy, Types of Agro Industries and its classification, Distinctive features of Agribusiness management: Distinctive features of Agri business management Vs General industry.

Unit 2: Agro based industries

Importance and Roleof Agro industries in economic Development of India, Types of agro-based industries and Agri Export Zones, Need of institutional arrangement for the promotion of agro-based industries, Procedure to be followed to set up agro-based industries, Constraints in establishing agro-based industries, Micro, small and medium enterprises (MSMEs).

Unit 3: Emerging Trends in Agribusiness Management

Agro Tourism, Organic Framing, Contract Framing, Herbal Farming, Post Harvest management and value addition, NGOs in agriculture and rural development, Biotechnology research and commercialization, Rural and Agri -foods retailing, Agriculture supply chain management, PPP (Public Private Partnership), Precision Farming.

Unit 4: Factors of Production

Production Characteristics of Agriculture and Industry, Production relationship and cost concepts, GAP (Good Agricultural Practices).

Unit 5: Forms of Farm Business Organization & Information Technology in Agribusiness Sole proprietorship, Partnership and Corporation, Meaning, Role and importance in Agribusiness and Agriculture, Information Technology for Agricultural Marketing, Online Market information and online market status (e-trading), Websites on Agriculture marketing and export, Role of private companies in online marketing (E Choupal and HUL Shakti).

- 1. "Agri Business Management Problems and Prospects" By Prof. R K Dixit and Dr Himanshu, Ritu Publications, Jaipur.
- 2. "Agri Business Management", Dr K P Sinha, A K Publications.
- 3. "Introduction to Agricultural Economics and Agri Business Management", by J M Talathi, V G Naik & V N Jalgaonkar, Ane Books India.
- 4. "Agri Business Management", Dr. J S Amarnath and Dr. A P V Samvel, Salish Serial Publishing House.
- 5. "Indian Agriculture and Agri Business Management", Dr. Smita Diwase, Krishi Resource Management Network.
- 6. "Agri Business Management", Smita Diwase, Everest Publishing House.
- 7. "Innovation in Agri Business Management", Karnam Lokanadhan, K Mani and K Mahendran, New Indian Publishing Agency.
- 8. "Cooperative Agri Business Management", A N Sarkar, Everest Publishing House.
- 9. "Agri Business and Extension Management", B S Hansra and K Vijayaragavan, Concept Publishing Company, New Delhi.



COURSE CODE	MB109II
COURSE TITLE	INTRODUCTION TO FINANCE
COURSE CREDITS	2

Introduction to Finance deals with the framework of finance. It discusses the scope of finance function and its emerging role in modern business

Course Objectives:

- 1. To study the basic concepts in finance as it is the lifeblood of any oraganization.
- 2. To know the basics of capital and money market.
- 3. To analyse the annual report of the company by using different techniques like common size analysis, trend analysis, ratio analysis etc.
- 4. To know all the contents of financial statements prepared as per Company's Act- Schedule I requirements.
- 5. To know the estimation and control of working capital.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109II.1	Understanding	The student will be able to UNDERSTAND the basic
10911.1	Onderstanding	concepts of finance.
109II.2	Remembering	The student will be able to EXPLAIN the basics of capital
10911.2		and money market.
109II.3	Remembering	The student will be able to EXPLAIN the techniques of
10911.3	Remembering	financial analysis like Ratio.
		The Student will be capable of IDENTIFY and interpret
109II.4	Remebering	the contents of financial statements prepared as per
		Company's Act – Schedule III requirements.
		The student will be able CALCULATE the working capital
109II.5	Applying	estimate and apply the methods to control the working
		capital requirements in industrial context.

Course Contents:

Unit 1: Introduction

Meaning of Financial Management, Nature & Scope of Finance Function, Objectives of Finance Functions, Significance of Finance Functions, Role of modern FinanceManager.

Unit 2: Time Value of Money

Concept of Time Value of Money, Application of Time Value of Money – Compounding and Discounting.

Valuation of Bonds and Shares:

Introduction, Concepts of Value, Features of Bond, Bond Values and Yields, Yield to Maturity, Present Value of a Bond, Valuation of ordinary shares.

Unit 3: Sources of Long Term Finance

Equity, Preference Shares, Debentures, Bonds, Term Loan, Hire Purchase, Leasing, Venture Capital, Crowd Funding, External Commercial Borrowings, ADRs, GDRs, Euro Bonds, FCCBs.

Unit 4: Raising of Long Term Finance

IPO, Red Herring Prospectus, Book Building Process, Green Shoe Option, Listing of Securities in Stock Exchange, Rights Issue, Bonus Issue, Private Placement of shares.

Unit 5: Management of Cash and Receivables Management

Motives for holding cash, Objectives of Cash Management, Factors determining cash needs, Cash management techniques, Introduction to receivables management, Objectives, Credit Policies, Credit Terms, Collection Policies.

- 1. IM Pandey, Financial Management, Vikas Publishing, Ninth Edition.
- 2. Prasanna Chandra, Financial Management, Tata McGraw-Hill, Sixth Edition.
- 3. James C Vanhorne, Financial Management and Policy Pearson Education Asia, 12th edition
- 4. M.Y. Khan and P.K. Jain, Financial Management, Tata McGraw-Hill, Fourth Edition.
- 5. A. P.Rao, Financial Management, EverestPublishing, Pune.



COURSE CODE	MB109III
COURSE TITLE	PERSONNEL ADMINISTRATION AND DOCUMENTATION
COURSE CREDITS	2

Course Description: People are vital input for the effective functioning of an organization. For any organization to become successful it is necessary to recognize the potential personnel, acquire them, develop and to retain the same. The term Personnel refers to Body of employees who fill the various positions in an organization. Personnel administration is the collective concern towards the human resources of anorganization.

Course Objectives:

- 1. To give students insight into the implementation of Personnel Administration Procedures.
- 2. To acquaint students with General consideration in wage and Salary
- 3. To acquaint students with General Communication and Disciplinary Action Communication.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109III.1	Remebering	The student will be able to DEFINE the process of implementation of Personnel Administration Procedures in
	8	Professional arena.
	Understanding	The student will be able to UNDERSTAND ethical
109III.2		importance of personnel documentation in context of
		global context.
109III.3	Creating	The student will be able to FORMULATE and design
107111.5	Creating	various Compensation Plans.
109III.4	Applying	The student will be able to COMMUNICATE the
		personnal policies effectively in professional practice.

Course Contents:

Unit 1: Personnel Administration

Definition, Nature, Objectives, Principles.

Unit 2: Personnel Policy

Definition, Scope, Process, Objectives, Contents of Personnel file and Personnel audit, Personnel Department Structure, proper Environment around factory.

Unit 3: General Communication

Drafting of appointment orders, Interview letters, Promotion, Transfer and Appreciation Letters, Notices and Circulars (All Types).

Unit 4: Wage and Salary Administration

General consideration in wage and Salary administration – Objectives and principles, Time keeping, Attendance.

Unit 5: Disciplinary Action Communication

Suspension Orders, show cause, Notices, memo, charge sheet, warning, letter of termination and dismissal, Challenges of modern personnel manager.

- 1. Guide of Labour Management forms and precedents (Law, Practice and Procedure)by S.D. Puri (Snow white publications).
- 2. Personnel Management by EdwinFlippo.
- 3. Personnel Management by C.B.Mamoria.
- 4. Dynamics of personnel Administration by Rudrabaswaraj.



COURSE CODE	MB109IV
COURSE TITLE	INTRODUCTION TO PHARMACEUTICAL BUSINESS ENVIRONMENT
COURSE CREDITS	2

This course enables students to learn about the channel of pharmaceutical marketing, Pharmaceutical Business Environment and its effect of promotional strategies, and physician 'sprescriptions

Course Objectives:

- 1. To enable students to learn about the channel of pharmaceutical marketing and develop an attitude towards of concern for the environment.
- 2. To enable students to learn Pharmaceutical Business Environments effect of promotional strategies, and physician's prescriptions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109IV.1	Remembering	The student will be able to EXPLAIN the regulatory
		environment that governs the pharmaceutical industry.
		The student will be able to DEMONSTRATE modern
		market access and drug promotion including the functions
109IV.2	Applying	of the following departments: health outcomes and
		economics, medical and scientific affairs, as well as, sales
		and marketing.
		The student will be able to BUILD point of view on future
109IV.3	Applying	trends and opportunities within the pharmaceutical
		industry.
109IV.4	Applying	The student will be able to RELATE drug discovery and
		development as they draw up their career plans.
109IV.5	Understanding	The student will be able to INTERPRET marketing
1091 V.3		strategy in scientific and medical industry.
		The student will be able to DEMONSTRATE
109IV.6	Applying	understanding of the history of ethical, legal and regulatory
	h Y	forces that have shaped the pharmaceutical industry.

Course Contents:

Unit 1: Introduction to Pharmaceutical Management

Identification of pharmaceutical market; market behaviour; physician prescribing habits; patient motivation; marketanalysis.

Unit 2: Environmental Scanning of Pharmaceutical Business Environment

Micro and Macro Analysis, PESTLE Analysis of Pharmaceutical Business Environment.

Unit 3: The Pharmaceutical Products

Drug Development and the Marketing Research Interface; Diversification and Specialisation; Marketing Generic Drugs; Non-prescription drugs.

Unit 4: Distribution Channels

Manufacturer; Wholesaler; Retailer; Hospital and Government Agencies.

Unit 5: Competitive Practices

Economic and Competitive Aspects of the Pharmaceutical Industry; Advertising; Detailing and other forms of Promotion; Retail Competition – The Community Level; International Marketing, Internal and External Controls.

- 1. Sachin Itkar, Pharmaceutical Management, Nirali Prakashan, 2nd Edition.
- 2. Subba Rao, Pharmaceutical Marketing inIndia.
- 3. Pharmaceutical Selling MukaBodya.
- 4. Tora Tora, Principles of Anatomy and Pharmacology, John Wiley and son, 11th Edition.
- 5. Satoskar, Pharmacology (Pharmaceutical), Popular Prakashan, 9th Edition.

COURSE CODE	MB109V
COURSE TITLE	INTRODUCTION TO LIFE SCIENCES, BIOTECHNOLOGY AND BIOINFORMATICS
COURSE CREDITS	2

This course is designed to learn the basic concepts in Biotechnology and Bioinformatics. The objective of the course is to familiarize the students with the tools and techniques in Biotechnology and Bioinformatics. They would also understand the importance of analyticaltoolsinbiotechnologyanditsapplicationsinvariousindustries. At the endof the course, the students will have sufficient scientific understanding of the basic concepts in instrumentation used in Biotechnology.

Course Objectives:

- 1. To introduce students with cell biology and basic concepts of Life sciences.
- 2. To familiarize the students with basic concept in Microbiology and various diseases associated with microorganisms.
- 3. To familiarize the students with the basic concepts in Biochemistry and classification of carbohydrates, Lipids and Proteins.
- 4. To introduce students with the history of Biotechnology.
- 5. To study basic concepts in Bioinformatics.
- 6. To familiarize the students with the tools and techniques in Biotechnology and Bioinformatics.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109V.1	Understanding	The student will be able to develop an UNDERSTANDING of the basic concepts in Life Sciences.
109V.2	Understanding	The student will be able to UNDERSTAND the fundamentals of Cell biology, Microbiology and Biochemistry.
109V.3	Remembering	The student will be able to EXPLAIN, distinguish and analysis the information regarding Types of Microorganisms, diseases associated with them and various symptoms.
109V.4	Remembering	The student will be able to IDENTIFY opportunities available for small or big entreprise in Biotechnology and Bioinformatics.
109V.5	Understanding	The student will be able to exhibit UNDERSTANDING about the ethical issues involved in Biotechnology and Bioinformatics.

Course Contents:

Unit 1: Introduction to Life Sciences: Cell Biology, Biochemical composition and the ultrastructure of the cell. Cell -Cell interaction, structure and function of cell organelles.

Unit 2: Introduction to Microbiology: Morphology and fine structure of bacteria. Control of Microorganisms, Viruses, Microbial organisms and diseases.

Unit 3: Introduction to Biochemistry: Structure, Classification and Properties of Carbohydrates, Lipids, Proteins and Nucleic acids.

Unit 4: Introduction to biotechnology, history of biotechnology, facts of modernbiotechnology, scope and importance of Biotechnology, Tools and techniques in Biotechnology: Analytical techniques and MolecularTechniques.

Unit 5: Biotechnology and Biodiversity, Applications of Biotechnology in India, Businessopportunities in biotechnology, Future of biotechnology in India, Introduction to Bioinformatics - What is bioinformatics, databank, data capture, databases, databases, Databases - Different biological databases and their applications, Applications of Bioinformatics - Bioinformatics industry in India.

- 1. B. D. Singh, Biotechnology, Kalyni Publishers, 1stEdition.
- 2. Kumar H. D., Textbook of Biotechnology, East-WestPress.
- 3. Attwood T. K., D. J. Parry-Smith, Introduction to bioinformatics, PearsonEduction.
- 4. Rastogi, Bioinformatics: Methods and Applications, Prentice Hall India, 2ndEdition.
- 5. David Mount, Bioinformatics: Sequence and Genomeanalysis.
- 6. Stephen and David, Introduction to Bioinformatics: A theoretical and practical approach.



COURSE CODE	MB109VI	
COURSE TITLE	INTRODUCTION TO IT	
COURSE CREDITS	2	

This course is designed to be an introductory course in information technology. The course focuses on key concepts for understanding modern computer systems. Students will also learn about the capabilities and limitations of information technologysystems

Course Objectives:

- 1. To understand the fundamentals of information technology.
- 2. To learn core concepts of computing and modern systems.
- 3. To understand modern software programs and packages.
- 4. To learn about upcoming IT technologies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109VI.1	Remembering	The student will be able to USE and EXPALIN MS Office
		tools for efficient work style
109VI.2	Applying	The student will be able to DEMONSTRATE the
109 V 1.2		understanding of different concepts of IT Systems.
109VI.3	Applying	The student will be able to MAKE USE of different
		concepts of IT and Web for making efficient decisions and
		execution.
109VI.4	Understanding	The student will be able to UNDERSTAND moral
		dimensions of Information Systems.

Course Contents:

Unit 1: Introduction to Information Technology

Introduction to Software and Hardware, Types of Software, Need for Information Storage and Processing, Information Technology Components, Role of Information Technology, Information Technology and the Internet.

Unit 2: Internet, its Tools and Emerging Trends in IT

Introduction, Internet Evolution, Basic Internet Terminology, Internet Applications, Computer Ethics, Introduction, Electronic Commerce (E-Commerce), Electronic Data Interchange (EDI), Smart Cards, Mobile Communication.

Unit 3: Introduction To Internet (WWW AND WEB BROWSERS)

Introduction, Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), World Wide Web (WWW), Web Browsing Softwares, Popular Web Browsing Softwares, Search Engines, Understanding URL, Surfing the web (Using e-governance website).

Unit 4: MS Word, Excel and Powerpoint

Introduction, Windows 2007 Interface, Customizing the Word Application, Document Views, Basic Formatting in MS Word 2007, Advanced Formatting, Navigating through a Word Document, Performing a Mail Merge, A Quick Look at Macros, Printing Documents, Print Preview, Introduction, Workbook, Worksheet, Formatting in excel, Advanced formatting in

Excel, Working with formulas, Printing worksheets, Introduction, Creating a Presentation, Basic Formatting in PowerPoint, Advanced Formatting, Using Templates, Inserting tables, Printing presentations.

Unit 5: Programming and ERP Systems

Software Design Cycle-Programming Languages- Enterprise Resource Planning (ERP) Systems- Social Media-Major Types of Websites-Wikis-SocialNetworking-Marketing.

- 1. Management Information System:Jawadekar.
- 2. Management Information Syste m: Laudon and Laudon.
- 3. The Essential Guide to Knowledge management: Amrit Tiwana.
- 4. The GIS Book: George B. Karte.
- 5. Internet (Use of Search Engines Google and yahooetc).
- 6. E Commerce: MilindOka.
- 7. E Commerce: C.V.S.Murty.
- 8. Fire Wall and Internet Security: William Cheswick, Stevens, AvielRubin.
- 9. E-Governance Case Studies Ashok Agarwal.

COURSE CODE	MB109VII
COURSE TITLE	INTRODUCTION TO INTERNATIONAL BUSINESS
COURSE CREDITS	2

The most conspicuous aspect of international boundaries is crossing the nationalboundaries. Firms seek international market opportunities more to day than ever before, touching the lives of billions of people around the world. Knowledge about international business, therefore, assumes great relevance for the upcoming Global managers

Course Objectives:

- 1. To Understand the scope and challenges for a company to enter into the international market along with the theories of International Trade.
- 2. To gain the knowledge of Country risk analysis process before making a decision to enterinto international market and market entry strategies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109VII.1	Applying	The student will be able to RELATE the trade between countries takes place, formalities for the trade, documents required for the trade.
109VI.2	Applying	The student will be able to DEMONSTRATE understanding of and analysis of documents required for export & import, procedure of trade, formalities of trade.
109VII.3	Understaning	The student will be able to UNDERSTAND the roles and activities of different International Trade Organizations in facilitating international trade.
109VII.4	Remembering	The students will be able to DEFINE what global business ethics are, and discover how culture impacts business ethics
109VII.5	Remembering	The student will be able to IDENTIFY opportunities available at internaltional market.

Course Contents:

Unit 1: Introduction to International Business

Introduction, Introduction to International Business, Elements of International Business, Globalization.

Unit 2: International Business Environment

Introduction, Economic Environment, Political Environment, Demographic environment, Legal Environment, Global Sourcing and Indian Industries structure, Introduction, What is global sourcing, Reasons for global sourcing, advantages and disadvantages, Challenges for Indian Businesses.

Unit 3: Culture and International Business

Introduction, Meaning of Culture, Country Culture, and Culture in an International Business Organization. Foreign Investments- Types and Motives: Foreign investments, types of foreign

investments, motives.

Unit 4: Regional integration

Introduction, Overview of Regional Integration, Types of Integration, Regional Trading Arrangements, India and Trade Agreements.

Unit 5: Global trade institutions

Introduction, World trade organization (WTO), International Labour Organization (ILO), International Financial Management: Introduction, Overview of International Financial Management, Components of International Financial Management, Scope of International Financial Management.

Prescribed Books:

International Business –By K Ashwathappa, TATA McGraw-Hill publication, Third edition.

Suggested Readings:

- 1. International Business-Competing in the Global Marketplace by Charles W Hill and Arun K Jain, TATA McGraw-Hill publication, Sixth edition.
- 2. International Business –Strategy, Management And The New Realities By S.TamerCavusgil, Gary Knight and John R. Reisenberger, Pearson Publications, First Edition.



COURSE CODE	MB109VIII
COURSE TITLE	HEALTHCARE AND HOSPITAL MANAGEMENT
COURSE CREDITS	2

The Masters in Hospital Administration is aimed towards orienting and developing students for executive positions in hospitals. The course develops the managerial skills of individuals and also exposes them to clinical aspects of hospital management. The students have the option of developing their skill set in a particular area of hospital management while taking the optionalmodules.

Course Objectives:

- 1. To analyze and assess various situations in the hospital.
- 2. To plan and organize developmental policies and implement strategies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to DEMONSTRATE the
109VIII.1	Understanding	understanding of the roles and responsibility of Hospital
		Administrator.
109VIII.2	Analyzing	The student will be able to OUTLINE the operations
109 v 111.2	Allaryzing	carried out by various departments in a hospital.
109VIII.3	Analyzing	The student will be able to ANALYZE and assess various
109 VIII.3	Allaryzilig	situations in the hospital.
109VIII.4	Creating	The student will be able to build a PLAN and organize
109 V III.4	Creating	developmental policies.
		The student will be able to UNDERSTAND and explain
109VIII.5	Understanding	ethical issues involved in Healthcare for making decisions
		in community interest.

Course Contents:

Unit 1: Introduction to Health care management with three tier Health care delivery.

Unit 2: National Health programmes overview.

Unit 3: Role of Government agencies in implementing Health Care to population.

Unit 4: International Health Organizations, National Health Policy.

Unit 5: Planning and Organisation of Hospitals, Management in O.P.D /ICU/Operation Theatre/materials and logistics, Supportive Hospital Services (Laundry, Kitchen, Diet, Fire Safety, Ambulatory Service, Security).

- 1. S.L. Goal, Hospital Administration and Management, Prentice HallIndia.
- 2. Darr Kurt, Hospital Organization and Management.
- 3. Frinch C.B., Host Planning and Management.
- 4. Goal S.L, Management of Hospital.
- 5. Gupta P.D., Useful reading for Hospital Management.

6. Prof Satoskar, Hospital Mgt, Pragti Books.



COURSE CODE	MB109IX
COURSE TITLE	INTRODUCTION TO OPERATIONS AND SUPPLY CHAIN MANAGEMENT
COURSE CREDITS	2

This course introduces the viewer to the basics of Operations and Supply Chain Management. The concepts in Operations Management are restricted to the planning and operational decisions within an organization while the supply chain concepts are for a networkoforganizations. The main emphasis of the course is on the basic concepts and on quantitative modeling of the various decision problems.

Course Objectives:

- 1. To Specify and implement a framework for Understanding concept of Operations in an organization.
- 2. To develop alternative solutions and a set of evaluation criteria.
- 3. To assess the outcomes of a course of action and make appropriate adjustments.
- 4. To understand concept of supply chain management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109IX.1	Understanding	The student will be able to UNDERSTAND the structure of supply chains and the different ways through which supply chains can become competitive in the market
109IX.2	Creating	The student will be able to CONSTRUCT a production Schedule.
109IX.3	Understanding	The student will be able to UNDERSTAND and explain the supply chain functions.
109IX.4	Understanding	The student will be able to UNDERSTAND and summaries production forecast.
109IX.5	Creating	The student will be able to DEVELOP in the right way the process of organizing and conducting the proceedings relating to the transport and distribution
109IX.6	Understanding	The student will be able to UNDERSTAND ethical issues involved in operations and supply chain management.

Course Contents:

Unit 1: Introduction to Operations Management

Nature, Scope, Importance and Functions - Evolution from manufacturing to operations management - Evolution of the factory system - manufacturing systems -quality - mass customization. Contribution of Henry Ford, Deming, Crossby, Taguchi.

Unit 2: Forecasting

Introduction, The Strategic Importance of Forecasting, Benefits, Cost implications and Decision making using forecasting, Classification of Forecasting Process, Methods of Forecasting, Forecasting and Product Life Cycle, Selection of the Forecasting Method, Qualitative Methods of Forecasting, Quantitative Methods, Associative Models of Forecasting, Accuracy of

Forecasting.

Unit 3: Operations Scheduling

Introduction, Purpose of Operations Scheduling, Factors Considered while Scheduling, Scheduling Activity under PPC, Scheduling Strategies, Scheduling Guidelines, Approaches to Scheduling, Scheduling Methodology [Quantitative], Scheduling inServices.

Unit 4:Supply Chain Management

Introduction, Domain Applications, SCM— The Breakthrough Article, Supply Chain Management, Views on Supply Chain, Bullwhip Effect in SCM, Collaborative Supply Chain, Inventory Management in Supply Chain, Financial Supply Chain—A New Revolution within the SCM Fold.

Unit 5: Just-In-Time

Introduction, Characteristics of JIT, Key Processes to Eliminate Waste, Implementation of JIT, Pre-requisites for implementation, JIT Inventory and Supply Chains.

- 1. Operations Management by Evans and Collier.
- 2. Operations Management by Heizer and Render.
- 3. Supply Chain Management by JanatShah.

COURSE CODE	MB109X
COURSE TITLE	INTRODUCTION TO BUSINESS ANALYTICS
COURSE CREDITS	2

The goal of this course is to provide students with the mathematical and practical background required in the field of data analytics.

Course Objectives:

- 1. To identify groups of Observations enables one to improve business efficiency.
- 2. To learn why using rigorous statistical methods to understand the relationship between different events is crucial.
- 3. To learn more about the importance of forecasting the future.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
109X.1	Remembering	The student will be able to IDENTIFY and translate real-world business and operational problems into business analytics problems.
109X.2	Applying	The student will be able to IMPLEMENT efficient business analytics strategies to solve business and operational problems.
109X.3	Applying	The student will be able to DEMONSTRATE the process for developing, reporting, and analyzing the business data.
109X.4	Understanding	The student will be able to UNDERSTAND the current trend of business analytics and be aware of the ethical issues related to business analytics

Course Contents:

Unit 1:Basics of Business Analytics

Key Terminologies, growth of Business Analytics, reasons for increasing Industry focus on Analytics, value delivered, key functions, building a Business Analytics team, 7 steps to Data Modelling.

Unit 2: Types of Analytics

Descriptive, Diagnostic, Predictive, Prescriptive, Autonomous. Types of Variables, Statistical summarisation, 6 Types of Questions.

Unit 3: Business Analytics Project Management

DIKW model, Characteristics of Information, Sources of Information, handling missing data, enabling collation and collaboration, Information as Competitive Advantage, Michael Porter's 5 Force model.

Unit 4: Types of Information Systems

Transaction Processing Systems, Management Information Systems, Decision Support Systems, Executive Information Systems, Data Warehousing, Data Mining, Data Visualisation.

Unit 5: Future of Business Analytics

Artificial Intelligence, Machine Learning, Deep Learning, Internet of Things (IoT), The Digital

Firm, characteristics of eBusiness, Mobility and Cloud.

- 1. Kerns, G. J. (2010). Introduction to probability and statistics using R. Publisher: G. Jay Kerns.
- 2. Verzani, J. (2014). Using R for introductory statistics 2nd Edition. New York: Chapman and Hall.



COURSE CODE	MB110
COURSE TITLE	DISASTER MANAGEMENT
COURSE CREDITS	1

This course is being introduced to enable students and citizens to recognize the increasing vulnerability of the planet in general and India in particular to disasters. This, it is expected would create basis to work towards preparedness and also help develop a culture of safety and prevention. The course elaborates on both natural and man made disaster and how to mitigate in the wake of accidents. Under each category, the causes and impact along with illustration would be discussed in detail.

Course Objectives:

- 1. To increase the knowledge and understanding of the disaster phenomenon, its different contextual aspects, impacts and public health consequences.
- 2. To increase the knowledge and understanding of the national Strategy for Disaster.
- 3. To ensure skills and abilities to analyse potential effects of disasters and of the strategies and methods to deliver public health response to avert these effects.
- 4. To ensure skills and ability to design, implement and evaluate research on disasters.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
110.1	Remebering	The student will be able to develop capacity to DESCRIBE, analyze and evaluate the environmental, social cultural, economic, legal, ethical and organizational aspects influencing vulnerabilities and capacities to face disasters.
110.2	Analyzing	The student will be able to obtain, ANALYZE, and communicate information on risks, relief needs and lessons learned from earlier disasters in order to formulate strategies for mitigation in future scenarios with the ability to clearly present and discuss their conclusions and the knowledge and arguments behind them.
110.3	Understaning	The student will be able to design and perform research on the different aspects of the emergencies and disaster events while DEMONSTRATING insight into the potential and limitations of science, its role in society and people's responsibility for how it is used.

Course Contents:

Unit 1: Understanding Natural Disasters

Understanding Natural Disasters, Understanding Disaster Management, Flood, Drought, Cyclone, Earthquakes, Landslides, Avalanches, Volcanic Eruptions, Heat and Cold Waves, Climate Change: Global Warming, Sea Level Rise, Ozone Depletion.

Unit 2: Understanding Man-Made Disasters

Understanding Man-Made Disasters, Nuclear Disasters, Chemical Disasters, Biological Disasters, Building Fire, Coal Fire, Forest Fire, Oil Fire, Air Pollution, Water Pollution, Deforestation, Industrial Pollution, Road Accidents, Rail Accidents, Air Accidents, Sea Accidents.

Unit 3: Risk Assessment and Vulnerability Analysis

Hazard, Risk and Vulnerability, Understanding Risk: Concept and Elements, Risk Reduction, Risk Analysis Techniques, Participatory Risk Assessment.

Unit 4: Vulnerability Analysis

Vulnerability Analysis and Risk Assessment, Observation and Perception of Vulnerability, Strategies for Survival, Strategic Developments for Vulnerability Reduction.

Unit 5: Disaster Preparedness

Disaster Management: Prevention, Preparedness, and Mitigation, Disaster Preparedness: Concept and Nature, Disaster Preparedness Plan, Disaster Preparedness by various authorities, Information Technology.

- 1. Bryant Edwards (2005): Natural Hazards, Cambridge University Press, U.K.
- 2. Carter, W. Nick, 1991: Disaster Management, Asian Development Bank, Manila.
- 3. Sahni, Pardeep et.al. (Eds.) 2012, Disaster Mitigation Experiences and Reflections, Prentice Hall of India, New Delhi.



JGLOBAL BUSINESS SCHOOL AND RESEARCH CENTRE DR. D. Y. PATIL VIDYAPEETH, PUNE

(Re-accredited by NAAC with ACGPA of 3.62 on four point scale at 'A' grade)
An ISO 9001:2015 Certified University

Name of the Programme : MBA

Name of Semester : SEMESTER II

COURSE CODE	MB201
COURSE TITLE	MARKETING MANAGEMENT
COURSE CREDITS	3

Marketing is a value-enhancing function that identifies opportunities, develops markets, and builds brands. Consequently, good marketing enables companies to charge price premiums, sustain competitive advantage and maintain long-run profitability. To this end, the course covers the following topics: understanding consumer and corporate behavior, conducting customer and competitor analysis, developing new products, branding and brand extension, pricing, designing distribution channels, and managing marketing-mix activities. First, you will be exposed to the fundamental conceptsof marketing and thus learn the –language of marketing (i.e., talk-the talk).

Course Objectives:

- 1. To understand consumer and corporate behavior, conducting customer and competitor analysis, developing new products, branding and brand extension, pricing, designing distribution channels, and managing marketing-mix activities.
- 2. To understand marketing concepts and their application to profit oriented and non-profit oriented organizations.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
201.1	Understanding	The student will be able to UNDERSTAND and explain
201.1	Understanding	the key marketing concepts, theories and techniques.
201.2	Applying	The student will be able to APPLY the marketing conceptual frameworks, theory and techniques in various marketing contexts.
201.3	Analyzing	The student will be able to ANALYZE the relevance of marketing concepts and theories in context of environmental changes on marketing planning, strategies and practices.
201.4	Evaluating	The student will be in position of EVALUATING the marketing environment and demonstrating the ability to justify the marketing strategies during the marketing plan implementation.
201.5	Applying	The student will be able to carry out a research project that EXPLORES marketing planning and strategies for a specific marketing situation.
201.6	Analyzing	The student will be able to DISTINGUISH between ethical and unethical practices in marketing management for making good decisions.

Course Contents:

Unit 1: Product

Concepts and Components, Products Meaning, Characteristics, Classification of Marketing Mix,

Meaning, Goods and Services, Product Mix, Product Line and Product line appraisal, Levels of Product, Product Life Cycle - Managing the product in Product Life Cycle.

Unit 2: Pricing

A Changing PricingEnvironment, Consumer Psychology andPricing, Setting thePrice, Factors influencing pricing decision - Approaches to pricing – Price and Non-price competition, Pricing methods, Pricing strategies.

Unit 3: Place

Importance, functions of distribution channels, Introduction to the various channels of distribution, Levels of Channel of Distribution, designing marketing channels, Introduction to Wholesaling, Retailing, Franchising, Direct Marketing, and Impact of technology and Internet on distribution.

Unit 4: Promotion

Elements of IMC and Developing respective communication campaign, Advertising, Sales Promotion, Publicity, Personal Selling, Direct marketing and direct response methods, Event Management, E-Commerce, Corporate Communication, Public Relations – Types of PR.

Unit 5: Consumer Behaviour

Concepts and Significance, Factors influencing Consumer buying Behaviour, The Buying DecisionProcess:Problem Recognition, Information search, Evaluation of Alternatives, Purchase Decision Post purchase Behavior, Buying Roles, Industrial buying process, Consumer markets Vs Industrial Market.

Suggested Readings:

- 1. Marketing Management A South Asian Perspective, Kotler, Keller, Koshy and Jha, Prentice Hall/Pearson
- 2. Marketing Management, Rajan Saxena, TMH
- 3. Marketing Management, Arun Kumar, N Meenakshi, Vikas Publishing
- 4. Fundamentals of Marketing, Bruce Walker and Stanton, McGrawHill
- 5. W.D. Perraut and E.J. Mc Carthy, Basic Marketing, TMH
- 6. Russel S. Winner, Marketing Management, Pearson
- 7. Marketing Management, Ramaswami and Namakumari,
- 8. Integrated Marketing Communications Kenneth Clownand Donald Ba

COURSE CODE	MB202
COURSE TITLE	FINANCIAL MANAGEMENT
COURSE CREDITS	3

Financial management explores the core finance principles and theories and relates them to the practical world with the help of several pedagogical tools that help manage an organization's money. It practices create organizational value by allocating scare resources among various business opportunities. It helps in the execution and supervision of organizational business policies. The importance of sound financial management practices cannot be stressed more in an ever-changing global economy.

Course Objectives:

- 1. To obtain an understanding and ability to use basic business financial management concepts.
- 2. To learn to apply tools of analysis such as valuation, risk-return relationships, financial statement analysis, capital budgeting, cost of capital, capital structure and working capital management.
- 3. To become familiar with the various types of financing available to a firm.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to DESCRIBE the financial
202.1	Remembering	environment within which organisations must operate at
		global level.
		The student will be able to EXPLAIN the concept of
202.2	Remembering	leverage and the benefits and costs associated with debt
		financing.
		The student will be able to IDENTIFY and apply the
202.3	Remembering	relevant cash flows for capital budgeting projects and apply
		various methods to analyze projects.
		The student will be able to ANALYZE financial statements
202.4	Analyzing	using standard financial ratios of liquidity, activity, debt,
		profitability, and market value.
		The student will be able to IDENTIFY alternative sources
202.5	Remembering	of finance and investment opportunities and their
		suitability in particular circumstances
202.6	Analyzing	The student will be able to ANALYSE a company's
202.0	Anaryzing	performance and make appropriate recommendations.

Course Contents:

Unit 1: Introduction to Financial Management

Overview of Financial Management, Financial Decisions, Profit Maximisation Vs Wealth Maximisation, Finance Functions, Relationship of Finance with other Disciplines, Role of Modern FinanceManager.

Unit 2: Financial Statement Analysis

Tools and techniques of financial statement analysis, Trend Analysis, Ratio Analysis – Meaning of Ratios, Objectives of ratio analysis, Types of Accounting Ratios (Including Problems).

Unit 3: Time Value of Money

Concept of Time Value of Money, Application of Time Value of Money – Compounding and Discounting, Types of compounding, Effective Annual rate, Future Value of Multiple Cash Flows, Future Value of Equal Cash Flows – Annuities and Perpetuities, Present Value of Single Cash Flow, Present Value of Multi period Cash Flow, Present Value of Annuity, Present Value of Annuity due, Present Value of perpetuity.

Capital Budgeting Decisions:

Nature and type of investment decisions, Techniques used in Capital Budgeting – Pay back period, Accounting Rate of Return, Net Present Value, Profitability Index, Internal Rate of Return.

Unit 4: Cost of Capital and Capital Structure

Introduction to Cost of Capital, Significance of cost of capital, Concept of opportunity cost of capital, Cost of Debt, Cost of Equity, Cost of Preference Capital, WACC, Capital Structure and Firm Value, EBIT-EPS Analysis.

Unit 5: Working Capital Management

Introduction, Meaning, Scope, Factors influencing Working Capital Requirements, Operating Cycle and Cash Cycle, Estimation of Working Capital Requirements.

Prescribed Books:

PrasannaChandra, -Financial Management, Tata McGraw-Hill.

Suggested Readings:

- 1. I M Pandey, Financial Management, Vikas Publishing, Ninth Edition.
- 2. Sixth EditionMY Khan and PK Jain, Financial Management, Tata McGraw-Hill, Fourth Edition.
- 3. A.P Rao, Financial Management, Everest Publishing, Pune.
- 4. Sheeba Kapil, FinancialManagement, Pearson.



COURSE CODE	MB203
COURSE TITLE	HUMAN RESOURCE MANAGEMENT
COURSE CREDITS	3

This course examines the role of the human resource professional as a strategic partner in managing todays organizations. Key functions such as recruitment, selection, development, appraisal, retention, compensation, and labor relations are examined. Implications of legal and global environments are appraised and current issues such as diversity training, sexual harassment policies, and rising benefit costs are analyzed. Best practices of employers of choice are considered.

Course Objectives:

- 1. To develop a clear and meaningful understanding of HRM theory, functions and practices.
- 2. To learn the techniques and methods through which humans are injected in anorganization, trained, appraised and compensated.
- 3. To understand contemporary practices in HRM.
- 4. To apply human resource management concepts and skills across a variety of contexts, situations and incidents.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
	Remembering	The student will be able to DEFINE and explain the basic
203.1		concepts, functions and processes of human resource
		management.
		The student will be able to DESIGN and organize various
203.2	Creating	HRM processes such as recruitment, selection, training,
203.2		development, performance appraisals and reward systems,
		compensation plans and ethical behaviour.
203.3	203.3 Analyzing	The student will be able to ANALYZE the developing role
203.3		of human resources in the global arena.
		The student will be able to EVALUATE the existing and
203.4	Evaluating	emerging HR strategies in context of external and internal
		environment.

Course Contents:

Unit 1: Perspective of HRM

Concepts of HRM, Difference between PM and HRM, Changing Environment in the Marketplace, Role and Competencies of HR, Ethical HRM, Strategic HRM.

Unit 2: Human Resources Planning

Definition, Need, Process of HRP, Demand Forecasting and Supply Forecasting, Job Analysis, Job Description and Job Specification, Concepts of Recruitment and Selection, Sources of Recruitment Difference between Recruitment and Selection, Selection Process, Induction and Socializing.

Unit 3: Human Resource Development

Training and Development - Objectives and Needs-Training Process-Methods of Training – Tools and Aids-Evaluation of Training Programs, Compensation Management-Job Evaluation, Wage/ Salary Fixation, Incentives, Bonus, ESOPs, Fringe Benefits, Career Management-career Planning and succession planning, Performance Management System-Definition, Concepts, Different Methods of Performance Appraisal- issues and dilemmas- Rating Errors.

Unit 4: Employee Relation and Employment Law:

Introduction to employee relations, Origin and growth of Labor relations, Labor Laws (Payment of Bonus Act, 1965. Employees' Provident Fund and Miscellaneous Provisions Act, 1952. Payment of Gratuity Act, 1972 and Employees' State Insurance Act, 1948), Trade Unions, Collective Bargaining, Grievance Handling.

Unit 5: Contemporary practices in HRM

Employee Separations, Downsizing and Outplacement, HRIS.

Prescribed Books:

Sharon Pandey and Basak- Human Resource Management, Pearson Education

Suggested Readings:

- 1. Aswathappa, K. Human Resource to Personnel Management, Tata Mc GrawHill.
- 2. Mamoria C.B and Mamoria S., Personnel Management, Himalaya PublishingCompanySeema Sanghi, HRM, VikasPublishing.



COURSE CODE	MB204
COURSE TITLE	OPERATIONS MANAGEMENT
COURSE CREDITS	3

Operations Management (OM) is concerned with the management of resources and activities that produce and deliver goods and services for customers. The course focuses on the basic concepts, issues, and techniques for efficient and effective operations.

Course Objectives:

- 1. To understand the strategic role of operations management in creating and enhancing a firm's competitiveadvantages.
- 2. To understand key concepts and issues of OM in both manufacturing and service organizations.
- 3. To apply analytical skills and problem-solving tools to the analysis of the operations problems.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
204.1	Understanding	The student will be able to UNDERSTAND the key
204.1	Onderstanding	concepts of operation management in global context.
		The student will be able to EXPLAIN the strategic role of
204.2	Remembering	operations management in creating and enhancing a firm's
		competitive advantages.
		The student will be able to APPLY analytical skills and
204.3	Applying	problem-solving tools to the analysis of the operations
		problems.
		The student will be able to ANALYZE the dynamic nature
204.4	Analyzing	of the environment in which decision related to Operation
		Management is taken.
204.5	Understanding	The student will be able to UNDERSTAND the ethical
204.5	onderstanding	dimensions of operation management.

Course Contents:

Unit 1: Introduction to Operations Management

Nature, Scope, Importance and Functions, Evolution from manufacturing to operations management-Evolution of the factory system, manufacturing systems, quality, mass customization. Contribution of Henry Ford, Deming, Cross by, Taguchi.

Unit 2: Types of Industries

Variety of Businesses – Integration of Manufacturing & Services, Scale of Operations. Methods of Manufacturing, Project/Jobbing, Batch Production, Flow/Continuous Production, Process Production, Characteristics of each method.

Facilities Location & Layout – Strategic importance - Factors affecting location & layout - Installation of facilities – Single location, multi-location decisions. Principles and Types of Facilities Layout.

Unit 3: Importance and Functions of Production Planning & Control

Introduction to PERT / CPM - Network Crashing (Numericals expected for PERT/CPM). Maintenance Management - Importance and types of maintenance - Maintenance Planning - Spare Parts Management - Concept of TPM.

Unit 4: Inspection

Cent percent Inspection, Sample Inspection, Operation Characteristics Curves, Statistical Quality Control – Construction & Interpretation of Control Charts – (X-R, n, p, c, np) Introduction to Six Sigma, (Numericals expected for Control Charts). Gap analysis for service quality assessment.

Unit 5: Productivity

Work Study - Objectives, Scope and Uses - Methods Study - Flow process chart, Flow diagram & Process mapping - Work Measurement - Elements - Performance Rating - Allowances - Standard Time - Synthetic Time Standards - Work Sampling (Numericals expected for Standard Time), Lean Production Systems - TOYOTA system - JIT - KANBAN - Theory of Constraints.

Prescribed Books:

- 1. Production & Operations Management Chary.
- 2. Manufacturing & Operations Management -L.C.Jhamb.

Suggested Readings:

- 1. Operations Management Krajewski.
- 2. Operations Management Mahadevan.
- 3. Production & Operations Management Chase.

COURSE CODE	MB205
COURSE TITLE	RESEARCH METHODOLOGY FOR MANAGERS
COURSE CREDITS	3

Research Methods gives essential guidance on how to carry out research projects and it introduces the core concepts, methods and values involved in doing research. This course provides a valuable learning through its comprehensive coverage of methods that are used by experienced researchers investigating the world of business. Researchers find it difficult to conduct an in-depth analysis in their areas of specialization without the sound knowledge of scientific process of conducting research. This course provides an opportunity to understand the crux of research methodology in a scientific and systematic manner.

Course Objectives:

- 1. To understand basic concepts of research and its methodologies.
- 2. To identify appropriate research topics.
- 3. To select and define appropriate research problem and parameters
- 4. To prepare a project proposal.
- 5. To organize and conduct research.
- 6. To write a research report and thesis.
- 7. To write a research proposal (grants).

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
205.1	Understanding	The student will be able to UNDERSTAND and apply different research approaches and methodologies for
		solving business related problems.
		The student will be able to IDENTIFY the appropriate
205.2	Remembering	research design and methodology to apply to a specific
		research project.
		The student will be able to ANALYZE the feasibility and
205.3	Analyzing	practicality of research methodology for a proposed project
		in context of current enviornment.
205.4	Applying	The student will be able to USE the knowledge as manager
	Applying	for taking facts based decisions.
		The student will be able to IDENTIFY and apply ethics in
205.5	Remembering	research, including those issues that arise in using
	_	quantitative and qualitative research.

Course Contents:

Unit 1: Introduction to Research Methodology

Meaning of research: Purpose, Significance of research in Social and Business Science, and Ethics in Research, Defining research problem: Review of literature; Features of a good Research Design, Types of Research Design.

Unit 2: Research Design Formulation-Sampling and Data Collection

Sampling: Meaning, Characteristics of a good Sample, Sampling Methods, Probability and Non-probability Sampling, Steps in Sampling Design, Sampling Errors. Sources of Data: Primary and Secondary, Methods of collecting primary data: Survey and Observation.

Unit 3: Measurement and Scaling

Scaling techniques: Scales of Measurement and Levels and Types of Measurement Scales, Drafting thequestionnaire, Reliability and Validity, Criteria for good measurement.

Unit 4: Data Analysis- Hypothesis Testing

Meaning and Purpose of Hypotheses Testing, Steps in Hypotheses Testing, Use of Statistical, Data Editing, Coding, Tabulation, Cross Tabulation, Concept of hypothesis, Procedure in Hypothesis Testing, Errors in Hypothesis testing, Types of Parametric and Non Parametric tests, Meaning of Correlation, Rank Correlation, Simple Linear Regression Analysis, Multiple Regression Analysis, Issues in Regression, Meaning of Regression Practical problems Chisquare test.

Unit 5: Result Presentation and Report writing

Report Writing – Layout of a Research Paper, Types of Report, Critical elements of a Research Report Techniques of Interpretation, Steps in drafting reports.

Prescribed Book:

Bajpai, N. (2014). Business Research methods. Pearson Education, 5th Impression.

Suggested Readings:

- 1. Sachdeva, J.K. (2010). Business Research Methodology. Himalaya Publishing House, 1st Edition.
- 2. Cooper, D.R. and Schindler P.S. (2006). Business Research Methods. Tata McGraw Hill, 9th Edition.
- 3. Malhotra, N. (2011). Marketing Research An Applied Orientation. Pearson Education, 6th Edition.
- 4. Bryman, A. and Bell, E. (2011). Business Research Methods. Oxford, 3rd Edition.



COURSE CODE	MB206
COURSE TITLE	DATA ANALYTICS
COURSE CREDITS	3

This course seeks to present you with a wide range of data analytictechniques and is structured around the broad contours of the different types of data analytics, namely, descriptive, inferential, predictive, and prescriptive analytics.

Course Objectives:

- 1. To learn about the importance of analytics, data awareness and responsibility.
- 2. To describe statistics, basic inferential statistics, linear regression, and probability concepts and calculations.
- 3. To cultivate both innovation and competitive advantage with analytics.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
206.1	Remembering	The student will be able to DEFINE and explain the data
200.1		behavior and advantages of analytics.
206.2	Applying	The student will be able to select the basic statistical
200.2	Applying	concept that is APPLIED on data in an organization.
206.3	Analyzing	The student will be able to critically ANALYZE the data
200.3	Allaryzing	for solving problem.
206.4	Applying	The student will be able to COMMUNICATE the rational
200.4	Applying	behind a decision taken based on the data analysis.
206.5	Remembering	The student will be able to IDENTIFY ethical issues
		involved in data analytics.

Course Contents:

Unit 1: Data Science Concepts

Using the past to predict the future, advantages, disadvantages, Data generation, interpretation and visualisation. Exploratory Data Analysis, Inference Vs Prediction. Management by Facts.

Unit 2: Data Modelling Approach

KRA/KPI. Contextual Data, Data Organisation, Structured Vs Unstructured data, the 5 V's of Business Analytics, Data Analytics framework, Analytics Tools – licensed vs open source, comparison of software features and capabilities.

Unit 3: Data Analysis Techniques

A|B Testing, What-if scenarios, Market Basket Analysis, Classification and Regression Tree, Monte Carlo Simulation, Time Series.

Unit 4: Statistical Models

Statistical Distributions - Normal, Binomial, Poisson. Measuring Central Tendencies, Symmetry, Variability. Correlation, Regression.

Unit 5: Data Science Toolkit

Cluster, Decision Tree, Factor, Regression, Machine Learning, Segmentation Analysis, Sentiment Analysis.

Prescribed Books:

Quantitative Techniques in publishers India Ltd., 4th Edition.

Reference Books:

- 1. Introduction to operations Research by billey E. Gilett, TMGH.
- 2. Operation Research by Nita Shah, Ravi Gor, Hardik Soni, PHI.
- 3. Hastie, Trevor, et al. The elements of statistical learning. Vol. 2. No. 1. New York: springer, 2009.
- 4. Montgomery, Douglas C., and George C. Runger. Applied statistics and probability for engineers. John Wiley and Sons, 2010.

COURSE CODE	MB207
COURSE TITLE	EMOTIONAL AND SPIRITUAL INTELLIGENCE FOR MANAGERIAL EFFECTIVENESS
COURSE CREDITS	3

This course will challenge your beliefs and understanding of leadership and briefly looks at leadership through the ages. The latest leadership trends will be discussed and studied in order to keep your approach to leadership dynamic and current. Emotional and spiritual intelligence are also discussed to ensure a comprehensive understanding of the individual (whether it is someone working with you or yourself). Regenesys' holistic approach allows us to look at your individual responsibility to lead as well as at your development as a leader.

This course will also look into the effect of leadership in an organisation and research ways to ensure your organisation leads the diverse culture and the employees that form part of it. Ways in which organisations and individuals learn from active leadership is also investigated. This course will allow you to identify your current understanding of leadership, how you came to this position of leadership, how you might change your approach to leadership and how these changes can influence an organisation - and maybe even the world.

Course Objectives:

- 1. To help students understand concepts and give exposure to various viewpoints in the field of emotional intelligence.
- 2. To understand Human Psychology influencing Human Behaviour and to develop valuable relations with other people, by understanding underlining principles of Human Relations.
- 3. To help students to sharpen critical thinking, problem solving, and communication skills.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
207.1	Remembering	The student will be able to EXPLAIN the concepts of
		emotional and spiritual intelligence.
		The student will be able to DEVELOP essential life skills
207.2	Creating	and will be able to manage his human resources in same
	C	manner.
		The student will be able to TAKE PART in a quality
207.3	Applying	education which is one that satisfies basic learning needs &
207.3	207.5 Applying	enriches the lives of studentss & their overall experience of
(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Y	life.
207.4	Analyzing	The student will be able to ANALYZE and deal with
		cultural or other differences at wokrplace.

Course Contents:

Unit 1: Introduction to Emotional Intelligence (EI)

What is EI, The difference between IQ and EQ, Power of Emotions, The Emotional Brain and Amigdala Hijack, Importance of EI in the workplace.

Unit 2:Fundamental Elements of Emotional Intelligence and its impact

Seven Elements defined in Behavioral terms (Self Awareness, Emotional Resilience, Motivation, Interpersonal Sensitivity, Influence Intuitiveness, Conscientiousness.

Unit 3: Fundamental Elements of Emotional Intelligence and its impact

Five Elements defined in Competence terms-Self Awareness, Self Management, Self Motivation, Empathy, Social Skills.

Unit 4:Building Blocks of Emotional Intelligence

Different models- Ability Based Model (Mayer and Salovey), Management Trait Model of Self-Efficacy (K.V. Petrides), Mixed Model (Daniel Goleman).

Unit 5: Social Management and Responsibility

Understand Emotions and How to Manage Them in the Workplace, Role of Emotional Intelligence at Work, articulate your Emotions Using Language. Disagreeing Constructively.

- 1. Book for reference: Working with Emotional Intelligence: Bloomsbury Publication-Daniel Goleman (1998).
- 2. Games People Play: The Basic Handbook of TA: Eric Berne (1964).
- 3. The Brain and Emotional Intelligence: New Insights: Daniel Goleman HBR's 10 Must Reads on Emotional Intelligence (2015).

COURSE CODE	MB208
COURSE TITLE	ENTREPRENEURSHIP DEVELOPMENT AND PROJECT MANAGEMENT
COURSE CREDITS	3

Entrepreneurship education plays a very vital role in creating awareness of enterprise and selfemployment as a career option for students. Using this framework, students will have experiences that will enable them to develop the insight needed to discover and create entrepreneurial opportunities; and the expertise to successfully start and manage their own businesses to take advantage of these opportunities.

Course Objectives:

- 1. To create awareness of enterprise and self-employment as a career option for students.
- 2. To devlope positive attitudes towards innovation, enterprise and self-employment.
- 3. To instill a spirit of Entrepreneurship among the student participants.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
208.1	Remembering	The student will be able to IDENTIFY and explain the typologies of entrepreneurship, the financial sources for startups and the modes of business networking.
208.2	Applying	The student will be able to IMPLEMENT theoretical knowledge acquired by designing a small virtual enterprise.
208.3	Analyzing	The student will be able to ANALYZE and develop the self-capabilities and skills necessary to assume entrepreneurial activity.
208.4	Remembering	The student will be able to IDENTIFY and evaluate the opportunities exist or emerging in market for an entrepreneur at local and global level
208.5	Applying	The student will be able to ESTABLISH an environmental and gender perspective for project management and project organisation.
208.6	Remembering	The student will be able to IDENTIFY and deal with ethical issues during implementing an idea of entreprise.

Course Contents:

Unit 1: Entrepreneur and Entrepreneurship

The Entrepreneur: Definitions and Concept Entrepreneurial Traits, Characteristics and Skills, Entrepreneur Vs Professional Managers, Successful Entrepreneurs, Women Entrepreneurs.

Unit 2: Entrepreneurship Development

Entrepreneurship Environment, Entrepreneurship Development Program and Training, Problems of Entrepreneurship, Growth of Entrepreneurs, Entrepreneurial Failures.

Unit 3: Role of Government and Financial institutions

DIC-District Industries Centre, SISI-Small Industries Service Institute, EDII-Entrepreneurship

Development Institute of India, NIESBUD-National Institute for Entrepreneurship and Small Business Development NEBD- National entrepreneurship Board of Development.

Unit 4: Doing Business in India

Introduction, Major Issues and Challenges, Ethical approach, Types of Organization, Legal Compliances.

Unit 5: Project Management

Project: Concept and Classification. Search for a Business Idea. Making a Business Plan, Marketing plan, Successful Projects of Social Entrepreneurs.

Prescribed Book:

The Dynamics of Entrepreneurial Development and Management by Desai Vasant, Himalaya Publishing house, Delhi, Fifth Edition, 2014.

Reference Books:

- 1. P.Saravanavel, Entrepreneurship Development, HimalayaPublishing.
- 2. Vasant Desai, Problems and Prospects of Small Scale Industries in India, Himalaya Publishing.
- 3. Peter F. Drucker, Innovation and Entrepreneurship, East-Westpress.
- 4. Hisrich, Entrepreneurship, Tata McGraw Hill, 6th Edition.
- 5. P.C.Jain (ed.), Handbook for New Entrepreneurs, EDII, Oxford University Press, New Delhi.



COURSE CODE	MB208A (Only for ABM Specialization Instead of MB 208)
COURSE TITLE	ENTREPRENEURSHIP DEVELOPMENT IN AGRI SECTOR
COURSE CREDITS	3

Concept of Entrepreneur, Entrepreneurship Development, Characteristics of entrepreneurs; SWOT Analysis and achievement motivation, Government policy and programmes and institutions for entrepreneurship development, Impact of economic reforms on Agribusiness/Agri enterprises, Entrepreneurial Development Process; Business Leadership Skills; Developing organizational skill (controlling, supervising, problem solving, monitoring and evaluation).

Course Objectives:

- 1. To explain the concept of Developing Managerial skills, Business Leadership Skills (Communication, direction and motivation Skills), Problem solving skill, Supply chain management and Total quality management.
- 2. To orient Students about Project Planning Formulation and report preparation; Financing of enterprise, Opportunities for agri- entrepreneurship and rural enterprise.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The student will be able to IDENTIFY and explain the
208A.1	Remembering	typologies of entrepreneurship, the financial sources for
		agri-startups and the modes of business networking.
		The student will be able to IMPLEMENT theoretical
208A.2	Applying	knowledge acquired by designing a small virtual agri-
		enterprise.
		The student will be able to ANALYZE and develop the
208A.3	Analyzing	self- capabilities and skills necessary to assume agri-based
		entrepreneurial activity.
208A.4	Evaluating	The student will be able to EVALUATE the opportunities
200A.4	Evaluating	exist in market for an agri-entrepreneur.
208A.5	Creating	The student will be able to DESIGN agri-business plans
	Creating	with Project planning and management.

Course Contents:

Unit 1: Entrepreneur and Entrepreneurship

Concept, Characteristics, functions and classification of entrepreneurs. Role of Entrepreneurship in Economic development, Factors affecting Entrepreneurial Growth: Economic factors, Non-Economic factors, Barriers to entrepreneurship.

Unit 2: Policies and Programmes for Entrepreneurs

Small scale industrial policies, industrial policy resolution 1948, 1956, 1977,1980, 1990, 1991, Entrepreneurial Development Programmes (EDP): Introduction, meaning, phases in entrepreneurial development, importance of EDP, objectives of EDP, Institutions for Entrepreneurship Development: Entrepreneurship Development Institute of India, National

Institute for Entrepreneurship and Small Business Development, Centre for Entrepreneurship Development their objectives and Activities.

Unit 3: Enterprise

Concept and Definition. Types of enterprises, difference between small and large enterprises, Small scale enterprises: Steps in setting up small scale enterprises, role of small scale enterprises in economic development, Farming as a business: Characteristics of farming.

Unit 4: Practical Exercises A

Assessing Entrepreneurial traits, Problem solving skills of an Entrepreneur, Managerial skills of an Entrepreneur, Financial skills of an Entrepreneur, HRM skills of an Entrepreneur.

Unit 5: Practical Exercises B

Identification and selection of business idea, Preparation of business plan, Proposal writing, Visit to Entrepreneurship development Institute.

- 1. Akhouri, M.M., P. Mishra S.P. and Sengupta, Ritha (1989). Trainers manual on developing entrepreneurial motivation, NIESBUD, NEW Delhi.
- 2. Entrepreneurship Development Institute of India (1987), Developing New Entrepreneurs, EDIT, Ahmedabad, NISIET. Library: 338-93/EDI/87/25104.
- 3. Betty Gordan B (1979). Entrepreneurship, playing to win. Taraporewala, Bombay.
- 4. Mancuso Joseph (1974). The entrepreneur's handbook (1st and 2nd). Arteck House.INC, USA
- 5. Singh A.K., Lakhansingh, R.Roy Burman (2006). Dimensions of Agricultural Extension. Aman publishing House, Meerut.
- 6. Khanka S.S. (2001), Entrepreneurial Development chand and company Ltd, 7361, Ramnagar, New Delhi 110055.
- 7. Vasant Desai (2004), Dynamics of Entrepreneurial Development and Management.
- 8. Morgan, C.T. Klng, R.a. Robinson, N.M. (1979). Introduction to psychology-Tata M.Graw Hill Publishing Co., New Delhi.
- 9. Agarwal R.C. Fundamentals of Entrepreneurship.
- 10. Hans Raj Bhatia (2003), A Text book Educational Psychology, New Delhi.



MB 209 : DOMAIN ELECTIVES - II (Only 1)

COURSE CODE	MB209I
COURSE TITLE	MANAGEMENT OF AGRICULTURE AND ALLIED SCIENCES
COURSE CREDITS	2

Course Description:

Course introduces the knowledge about various inputs like Seeds, Pesticides, Fértilizer, Bio fertilizer, Nutrient for increase the productivity and farming of Horticulture crop, Livestock farming, Aquaculture, Mushroom cultivation, Irrigation and output industries also get the knowledge of various laws in our Country related to input and output industries. That helps students for the development of technical knowledge in Agro Industries.

Course Objectives:

- 1. To know the various input and output industries in Agriculture and Allied Sciences.
- 2. To know the various prevalent laws in our Country related to input and output industries.
- 3. To know the present needs of input and output industries so that students should work confidently when they get jobs in such industries.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
2001.1	Remembering	The student will be able to DEFINE the various concepts
209I.1		of Agriculture and its allied branches.
2091.2	Understanding	The student will be able to UNDERSTAND the industry and various prevalent Indian laws, related with agriculture and allied sciences.
2091.3	Analyzing	The student will be able to ANALYSE the details concerned with the income of farmers.

Course Contents:

Unit 1: Management of Seed, Crop protection, Pesticide, Fertilizer and Bio fertilizer Industry

Various types of seeds, advantages of F1, F2, Hybrid, BT, Research, Certified and truthful seeds, Need and types of crop protection chemicals, fertilizers and micronutrients, Major Companies, Market Potential, SWOT Analysis.

Unit 2: Horticulture and Mushroom Industry

Fruit Production and Post Harvest Management, Management of Floriculture and Landscaping, Vegetable Production, Hi-tech Agriculture, Mushroom: Introduction, Importance and Types of Mushroom.

Unit 3: Livestock Production and Value addition in animal product

Scope of livestock in Indian Economy, Trends in livestock production, Nutrient requirement of livestock and poultry, Maintenance of record of livestock dairy and poultry farms, Animal health insurance, Trends in marketing and utilization of animal products, Market standards and regulation animal products.

Unit 4: Farm Engineering

Farm Power and Machinery Management, Renewable Energy Resource Management, Major companies, Role of Government in Equipment Industry, SWOT Analysis.

Unit 5:Water Management Industry

Need of water management, Types and advantages of water management systems, Major Companies, Role of Government in Water Management Industry, SWOT Analysis.

- 1. Marketing of seeds, Premjit Sharma, Gene Tech Book.
- 2. Horticulture Marketing, FAO Agricultural Service Bulletin, Daya Publishing House.
- 3. Commercial Production of Horticultural Crops, KunalMitra, Oxford Book Company.
- 4. Food and Nutrition, Mahindraa Deshpande, Dr. Nikhilesh Kulkarni, Himalayan Publishing House.
- 5. Principles of Agri-Engineering, Volume-I, T P Ojha, A M Michael, Jain Brothers, New Delhi.
- 6. Changing Face of processed food industry in India, Rajat K Baisya, Ane Book India.
- 7. Marketing of vegetables in India, VigneshwaraVarmudy, Daya Publishing House, New Delhi.
- 8. Food Technology and Entrepreneurship Management, Dr. C R Bharatia, urendra Publications.



COURSE CODE	MB209II
COURSE TITLE	FINANCIAL MARKETS AND SERVICES
COURSE CREDITS	2

The Course aims at providing the students, basic knowledge about the Finance concepts, markets and various services provided in those markets. The syllabus is structured in a way which provides adequate information about the roles of intermediaries and its regulating bodies. The course also provides information about the prevailing financial system in India.

Course Objectives:

- 1. To acquire the skills necessary to manage financial firm
- 2. To describe and apply financial concepts, theories, and tools
- 3. To evaluate the role of technology and the legal, ethical and economic environment as it relates to financial institutions including the Reserve Bank of India, commercial banks, insurance companies, mutual funds, investment banks, pension funds, and regulatory agencies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209II.1	Domombosino	The student will be able to DEFINE the dimensions of
20911.1	Remembering	performance and risk relevant to financial firms.
		The student will be able to EXPLAIN how the financial
209II.2	Remembering	services component industries (insurance, banking,
		securities, real estate and financial planning) interact.
209II.3	Analyzina	The student will be able to ANALYZE contemporary
20911.3	Analyzing	managerial risk management oversight processes.
20011.4	Analysia	The student will be able to CALCULATE contemporary
209II.4	Applying	measures of financial measures of performance and risk.
		The student will be able to EVALUATE the economic
209II.5	Evaluating	environment and the impact of governmental economic
		policies on consumers and financial institutions.
		The student will be able to DISCUSS the impact that
20011	The desired in a	financial innovation, advances in technology, and changes
209II.6	Understanding	in Regulations has had on the structure of the financial
		firms/industry

Course Contents:

Unit 1: Indian Financial System

Overview of Indian Financial System and Market development since 1991. Types and Role of Financial Intermediaries in Financial System.

Unit 2: Indian Banking System

Structure of Indian Banking System, Role of Reserve Bank of India as a regulatory body, Functions of Reserve Bank of India, Definition of Bank, Relation of Banker and Customer, Functions of Commercial Bank. Types of Banks. New Age Banking. NBFCs.

Electronic Banking and IT in Banking: Communication Networks in Banking System, IT Applications in Banking –Internet, SWIFT, Automated Clearing Systems, Electronic Fund Management, Electronic Clearing System (ECS), Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), Indian Financial System Code (IFSC), Automated Teller Machines (ATMs), Internet Banking, Core Banking Solutions (CBS), Computerization of Clearing of Cheques, Cheque Truncation System (CTS).

Unit 3: Financial Market

Structure of Financial Market, Instruments used in Money Market – Call Money Market, Treasury Bills Market, Commercial Bills Market and Certificate of Deposits. Instruments used in Capital Market – Equity and Debt.

Unit 4: Financial Services

Brief Overview and functions of Mutual Funds, Insurance, Wealth Management, Advisory Services, Merchant Banking Services.

Unit 5: Merger and Acquisition

Introduction to Mergers and Acquisition, Forms of expansion, Reasons for merger, Legal and Procedural aspects of Merger.

Prescribed Books:

- 1) G.S.Batra Financial Services and Market.
- 2) Meir Khan Financial Institutions and Markets, Oxford Press
- 3) L M. Bhole, Financial Institutions and Market, Tata McGraw Hill
- 4) V.A. Avadhani, Marketing of Financial Services, Himalaya Publishers, Mumbai.
- 5) Vasant Desai, Indian Financial Systems, Himalaya Publishers Books for Reference.

Suggested Readings:

1. L. M. Bhole, Financial Institutions and Markets, TATA McGraw Hill.



COURSE CODE	MB209III	
COURSE TITLE	TRAINING AND DEVLOPMENT	
COURSE CREDITS	2	

This course provides students with an overview of the role of Training and Development in Human Resource Management. The key elements covered include: needs analysis, program design, development, administration, delivery and program evaluation. Other topics include adult learning theory, transfer of training, career planning, counselling, training techniques, budgeting and trends in training.

Course Objectives:

- 1. To understand the concepts of training and development as a tool of transformation.
- 2. To familiarize with the process of training and development to ensure desired out comes.
- 3. To understand various training and development tools and techniques.
- 4. To familiarize with evaluation design to asses training program effectiveness

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209III.1	Remembering	The student will be able to DEFINE the basics of existing
209111.1	Remembering	practices related with training and development in industry.
209III.2	Remembering	The student will be able to EXPLAIN the systematic
209111.2	Kemembering	process of T&D.
209III.3	Applying	The student will be able to EXPERIMENT with the T&D
		program to cater the needs of a company.
		The student will be able to COMPARE and analyze
209III.4	Analyzing	various methods available for each step of training
		execution.
209III.5	Cracting	The student will be able to DESIGN an effective Training
209111.3	Creating	and Development plan for a company.

Course Contents:

Unit 1: Introduction to Training and Development

Meaning, Importance of Training and Development, Difference between Training and Development, Factors influencingworking and learning.

Unit 2: Learning Process and Training

Learning Through Training, Adult Learning, Learning Theories and Learning Curve, Learning Styles.

Unit 3: Training Design and Administration

Need Assessment –Importance and Process, Implementing Training Programs (Training methods), Technique and Aids, E-learning and Use of Technology in Training. Developing Training Modules.

Unit 4: Evaluation of Training

Training Evaluation and amp; ROI, Measurement Toolsand Technique, Feedback Mechanism.

Unit 5: Trainer as a Change Agent

Trainer and his Role; Concept, Importance and Process of Coaching, Counseling and Mentoring.

- 1. Noe, R.A. (2008), Employee Training and Development. McGraw-Hill.
- 2. Aswathappa, K. Human Resource to Personnel Management, Tata Mc Graw Hill.
- 3. Mamoria C.B and Mamoria S., Personnel Management, Himalaya Publishing Company.
- 4. Gary Dazzler, Human Resource Management, Pearson Education.



COURSE CODE	MB209IV	
COURSE TITLE	PHARMACEUTICAL MANAGEMENT	
COURSE CREDITS	2	

Our pharmaceutical companies are trying their best to achieve remarkable export sale in the international markets. This also provides quality management with special focus on pharmaceutical management for developing business leaders by nurturing knowledge, skills, communication, attitudes and behavior. Pharmaceutical export is contributing to the GDP of the country and every year this contribution is positively growing. The content of the course is designed to address the challenges facing the pharmaceutical industry. The Indian pharmaceutical company has been built from an industry that copies patent drugs and manufactures them inexpensively. Now it is counted amongst the industries that are fuelling Indias economic growth and holds enormous potential. Indian-based pharmaceutical companies are also predicted to gain considerable market share in the world. It holds rank worldwide, in terms of technology, quality and range of medicines manufactured. Thus the course concentrates on the Pharmaceutical Export: Facts and Challenges that should not beignored.

Course Objectives:

- 1. To understand and explain the concept, principles and functions of management and humanresource management along with evaluation techniques for job and career planning.
- 2. To know and understand the principles and functions of material management and inventorycontrol and also understand the concept of production management in detail.
- 3. To recall and explain the functions of pharmaceutical marketing and understandingsalesmanship and activities related to it like recruitment, selection, training, compensation.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209IV.1	Remembering	The student will be able to DEFINE the concepts of
2071 V.1		Pharmaceutical Management.
		The student will be able to EXPLAIN about production
209IV.2	Remembering	management, production planning and control, design and
		development of packaging, marketing of pharmaceuticals.
_	209IV.3 Applying	The student will be able to APPLY the pharmaceutical
20017/ 2		research techniques, product management, planning,
2091V.3		marketing accounts and finance as well as Quality Control
		of Pharmaceuticals.
209IV.4	Analyzina	The student will be able to ANALYZE pharmacopoeial
	Analyzing	purity and identity tests for real life samples
209IV.5	Analyzing	The student will be able to COMPARE various methods of
		analysis and their outcomes.
209IV.6	Croating	The student will be able to FORMULATE the observations
	Creating	to meaningful results and drawing the inferences.

Course Contents:

Unit 1 : Production Management

Fundamentals of production, organization, economic policy, manufacturing economics, production capacities, production lines and job balancing, visible and invisible inputs, methodology of activities. Production planning and control, production processes Considerations for design of large scale manufacturing units including intricate design criteria for units to manufacture sterile and non-sterile products with special reference to tablets, capsules, andinjections. Design and development of packaging units including recent advances in packaging techniques for various types of sterile and non-sterile dosage forms. Warehousing design, construction, maintenance and sanitation; good warehousing practice, materials management.

Unit 2: Pharmaceutical Marketing

Evolution of marketing concept; production oriented, sales oriented, promotion oriented and consumer oriented (modern concept); market segmentation; concept of marketing, mix Role of 7 P's (Product, Price, Promotion, Place, Physical Evidence, Process, People) in Pharmaceutical Marketing Management, corporate planning and strategy, Pharmaceutical industrial marketing management. Pharmaceutical marketing environment. Product management. E-Pharma Marketing.

Unit 3: Product Planning

Selection of product, new product development and product differentiation, pricing, promotion – personal selling; salesmanship, qualities of salesman, management of sales force, advertising, publicity and window display, channels of distribution. Marketing Research: Definition and importance, Pharmaceutical Marketing Research techniques, marketing information system, pharmaceutical marketing research area. Market Demands and Sales Forecasting: Major concepts in the demand measurement, estimating current demands, geo-demographic analysis, estimating industry sales, market share and future demand, sales forecasting.

Unit 4: Introduction to financial management:

Financial planning and control, working capital management, management of fixed assets. Concepts and techniques of financial management decision, concepts in evaluation – time value of money, valuation of a firm's stock, capital assets pricing model, investment in assets and required returns, risk analysis, financing and dividend policies, capital structure decision, working capital management, management of cash, management of accounts receivable, inventorymanagement. Evaluation of investment decisions by pay back period, accounting rate of return, net present value methods, break even analysis.

Unit 5: Project Evaluation

Project definition, preparation of feasibility assessment and selection, project reporting, conventional project appraisal; limitations, towards a new framework, Projections, profitability, cost and benefit analysis, appraisal criteria – financial, economic and social, Risk analysis.

Prescribed Textbook:

- 1. Management accounting by Khan and Jain; Tata Mc Graw Hills.
- 2. Cost Accounting Methods and Problems by BHAR; A P Academics.
- 3. Cost Accounting Principles and Practice by Dutta; Pearson.

Suggested Readings:

1. Product Management by Lehmann IV th edition; Tata Mc Graw Hills.

- 2. Project Management- The Managerial Process by Gray and Larson; Tata Mc Graw Hills
- 3. Investment and Portfolio Management by M. Ranganathan; Pearson Publication.



COURSE CODE	MB209V
COURSE TITLE	APPLICATION AND METHODOLOGY OF BIOTECHNOLOGY
COURSE CREDITS	2

Biotechnology can be broadly defined as "using organisms or their products for commercial purposes." As such, (traditional) biotechnology has been practices since the beginning of record history. It has been used to bake bread, brew alcoholic beverages, and breed food crops or domestic animals. But recent developments in molecular biology have given biotechnology new meaning, new prominence, and new potential. It is (modern) biotechnology that has captured the attention of the public. Modern biotechnology can have dramatic effect on the world economy and society.

Course Objectives:

- 1. To acquaint the students with the significance of Methodology of Biotechnology.
- 2. To familiarize the students with the different analytical and Molecular techniques in theBiotechnology.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209V.1	Remembering	The student will be able to DEFINE various tools and techniques in Biotechnology.
209V.2	Remembering	The student will be able to EXPLAIN the significance of methodology of Biotechnology.
209V.3	Applying	The student will be able to APPLY the various analytical and molecular techniques.

Course Contents:

Unit 1: Plant Tissue culture

Primary culture, callus, Somaclonal propagation, application, Scope and applications Pharma and agriculture-products, new bio products, tissue culture basedproducts, crop improvement and protection, floriculture, herbal medicine.

Unit 2: Animal Tissue culture

Animal cell culture- basics and techniques, organ culture, application, Recombinant DNA technology-Restriction endonucleases, Gene Cloning, genome library, Vectors, Plant and animal Vectors, molecular cloning strategies.

Unit 3: Introduction to Plant Biotechnology

Transgenic Plants, Introduction to AnimalBiotechnology, Transgenic animals.

Unit 4: Hybridoma technology

Basics of immunology, Immunization techniques, Hybridoma technology and applications.

Unit 5: Bioinformatics

Data Analysis- Accessing databank, sequence analysis, BLAST, sequence comparison, multiple alignments, Clustal W, protein structure prediction.

- 1. B. D. Singh, Biotechnology, Kalyni Publishers, 1stEdition.
- 2. Kumar H. D., Textbook of Biotechnology, East-WestPress.
- 3. Attwood T. K., D. J. Parry-Smith, Introduction to bioinformatics, PearsonEduction.
- 4. Rastogi, Bioinformatics: Methods and Applications, Prentice Hall India, 2ndEdition.
- 5. David Mount, Bioinformatics: Sequence and Genomeanalysis.
- 6. Stephen and David, Introduction to Bioinformatics: A theoretical and practical approach.



COURSE CODE	MB209VI	
COURSE TITLE	IT IN BUSINESS MANAGEMENT	
COURSE CREDITS	2	

This course is to providing computing, telecommunications, networking infrastructure and audio visual support to academic and administrative programs and services. The information technology implements cost effective solutions that enhances the organization's ability to provide a quality education for students and it gives administrators and faculty the means to operatesuccessfully.

Course Objectives:

- 1. To develop skill for maintaining a reliable and scalable information technology infrastructure, enabling innovative uses of technology for educational excellence.
- 2. To develop a technology governance process which includes input from all clients.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209VI.1 Rememb	Domomboring	The student will be able to DEFINE and explain the
209 V 1.1	209VI.1 Remembering	features of important ERP modules
209VI.2	A notivina	The student will be able to APPLY the operational aspects
209 V 1.2	Applying	of ERP implementation and support
2007/1.2	09VI.3 Analyzing	The student will be able to DISTINGUISH between
209 V 1.3		various modules of ERP systems.

Course Contents:

Unit 1: Information Technology Framework

Information System Functionality- Comprehensive Information System Integration-Communication Technology-Rationale For ERP Implementation-ERP System Design-Supply Chain Information System Design.

Unit 2: Impact of Globalization and Information Technology on different areas of management practices.

Unit 3: Information Technology in Supply Chain

Role and Importance of IT in Supply Chain Management, IT solutions for Supply Chain Management, Supply Chain Information Technology in Practice.

Unit 4: Global IT Management

Introduction, Challenges and Opportunities of IT in Global Market.

Unit 5: Ethical issues of IT in Business.

Prescribed Books:

- 1. Management Information System: Jawadekar.
- 2. Management Information System: Laudon and Laudon.
- 3. The Essential Guide to Knowledge management: AmritTiwana.

Reference Books:

- 1. Douglas Long International Logistics: Global Supply Chain ManagementSpringer- Verlag New York, LLC;2004.
- 2. Information Technology Enabled Services Vol. 1 and 2 (ICFAI UniversityPress).



COURSE CODE	MB209VII
COURSE TITLE	EXPORT AND IMPORT MANAGEMENT
COURSE CREDITS	2

Globalization has affected all countries of the world and global trade is growing at pace that makes it importance for business to stay attuned to the changing world economy. Till the early 1990s, most of the countries were closed economies there were quantitative restrictions on import and stringent restrictions on foreign investment. The emerging economies along with the development countries have assumed an importance role in the field of international trade.

Course Objectives:

- 1. To help in understanding of EXIM procedures assumes greater significance in today's global world.
- 2. To understand the procedures, regulations, stipulations, provisions and opportunities involved in export and import.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209VII.1	1 Remembering	The student will be able to DEFINE and explain the basics
	0	of EXIM procedures.
2007/11/2	09VII.2 Applying	The student will be able to MANAGE the export and
207 V 11.2		import documentation effectively and efficiently.
209VII.3	Analyzing	The student will be able to ANALYZE export
209 V II.3		opportunities and international markets.

Course Contents:

Unit1: Understanding International Trade Environment

Introduction to Export and ImportManagement: Nature and Defined of Export Management, Need and Features of Export Management, Motivation for Export, Process of Export Management, Functions of Export Manager.

International TradingEnvironment : Multilateral Trading System Uruguay Round, Measures for Protection of Domestic Industries Trade Block and Trade Agreement, Implication for Market Entry Strategies.

Organizingand Registration of Export andImport Process: Nature of Export Firm, Setting up an Export Firm, Procedure for the Allotment of Importer and Exporter Code Number, Registration of Export Firm, Starting Export Business Tips.

Unit 2: Managing Exports Business

Method of Payment : Nature / Method of Payment Terms, Advance Payment, Open Account, Letter of Credit (Form and Type of L/C), Documentary Collection, Instruments of Payment (Incoterms).

Export PricingDecision : Nature of Pricing Decision, Price Defined, Structure of Cost, Setting price and Price Negotiation, Content of an Export Price Quotation.

Unit 3: Execution of Export Order

Export - Import Documentation, Procedures and Steps: Steps for Successful Exporting,

Export –Import Documentation.

Business Risk Management and Coverage: Risk Management in Export –Import Business, Types Of Risks, Quality and Pre-Shipment Inspection.

Export Contract and Incoterm: Incoterm—Terms and—Condition,—Purpose and Scope of Incoterm, The Structure of Incoterms, Incorporation of Incoterms into the contract of sale, IncotermGroup.

Unit 4: Post Export Follow up

Customs Clearance of Export ImportCargo : Clearance of Export Cargo, Clearance of Import Cargo, Customs Valuation.

Export IncentiveSchemes: Duty Exemption Schemes, Duty Remission Schemes, Export Promotion Capital Goods Scheme, Special Economic Zones.

Unit 5: Import Procedures

Types of Importer, Import of Unrestricted Item, Import of restricted Item, Import Clearance and Documents, Cargo Handling and Demurrage Charges, Application Fee for Import Licences.

World Shipping and Containerization : Overview of Shipping Operation, Types of Ships and International Trade, Need and Type of Containerization, Inland Container Depots.

Prescribed Books:

- 1. Export Import Management By Justin Paul and Rajiv Aserkar, OxfordPublishing.
- 2. Export Management, BY P.K.Khurana, GalgotiaPublishing.

Reference Books:

1. Export and Import Management By Aseem Kumar, Anurag Jain Publishing.



COURSE CODE	MB209VIII	
COURSE TITLE	HOSPITAL ADMINISTRATIONS	
COURSE CREDITS	2	

The Masters in Hospital Administration is aimed towards orienting and developing students for executive positions in hospitals. The course develops the managerial skills of individuals and also exposes them to clinical aspects of hospital management. The students have the option of developing their skill set in a particular area of hospital management while taking the optionalmodules.

Course Objectives:

- 1. To work in teams and help in team building across different faculties and departments in the hospital.
- 2. To identify problem areas and integrate practices that help towardsquality improvement.
- 3. To self-assess and participate in continuous professional development.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209VIII.1	Undonstandina	The student will be able to UNDERSTAND concepts and
209 V III. I	Understanding	functions of Hospital Administration.
		The student will be able to DEVELOP the managerial
209VIII.2	Creating	skills of individuals and also exposes them to clinical
		aspects of hospital management.
209VIII.3	Analyzing	The student will be able to ANALYZE their own skill set
		for their further professional development.

Course Contents:

Unit 1: Hospital Organization-Structure, Function, Role In Primary Health Care.

Unit 2: Hospital Administrator, Roles/Responsibilities.

Unit 3: Skills of A Hospital Administrators.

Unit 4: Hospital Operations Management.

OPD, Inpatient, ICU, OT, Accident AndEmergency, DayCare, NursingServices, Diagnostic(Lab/Radiology), HospitalRecords/HIS, DietaryServices, CSSD, LaundryServices, Bio MedicalServices, House Keeping/MaintenanceServices.

Unit 5: Human Resource /Personnel Management, Materials Management InHospital, Quality Management InHospitals, Laws and Ethics Related To Hospitals and Financial Management In Hospitals.

Reference Books:

- 1. Hospital Admionatration by D. C. Joshi and Mamata Joshi, 2009.
- 2. Hospital Management by S M Zha, 2011.

COURSE CODE	MB209IX
COURSE TITLE	PRODUCTION AND OPERATIONS MANAGEMENT
COURSE CREDITS	2

The management of the efficient transformation of inputs into outputs to suitably satisfy customers. Inputs are materials, labor, capital and management. Outputsareproducts or services, which customers want and often pay for. The course provides an introduction to the operations and the related management concepts. The level of discussion varies from strategical to daily control of business processes.

Course Objectives:

- 1. To decide plant location and plant layout.
- 2. To understand how Operations can be planned effectively.
- 3. To understand inventory management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209IX.1	Remembering	The student will be able to DEFINE and explain the concept and significance of proper facilities location and layout
209IX.2	Applying	The student will be able to IMPLEMENT inventory management policies
209IX.3	Analyzing	The student will be able to ANALYZE the facilities location and layout
209IX.4	Creating	The student will be able to DESIGN production plans.

Course Contents:

Unit 1: Production Management

Integrated Production Management, System Productivity, Capital Productivity, Labour Productivity, Personnel Productivity, Training, Nature and scope of Operations: Functions of Operations Management, System's perspective, Challenges in Operations Management, Competitiveness, Types of Manufacturing and service Systems.

Unit 2: Facilities Planning, Layout and Material Handling

Location, factors affecting size of the firm, factors affecting plant location, economic survey of the site selection, computation of investment and cost of production and distribution, factors and location rating, break even analysis for facility location planning, simple median model, centre of gravity method, Plant layout, material flow system, process layout, product layout, mixed layout, project layout, cellular layout, process charts, flow diagram, travel chart, RELchart.

Unit 3: Inventory Management, Production planning and control

Continuous Inventory Systems, Periodic Inventory system, Two- bin system, The ABC classification, EOQ methods, Order quantity with variable demand, order quantity for a periodic inventory system, Production planning Hierarchy, Aggregate planning, Level strategy, Chase strategy, Mixed strategy, Disaggregating the aggregate plan, Rough Cut Capacity planning, Material Requirement planning.

Unit 4: Quality Management

Meaning, cost of quality, contribution of famous quality Guru, TQM, Six Sigma, SQC, Quality certification.

Unit 5: Maintenance Management:

The Maintenance Function, Equipment Life Cycle, Measures of Maintenance Performance, Maintenance Strategies, Total Productive Maintenance.

- 1. Production and Operations Management Chary Tata McGraw- HillPublications.
- 2. Operations Management for Competitive Advantage Chase, Aquilano, Jacobs, Agarwal, Tata McGraw- Hill Publications.

COURSE CODE	MB209X
COURSE TITLE	APPLICATIONS OF BUSINESS ANALYTICS
COURSE CREDITS	2

Analytics has been defined as the extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to drive decisions and actions. Analytics is more than just analytical methodologies or techniques used in logical analysis. It is a process of transforming data into actions through analysis and insights in the context of organizational decision making and problem solving. Analytics includes a range of activities, including business intelligence, which is comprised of standard and ad hoc reports, queries and alerts; and quantitative methods, including statistical analysis, forecasting/ extrapolation, predictive modeling (such as data mining), optimization and simulation.

Course Objectives:

- 1. To introduce the fundamental ideas behind optimization technology to the extent that you can utilize this knowledge to build your own solvers based on various paradigms.
- 2. To gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.
- 3. To learn how to use and apply Excel and Excel add-ins to solve business problems.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
209X.1	Remembering	The student will be able to DEFINE and explain the usage of excel in business solving process.
209X.2	Applying	The student will be able to APPLY the data mining tools practically
209X.3	Analyzing	The student will be able to ANALYZE the data using tools of excel.

Course Contents:

Unit 1: Data Science Concepts

Using the past to predict the future, advantages, disadvantages, Data generation, interpretation and visualisation. Exploratory Data Analysis, Inference Vs Prediction. Management by Facts.

Unit 2: Data Modelling Approach

KRA/KPI, Contextual Data, Data Organisation, Structured Vs Unstructured data, the 5 V's of Business Analytics, Data Analytics framework, Analytics Tools – licensed vs open source, comparison of software features and capabilities.

Unit 3: Data Analysis Techniques

A|B Testing, What-if scenarios, Market Basket Analysis, Classification and Regression Tree, Monte Carlo Simulation, Time Series.

Unit 4: Statistical Models

Statistical Distributions - Normal, Binomial, Poisson. Measuring Central Tendencies, Symmetry, Variability. Correlation, Regression.

Unit 5: Data Science Toolkit

Cluster, Decision Tree, Factor, Regression, Machine Learning, Segmentation Analysis, Sentiment Analysis.

- 1. Kerns, G. J. (2010). Introduction to probability and statistics using R. Publisher: G. Jay KJerns.
- 2. Verzani, J. (2014). Using R for introductory statistics 2nd Edition. New York: Chapman and Hall.
- 3. Webster J.C. and Albert M.Cook, —Clinical Engineering Principle and Practicel, Prentice Hall Inc., Englewood Cliffs, New Jersey, 1979 (Unit I).
- 4. Goyal R.C., Handbook of hospital personal management, Prentice Hall ofIndia.

COURSE CODE	MB210	
COURSE TITLE	INDUSTRY SECTORAL ANALYSIS	
COURSE CREDITS	1	

Industry sectoral analysis is the analysis of a specific branch of manufacturing, service, or trade. Understanding the industry in which a company operates provides an essential framework for the analysis of the individual company that is, company analysis. Equity analysis and credit analysis are often conducted by analysts who concentrate on one or several industries, which results in synergies and efficiencies in gathering and interpreting information.

Course Objectives:

- 1. To learn assessment of the economic and financial condition and prospects of a given sector of the economy.
- 2. To give exposure to the students about different business domains and verticals.
- 3. To make the students to do desk research and understand profile of various industries.
- 4. To provide an understanding of the role of market research and analytics in the society and business, and create an awareness of the processes involved in designing and planning an effective research.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
210.1	Remembering	The student will be able to DEFINE the basics of industry.
		The student will be able to DEMONSTRATE better
210.2	Applying	understanding of their market, the emerging trends, and to
		identify opportunities and threats.
210.3	A polying	The student will be able to APPLY micro and macro tools
210.3	10.3 Applying	for assessment of the sector.
210.4	Analyzing	The student will be able to ANALYZE the economic and
		financial condition of the sector of economy.

Course Contents:

All the students need to undergone compulsorily through 'Industry Sectoral Analysis' course for 1 credit. The course is like a Desk Research. The students can choose any one industry sector from the economy for their sudy as per their choice and interest.

The Institute will provide the guidelines to the students for how to conduct the Industry Sectoral Analsis study. The Instituite will also allot the guides for every student for monitoring the progress of the course and report. At the end of semester students need to submit spiral hard bound copy of report to their respective guides and also need to appiear for presentation and viva-voce.

GLOBAL BUSINESS SCHOOL AND RESEARCH CENTRE DR. D. Y. PATIL VIDYAPEETH, PUNE

(Re-accredited by NAAC with ACGPA of 3.62 on four point scale at 'A' grade)
An ISO 9001:2015 Certified University

Name of the Programme: MBA

Name of Semester : SEMESTER III

COURSE CODE	MB301	
COURSE TITLE	STRATEGIC MANAGEMENT	
COURSE CREDITS	3	

Organisations face increasing environmental uncertainty with shortening product and technology life cycles and increasing competition. Managers need to develop an understanding of their organisation's industry structure, external environment as well as its internal strengths and weaknesses. It is also important that managers are able to think creatively in formulating and implementing their strategies to ensure their organisation's success in its industry. This course, therefore, focuses on providing future managers with relevant strategic management concepts to advance their skills and abilities so that they can contribute towards an organisation's competitive advantage.

Course Objectives:

- 1. To develop an understanding of Strategy and Policy Making amongstudents.
- 2. To develop an ability to apply various tools and techniques such as Corporate and Business Strategies to real world business problems.
- 3. To develop Graduates who are socially responsible and responsive to theneeds of the society.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
301.1	Analyzing	Students will be able to ANALYZE strategic macro
301.1		environmental issues.
301.2	Remembering	Students will be able to EXPLAIN industry factors, and
301.2	Remembering	identify its impact on profitability and strategic positioning.
301.3	Analyzina	Students will be able to assess ANALYZE organizational
301.3	Analyzing	performance and SBU strategies
	\ \	Students will be able to IDENTIFY strategic capabilities
301.4	Remembering	and gaps to implement strategy at the single business unit
		level.

Course Contents:

Unit 1: Introduction to Strategic Management and Business Policy decisions, Environmental appraisal, corporate level strategies, Business level strategies, Strategic management in Indian firms, Practices and cases

Introduction to business policy and strategy, concept of strategy. Corporate, business and functional levels of strategy. Introduction to Strategic Management, definition of strategic Management, elements of strategic management, model of strategic management processes, strategic management vs operational management. Stakeholdersinbusiness.

Hierarchy of Strategic Intent: Understanding strategic intent, concept of stretch and fit, vision, mission, business definition, business model, goals and objectives.

Unit 2: Strategy Formulation

Concept of environment, characteristics of environment, internal and external environment, environmental sectors, environmental scanning, appraising the environment, Industry analysis-

Porters five forces model of competition, competition analysis and competitive edge, ETOP.

Organizational appraisal: Company internal environment, organizational appraisal, concept of value chain, value chain analysis, organizational capability factors, structuring organizational appraisal, SWOT.

Corporate Level Strategies: Concentration, integration, diversification, internationalization and cooperation, stability, retrenchment and restructuring, merger and acquisition strategies, achieving acquisition success, effective acquisition.

Business Level Strategies: Managing relationship with customers, purpose of business level strategies, foundations of business level strategies, positioning of firm in industry, business strategies for different industry conditions, cost leadership strategy, differentiation strategy. Strategic analysis and choice.

Strategic alternatives, strategic analysis, contingencystrategies.

Tools and techniques for strategic analysis, GE 9 cell model, Portfolio analysis BCG matrix, experience curve, impact matrix.

Unit 3: Implementingstrategic plan

Implementing strategic plan – Role of chief executive officer and the board of directors, Role of top management – Power games – Strategic management in MNC, functional and operational implementation, corporate culture, structure and organizational values.

Unit 4: Strategic Evaluation

Operations control and Strategic control, Techniques for Strategic Evaluation and Control, Symptoms of malfunctioning of Strategy.

Unit 5:Blue Ocean Strategy

Principles of Blue Ocean strategy, Concepts of Red Ocean Strategy, Difference between Blue ocean and Red ocean strategy.

- 1. Exploring Corporate Strategy, Gerry Johnson, Kevan Scholes, Richard Whittington, 2009, Pearson Ed Ltd, United Kingdom, 2nd Ed.
- 2. Crafting and Executing Strategy Arthur A Thompson Jr, Strickland A.J., John E. Gamble and Arun K. Jain, McGraw Hill Education Private Limited, New Delhi.
- 3. Strategic Management Michael Hitt, Ireland, Hoskission, 2010, Cengage Learning, NewDelhi.
- 4. Strategic Management Concepts and Cases, Fred R. David, 2010, PHI Learning, New Delhi.
- 5. Business Policy and Strategic Management (Text and Cases), Subba Rao, P 2010.

COURSE CODE	MB302
COURSE TITLE	START UP AND NEW VENTURE MANAGEMENT
COURSE CREDITS	3

This course provides students with analytical frameworks for assessing entrepreneurial potential and management skills development, including researching and creating a business plan. Topics include: small business and marketing management; evaluating and purchasing a business; developing a basic business plan; franchising options; e-commerce marketing strategies; financial management; HR management; and leadership. The main emphasis will be on new venture development and management.

Course Objectives:

- 1. To acquire in-depth understanding towards Entrepreneurship as an area of study.
- 2. To instill the spirit of entrepreneurship and imbibe an entrepreneurial mind-set.
- 3. To provide an overview of the competencies needed to become an entrepreneur and to provide students an opportunity to assess their strengths and identify the gaps to become successful entrepreneurs.
- 4. To familiarize the students with various entrepreneurial options, the process of establishing a start-up and launching a new venture.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
302.1	Evaluating	Students will be able to APPRAISE the entrepreneurial traits and instincts.
302.2	Applying	Students will be able to DEMONSTRATE creativity and innovation
302.3	Remembering	Students will be able to IDENTIFY potential business opportunity for new venture
302.4	Evaluating	Students will be able to EVALUATE business model and financial projections

Course Contents:

Unit 1: ConceptandDefinitions

Entrepreneur and Entrepreneurship and Economic development: A Typology of Entrepreneurs, The Entrepreneur's role, Task and personality, Entrepreneurial skills: creativity, problem solving, decision making, communication, leadership quality, McClelland's N-Ach Theory, self-analysis, personal efficacy, culture and values, risk-taking behavior, technology backup.

Unit 2: Evaluating Entrepreneurial Options and Startup Opportunities

Understanding the idea and an opportunity, the opportunity creating, shaping, recognizing and seizing, screening venture opportunities, gathering information and analyzing, evaluating venture opportunities and develop startup strategy, feasibility analysis and risk-taking ability.

Unit 3: Understanding Startup Finances, Capital and Other Requirements

An overview of startup finance and sources of finance, understanding the business model and financial projections-how to forecast expenses and revenue, gathering the resources, developing entrepreneurial marketing and operational plan, role of government institutions.

Unit 4: Developing Team and Presenting Business Plan

The importance of team, forming and building team, examining sample business plans and writing business plan, understanding the investor's perspective and presenting the business plan, valuation of business plan and the elevator pitch.

Unit 5: Launching and Managing the New Venture

Legal issue and other formalities, Legal form of new venture, Entrepreneurial challenges as an individual and as an entrepreneur, both. Skills of managing business risk enhancing success.

Prescribed books:

- 1. Holt H. David (2005), Entrepreneurship New Venture Creation, Prentice-Hall.
- 2. Histrich D. Robert and Peters P. Michal Shepherd A Dean (2007), Entrepreneurship, McGraw Hill.

References books:

- 1. Kuratko F. Donald and Hornsby S. Jeffery (2009), New Ventures Management, Entrepreneur Road Map, Pearson Education.
- 2. Kuratko F. Donald and Hornsby S. Jeffery (2009): New Ventures Management, Entrepreneur Road Map, and Pearson Education.
- 3. Stutely, R. (2002): The Definitive Business Plan, FT Prentice Hall.
- 4. O'Rourke S. James (2009): Writing and presenting business plan, Cengage Learning.
- 5. Stevenson, H.H., Grousebeck, H.I., Roberts, M.J. and Bhide, A. (2000): New Business Ventures and the Entrepreneur, McGraw-Hill, Singapore.



MARKETING MANAGEMENT SPECIALIZATION

COURSE CODE	MB303A
COURSE TITLE	SALES AND DISTRIBUTION MANAGEMENT
COURSE CREDITS	3

Course Description:

Economic growth can only be increased and sustained if manufacturers, distributors and the service industries are able to sell and distribute their products profitably to the widest possible markets. Selling, Sales and Distribution Management are therefore essential functions without which economic growth cannot take place.

Course Objectives:

- 1. To introduce course participants to national and international sales and distribution practices.
- 2. To expose course participants to the tools and strategies necessary for designing, motivating and evaluating sales and distribution management systems.
- 3. To sharpen decision making skills of future sales and distribution managers.
- 4. To develop understanding and appreciation of the Sales and Distribution processes in organizations.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303A.1	Understanding	Students will be able to UNDERSTAND marketing and
303A.1	Onderstanding	sales in various industry and can put skills to practical use
		Students will be able to IDENTIFY potential customers
303A.2	Remembering	and segments, understand and anticipate customer
		expectations and needs.
		Students will be able to DEMONSTRATE & appreciate
303A.3	Applying	the diverse variables affecting the sales & distribution
		function.
303A.4	Applying	Students will be able to LINK distribution with other
303A.4	Applying	marketing variables.
303A.5	Evaluating	Students will be able to EVALUATE accommodation
303A.3		business distribution channels and branding.
303A.6	Constinu	Students will be able to DEVELOP sales and distribution
303A.0	Creating	plans.

Course Contents:

Unit 1: Introduction to Sales Management

Marketing vs. Sales, SalesStrategies.

Unit 2: Sales Techniques

Personal sellingprocess, Consumer and organizational buyerbehaviour, Sales responsibilities and preparation, Key Accountmanagement, Customer Relationship Management.

Unit 3: Sales force Management

Designing and organizing the sales force, Recruiting and selecting right salespeople, Training,

motivating and developing the salesforce.

Unit 4: Sales environment

Cultural factors that effect a Firm's sales performance, International Selling, Selling of financial services, B 2 C selling Vs. B 2 Bselling.

Unit 5: Distribution Management

Marketing Logistics, Distribution role and functions of Channels, Channel Design Decisions, Channel Selection Criteria and Issues, Channel Management and ConflictManagement.

Prescribed Books:

1. Sales and Distribution Management – Text and Cases By: Krishna K. Havaldar and Vasant M. Cavale, TATA McGraw-Hill.

Suggested Readings:

- 1. Selling and Sales Management; David Jobber and Geoff Lancaster: Pearson Education.
- 2. Sales Management-Shaping future sales leaders; John F. Tanner Jr, Earl D. Honeycutt Jr., and Robert C. Erffmeyer; PearsonEducation.

COURSE CODE	MB304A	
COURSE TITLE	DIGITAL MARKETING	
COURSE CREDITS	3	

With the rapid shift of advertising dollars away from traditional media to online platforms, it is becoming increasingly important for marketing graduates to be well-versed in digital marketing and analytics fundamentals.

This course has been designed for those who want to understand the key elements of building an effective digital marketing campaign. Covering best practice and using case studies throughout, the session offers a practical guide to the core techniques in digital marketing. Online tools and reference materials are highlighted throughout, enabling delegates to leave with solid hands-on knowledge that they can implement immediately upon return to the office

Course Objectives:

- 1. To provide students with the technical foundation and digital literacy necessary to market goods and services on the internet.
- 2. To learn best practices for social media marketing using appropriate skills.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		Students will be able to IDENTIFY target customers
304A.1	Remembering	through digital channels, they create websites that attract
		customers, and they optimize online business performance.
		Students will be able to USE interactive and direct
304A.2	Applying	marking, digital advertising, e-business technologies, and
		global enterprise.
		Students will be able to EVALUATE online branding
304A.3	Evaluating	through search engine marketing and social network value
		creation

Course Contents:

Unit 1: Digital marketing Fundamentals

Understanding the concepts of digital marketing, internet, WWW, traditional marketing vs digital marketing, Introduction to e-commerce: Business models, Business Models on the Web. Public policy: social, legal, ethical, political issues for e-commerce.

Unit 2: Mobile e-commerce

Retailing (e-tailing), Services online: Online content and digital media, B2B e-commerce, Global opportunities and issues.

Unit 3: Scope of Digital Marketing and Web Planning

Know your customers - Buyer behavior, segmentation, targeting, web design and planning, types of websites, Planning of website, Overview, the website, branding, banner ads, affiliate marketing. Paid search, Characteristics of E Marketing: Addressability, Interactivity, Accessibility, Connectivity, Control, Mapping of digital marketing media.

Unit 4: Tools of Digital Marketing

Email Marketing-Introduction to email marketing, challenges faced in bulk emails, types of email marketing.

SEO: Introduction to concept search engine optimization (SEO), comparison shopping engines. Email, RSS, podcasting, Blogs, Viral, Wikis, CRM. Auctions, Portals.

Online Branding: Search Engine Marketing, Online Communities and Innovation Communities, Mass Collaboration and Crowd-sourcing, Social networks, Value Creation through Social Networking.

Unit 5: Web Analyticsand Social Media Marketing

Introduction, understanding account structure, cookie tracking, monitoring traffic, Understanding Digital Analytics, Acquisition, Engagement and Conversion, Measuring Social Impact, Multi-Touch Analytics, Mobile Analytics, and The Future of Digital Analytics: Big Data.

Text Books:

- 1. Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation by Damian Ryan, Calvin Jone. Kogan Page.
- 2. Marketing 2012 by William M. Pride, O. C. Ferrell, Cengage Learning.
- 3. Integrated Marketing Communications: Asia Pacific Edition by William Chitty, Nigel Barker, Michael Valos, Terence A. Shim, Cengage Learning.
- 4. DigiMarketing: The Essential Guide to New Media and Digital Marketing by Kent Wertime, Ian Fenwick.



COURSE CODE	MB305A
COURSE TITLE	PRODUCT AND BRAND MANAGEMENT
COURSE CREDITS	3

Product and Brand Managers are the lifeblood of many of the world's most successful companies. They provide their companies with significant competitive advantage. Generally they are responsible for the development and introduction of new products, including pricing, promoting and distributing products. They also manage old, new and derivative products (product extensions); determine when old products die and how to position their products against thecompetition.

Course Objectives:

- 1. To learn fundamentals of Product and Brand Management.
- 2. To make participants understandcompetition at product level as well as brand level. Two broadly important aspects namely Product Management from competition point of view and Product Management from NewProduct Development and Innovation point of view are to be covered.
- 3. To make students understand principles of Branding, role of brands, elements and components of brands, brand equity etc. The main aim for Brand Management is to make sure that students understand implications of planning, implementing and evaluating Branding Strategies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305A.1	Applying	Students will be able to APPLY marketing skills and understanding of various aspects of marketing from brand
303A.1	Applying	equity perspective.
	\ \ \	Students will be able to make the product and brand
305A.2	Analyzing	management decisions to build MEASURE and manage
		brand equity.
305A.3	Applying	Students will be able to DEMONSTRATE the ability to
		sketch a life cycle for a given product.
305A.4	Evaluating	Students will be able to EVALUATE appropriate branding
303A.4	Evaluating	strategies & branding concepts in their field of interest.

Course Contents:

Unit 1: Product Management

Product Development, Product focused organization; Market focused organization, Factors influencing design of the product, Changes affecting product management.

Developing Product Strategy

Setting objectives and alternatives, Product strategy over the life-cycle, Customer analysis, Competitor analysis, Design of manufacture, New product development.

Unit 2: Brands and Brands Management

Commodities VsBrands, The role ofbrands, Branding Challenges and opportunities, The Brand

equityconcept, Building a strongBrand, Sources of brand equity: Brand Awareness and BrandImage.

Unit 3: Brand Positioning and Brand Building

Brandknowledge, Brand portfolios and marketsegmentation, Identifying and establishing brandpositioning, Defining and establishing brandvalues, Steps of brand building: Choosing Brandelements, Designing marketing programs to build brandequity, Integrated Marketing Communications.

Unit 4: Brand Leveraging and Brand Performance

Leveraging secondary brandassociations, Co-branding, Celebrityendorsement, Establishing brand equity managementsystem, Measuring sources of brand equity and consumermindset.

Unit 5:Designing and Sustaining Branding Strategies

Brand hierarchy, Designing a Brandingstrategy, Brand extension and brandtransfer, Managing brand overtime, Using cause related marketing to build brandequity.

Measuring and Managing brand equity

Brand Value chain and BrandAudits, Brand Tracking, BrandValuation, Brand Equity Models – Brand Asset Valuation, Aaker Model, BRANDZ, Brand Resonance, Reinforcement, Revitalization, Crisis.

Prescribed Books:

- 1. Strategic Brand Management By Kevin Lane Keller, M.G.Parameswaran and Issac Jacob, 3rd edition, Pearson education.
- 2. Product management Donal R. Lehmann, Russel S. Winer.

- 1. Branding Concepts and Process DebashishPati.
- 2. Marketing Management PhilipKotler.
- 3. Successful Branding Pran KChoudhary
- 4. Brand Positioning Strategies for Competitive Advantage -Subrato SenGupta.
- 5. Strategic Brand Management-Caperer.
- 6. Behind Powerful Brands Jones.

COURSE CODE	MB306A	
COURSE TITLE	CONSUMER BEHAVIOUR	
COURSE CREDITS	3	

Focus of the course would be on the psychological and sociological elements and their impact on consumer decision making. The course will help the students take a holistic view of the buyer; it will help equip them with knowledge of various models and frameworks to help understand buyer behavior and align the knowledge with formulation of appropriate marketing strategies. The objective is to gain an understanding of the theoretical and conceptual concepts of buyer behavior and apply them to real life marketing situations and practices.

Course Objectives:

- 1. To identify and explain factors which influence consumer behavior and display critical thinking and problem solving skills.
- 2. To help students understand different models of consumer decision making.
- 3. To gain, evaluate and synthesize information and existing knowledge from a number of sources and experiences.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DEFINE the nature of consumer behaviour and various
306A.1	Remembering	practices and theories linked to the study of consumer
		psychology.
306A.2	Understanding	DESCRIBE the critical and reflexive actions of consumers
300A.2	Onderstanding	in connection with consumption pattern and culture.
	,	DEMONSTRATE how knowledge of the different facets
306A.3	Applying	of consumer behaviour can be applied in developing
		various marketing strategies.
306A.4	Analysina	OUTLINE and synthesize the information & knowledge
300A.4	Analysing	gained from various sources and experiences.
		CHECKING the appropriateness of marketing strategies
306A.5	Evaluating	designed on the basis of consumer behaviour studies
	A	related to specific situations.

Course Outline:

Unit 1: Introduction to Consumer Behavior

Introduction of marketing strategy and consumer behavior, Market Analysis. Consumer Behavior, its Origin and Strategic Applications. Consumer Needs and Motivation: Types and Systems of needs, Motivation dynamic.

Unit 2: Culture and Consumer behavior

Meaning of culture, Characteristics of culture, function of culture, types of culture, Cross-cultural consumer analysis:- cross cultural marketing objectives, Basic areas for cross-cultural marketing,

problem in cross cultural marketing. Motivation and consumer behavior: - Introduction, motives and motivation, positive or negative motivation, Consumer motives:- personal, social motives.

Unit 3: Personality and Consumer Behavior

Theories of Personality, Personality and Understanding Consumer Behavior, Brand Personality, Self and Self Image, Virtual Personality for Self. Consumer Perception: Sensory Dynamics of Perception, Elements of Perception, Consumer Imagery. Consumer Learning: The elements of consumer learning, Behavioral learning. Consumer Attitude Formation and Change, structural models of attitudes, attitude formation, Communications and Consumer Behavior.

Unit 4: Attitude and consumer behavior

Meaning of attitude, nature and characteristics of attitude, types of attitude, learning of attitude, sources of influence on attitude formation, Model of attitude- Tri-component attitude model, multi-attribute attitude model.

Unit 5: Marketing ethics and Social Responsibility

Exploitative targeting, manipulating consumers, and social responsibility.

Prescribed Books:

- 1. Consumer Behavior by Leon G. Schiffman, Joseph Wisenblit & S. Ramesh Kumar, Tenth Edition. Pearson, India.
- 2. Consumer behavior & marketing strategy, J. Paul Peter, Jerry C. Olson, Seventh Edition, India.

- 1. Consumer Behavior Hawkins, Best, Coney.
- 2. Customer Behavior A Managerial Perspective Sheth, Mittal Thomson.
- 3. Conceptual Issues In Consumer Behavior Indian Context S Ramesh Kumar-Pearson.

COURSE CODE	MB307A
COURSE TITLE	INTEGRATED MARKETING COMMUNICATIONS
COURSE CREDITS	3

Integrated Marketing communication is part and parcel of marketing which is the backbone of any organization. It has huge potential as a career opportunity because without media no organization can survive in this competitive environment.

Course Objectives:

- 1. To make the students familiar with different concepts and practices of marketing communication.
- 2. To learn various tools of marketing communication and its counterparts.
- 3. To gain knowledge about the W's to use media (when, why, where, what).
- 4. To learn to make effective media plan.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307A.1	Remembering	DEFINE the major role of IMC process, IMC Tools,
307A.1		Elements of IMC.
		CLASSIFY the types of advertising and ad agencies,
307A.2	Understanding	Measurement of ad effectiveness & budget for promotional
		program.
307A.3	Applying	EXECUTE the creative strategy for copy platform,
307A.3	Applying	campaign planning, appeals & media planning.
307A.4	Analysing	ANALYSE the effectiveness of various media platforms.
307A.5	Evaluating	MONITOR implementation of market research, Ethics &
		Social responsibility in IMC campaign

Course Outline:

Unit 1: An Introduction to IMC

Role of IMC in Marketing process, IMC program situation Analysis, Introduction to IMC tools (Advertising, sales promotion, publicity, personal selling, Direct marketing, Event Management, E-commerce, Corporate communication, Public Relations, Media Relations, Industrial Relations, Government relations, ,Trade fair and exhibitions, crisis management), Elements of IMC.

Unit 2: Message design & Communication in IMC

Perspectives on consumer behavior, Advertising – features & Objectives, Organization structure & classification of ad agencies, Source and message factors, Measurement of ad effectiveness (DAGMAR) model, AIDA model, Establishing and allocating budget for promotional program.

Unit 3: Creative strategy planning, development and execution

Creative process, Copy platform & Campaign planning, Appeals and execution styles, Media planning & strategy.

Unit 4: Understanding different media

Broadcast media and print media, Sales promotion-consumer oriented sales promotion techniques, trade oriented sales promotion ,Personal selling-Role of Direct marketing in IMC, Customer Relationship management, Public relations- Functions of PR department, Importance of sponsorship programs, event marketing, Internet marketing- Meaning, objectives & benefits of internet marketing.

Unit 5: Marketing research, ethics and its applications

Definition, Implementation of Market research in IMC, Application of market research, Ethics and social responsibility in IMC campaigns.

Prescribed Books:

1. Advertising and Promotion: An Integrated marketing communications perspective By George E. Belch and Michael A. Belch, TATA McGraw Hill.

- 1. Advertising Management Batra, Myers, Aaker.
- 2. Principals of Marketing Philip Kotler, 12th Ed.
- 3. Integrated Advertising, Promotion & Marketing Communication Clow, Baack (2nd Ed).



COURSE CODE	MB308A	
COURSE TITLE	MARKETING RESEARCH	
COURSE CREDITS	3	

The course is designed to help students develop their research, inquiry and communication skills while providing a road map to their future career in Marketing. Emphasis is placed on the practical issues related to decision maker's use of marketing information. Marketing research provides the student with substantial experience in developing critical analysis and statistics skills.

Course Objectives:

- 1. Analyze the roles, the functions and the processes that surround marketing research, emphasizing the specification, collection and analysis of primary data.
- 2. Examine the research process, problem definition, alternative research designs, qualitative methods, survey methods, experiments, measurement & questionnaire design, data collection and foundational techniques for data analysis, as well as hands-on experience with computer application for data analysis.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DEFINE basic marketing information needs and research
308A.1	Remembering	methods used in solving essential business problems and
		challenges.
308A.2	Understanding	EXPLAIN the types of research and its application in the
300A.2	Onderstanding	field of marketing.
308A.3	Applying	CONSTRUCT instrument, schedules and scales required to
308A.3	Applying	carry market research and develop sampling plan.
308A.4	Analysing	ANALYZE the data collected for the purpose of making
306A.4	Allarysing	inferences of market research studies.
308A.5	Creating	DESIGN a marketing strategic plan based on the outcome
		of marketing research.

Course Outline:

Unit 1: Introduction to Marketing Research:

Definition of Marketing Research, Marketing research process, Role of Marketing research in Decision making, defining the problem- Importance, Process, Tasks involved, Management decision problem & Marketing research problem, Ethics in marketing research.

Unit 2: Research Design

Types of Research Designs – Exploratory, Descriptive & Causal, Formulating hypotheses using exploratory research techniques like literature survey, experience survey & analysis of cases, Meaning of Qualitative research & applications of Depth Interviews & Focus Groups in

marketing Applications of longitudinal studies in consumer panels, retail shop audit, media audience tracking studies like TRP, brand tracking studies. Descriptive research design, causal research design, Applications related to Test Marketing.

Unit 3: Data collection - Questionnaires, Scaling & Sampling

Designing questionnaires & observation forms for different marketing research situations, Scale Construction, Scale Purification Process, Reliability Testing using Chronbach Alpha, Validity Testing, Applications of Likert, Semantic Differential & Staple Scales for positioning research, brand research, attitudinal studies, customer satisfaction research, sampling unit, sampling element, choice of sampling frame, determining sample size for probability & non-probability sampling methods & choice of final sample by using appropriate sampling methods in a step by step manner.

Unit 4: Data Analysis

Testing hypothesis for one mean, two means, two proportions, Chi Square Test, ANOVA – One & Two way, Conjoint Analysis, Factor Analysis, applications in consumer behavior studies Cluster Analysis, Multi- dimensional Scaling & Perceptual Mapping, Discriminant Analysis.

Unit 5: Applications & Recent Trends in Marketing Research

Introduction, Consumer Market Research, Business-to-Business Market Research, Product Research, Pricing Research, Advertising Research, Media research, Sales Analysis and Forecasting, Data Mining, Recent Trends in Marketing Research-online marketing research, Retail, social marketing, brand equity, services marketing.

Prescribed Books:

Marketing Research - An Applied Orientation by Malhotra and Dash, Pearson Education.

- 1. Marketing Research, Zikmund, Babin, Cengage Learning Marketing Research by Boyd, H.P., R. Westfall and S. F. Stasch., Delhi: A.I.T.B.S., 7th Edition.
- 2. Marketing Research by Burns, G.A. and D. Bush, South Western: Cengage, 9th Edition.

COURSE CODE	MB309A	
COURSE TITLE	RURAL MARKETING	
COURSE CREDITS	3	

Business-to-business (B2B) refers to a situation where one business makes commercial transaction with another. This Course typically covers how a business is sourcing materials for their production process.

Course Objectives:

- 1. The course aims to familiarize the students with the basic concepts of Rural Marketing, the nature of the Rural Consumer, and marketing of agricultural inputs and produce.
- 2. To prepare the young graduate for the task of Rural Marketing Research and to undertake the Self-employment linked with Rural Marketing Management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309A.1	Remembering	DESCRIBE the major concepts and models of rural marketing.
309A.2	Understanding	UNDERSTAND the Agricultural Marketing ecosystem.
309A.3	Applying	APPLY the principles of rural marketing mix in development of new product.
309A.4	Analysing	ANALYZE the Rural marketing strategies for effective Brand and Channel Management.
309A.5	Evaluating	EVALUATE rural marketing strategies and their effectiveness.
309A.6	Creating	GENERATE the rural marketing plan to achieve organizational objectives.

Course Outline:

Unit 1: Introduction to Rural Marketing

Introduction: Meaning – Evolution – Nature and Characteristics of Rural Market -Understanding the Indian Rural Economy -Rural Marketing Models – Rural Marketing Vs Urban Marketing – Parameters differentiating Urban and Rural Market – Differences in consumer behavior in Rural and Urban market.

Unit 2: Agricultural Marketing

Concept and Nature of Agricultural Marketing, Types of Agricultural Produce, Concepts and types of Agricultural Markets, Marketing channels, Methods of Sales.

Unit 3: Rural Marketing Mix

Rural Marketing Mix: Rural Marketing Mix – Additional Ps in Rural Marketing – 4As of Rural Marketing Mix – New Product Development for Rural Market – Rural Market Product Life Cycle – Objectives behind new product launch – New Product development process.

Unit 4: Brand and Channel Management

Rural Market Brand and Channel Management: Brand Loyalty in Rural Market – Regional Brands Vs National Brands – Channel Management – Indian Rural Retail Market – Rural Retail Channel Management – Strategies of Rural Retail Channel Management.

Unit 5: Issues in Rural Marketing

Rural consumer behavior-Feature- Factors influencing consumer behavior-Lifestyle of rural consumer –FMCG sector in rural India- Challenges faced by rural marketer- The role of advertising in Rural Marketing.

Prescribed Books:

- 1. Rural Marketing Pradeep Kashyap, 3e Pearson Education, 2016.
- 2. Rural Marketing –C. S. G. Krishnamacharyulu, Lalitha Ramakrishnan, Text and Cases, Pearson Education, 2009.

Suggested Readings:

1. Rural Marketing, Environment, problems and strategies – TP Gopalaswamy, 3e Vikas 1. Publications, 2016.

AGRI BUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	MB303B
COURSE TITLE	CURRENT TRENDS IN AGRI BUSINESS MANAGEMENT
COURSE CREDITS	3

Course Description:

Course introduce the student regarding current and upcoming trends in agri business sector, factors of production, good agricultural practices that will help the nation to become self-dependent. Course will give more focus on modern agricultural practices implementation at grass root level.

Course Objectives:

- 1. To understand current trends in agriculture, horticulture, floriculture in terms of administration, business planning, marketing.
- 2. To introduce about latest technologies adapted by successful farmers and agro industries in terms of post-harvest management, use of IT in Agriculture.
- 3. To understand modern practices used in agribusiness today.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303B.1	Remembering	DESCRIBE the types of agro industries, modern and traditional methods of agriculture
303B.2	Understanding	UNDERSTAND Agripreneurship, Post-Harvest Equipments, Food Processing Technologies
303B.3	Applying	APPLYING Digital Marketing, SWOT analysis
303B.4	Analysing	ANALYSING the current trends and best practices in agribusiness with reference to IT, landscape, seeds and fertilizers, post-harvest treatments
303B.5	Evaluating	EVALUATE the process of applying theory knowledge in practical about models, practices, SOPs and GAP in agribusiness management

Course Outline:

Unit 1: Introduction to Agro based industries

Types of agro-based industries and Agri Export Zones, Institutional preparation for the adaption of new technologies, Role of Agro Industries in development of country, Difference between traditional and modern technologies in agriculture.

Unit 2: Emerging Trends in Agribusiness Management

Agripreneurship, Sustainable Farming, Post-Harvest Equipments, Landscape design softwares, Food Processing Technologies, Use of IT in Agri Business.

Unit 3: Management of New Technology in Agri Business

Marketing reforms in agri business, Management of Digital Marketing, Management of Resistance to Change, Comparative analysis of modern techniques and anticipation of future trends, SWOT analysis of current trends in Agri Business Management.

Unit 4: Use of IT in agri business management

Meaning, Role and importance of IT in Agribusiness and Agriculture, Robotics in dairy industry, Use of IT tools in Sales and Marketing, Use of drone in farming, IoT in Agri sector.

Unit 5: Current trend in Agri allied Sectors

Modern trends in Seed Sector, Current practices in animal husbandry sector, Pesticide formulations, fertilizer formulations (numerical), Business plan preparation and presentation for agri business, Gathering the current resources to manage good production.

Prescribed Books:

- 1. "Agri Business Management Problems and Prospects" By Prof. R K Dixit and Dr Himanshu, Ritu Publications, Jaipur.
- 2. "Agri Business Management", Dr K P Sinha, A K Publications
- 3. "Introduction to Agricultural Economics and Agri Business Management", by J M Talathi, V G Naik & V N Jalgaonkar, Ane Books India.
- 4. "Agri Business Management", Dr. J S Amarnath and Dr. A P V Samvel, Salish Serial Publishing House.

- 1. "Indian Agriculture and Agri Business Management", Dr, Smita Diwase, Krishi Resource Management Network.
- 2. "Innovation in Agri Business Management", Karnam Lokanadhan, K Mani and K Mahendran, NewIndian Publishing Agency.



COURSE CODE	MB304B
COURSE TITLE	LIVESTOCK MANAGEMENT AND FODDER TECHNOLOGY
COURSE CREDITS	3

Course introduces various practices involved in animal husbandry. Students will get information about various breeds, their suitability, potential in various climatic zones. Students will also get information about fodder of animals and different fodder processing technologies including information of current trends in such industries.

Course Objectives:

- 1. To know about livestock management in India.
- 2. Laws and rules related to livestock management.
- 3. To know about fodder technologies and to find opportunities related to entrepreneurship in livestock management sector.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	_ Course Outcomes
204D 1	Remembering	DESCRIBE the concept, potential and uses of livestock in
304B.1		dairy sector
304B.2	Understanding	UNDERSTAND purchasing criteria, maintenance,
304D.2	Understanding	vaccination of livestock, B:C Ratio
		APPLYING identification remarks of livestock, cow and
304B.3	Applying	buffalo management, preservation of milk and other
		products of livestock
304B.4	Analysing	ANALYSING financial aspects of livestock, budget
304D.4	Allarysing	analysis for livestock
		EVALUATE the process of fodder preservation
304B.5	Evaluating	techniques, nutritional requirement of livestock, marketing
		of fodder and livestock products

Course Outline:

Unit 1: Introduction to Livestock Management

Meaning, concept, importance of livestock management, Potential of livestock management in India, Various breeds and their resembles in animal sector, Use of livestock for dairy, meat purpose, Livestock Industrial analysis.

Unit 2: Livestock Management

Purchase and maintenance of livestock, Vaccinations for livestock, B:C ratio of livestock, Different cattle shed design and construction of milk parlor, Economic development of country through livestock development.

Unit 3: Processing & Marketing of Livestock

Identification of livestock for benefit, Product identification and finalization of livestock, Management of cow, buffalo, ship & goat, poultry, other animals, Livestock product preservation techniques and marketing, SWOT analysis of marketing of livestock product.

Unit 4: Financial Aspects of Livestock and Fodder

Financial projections for animal industry, Sources of finance for livestock and fodder, Preparation of financial documents for control over budget, Agencies involved in financing and insurance of livestock, Economic growth of farmers and agro industries.

Unit 5: Fodder Technology Management

Various types of fodder, Preservation of fodder for good market value, Preservation, processing and marketing of animal fodder, Current trends in preservation of fodder, Parameters to decide fodder and micronutrient calculations

Prescribed Books:

- 1. "Handbook of Livestock Management" by Richard A. Battaglia, Pearson publication.
- 2. "Livestock Production Management" by Nilotpal Ghosh, PHI LEARNING PVT. LTD. New Delhi.
- 3. "Fodder Production and Grassland Management" by Reddy D V, Oxford & IBH publication.
- 4. "Grassland Dynamics: An Ecosystem Simulation Model" by cabi, CABI.

- 1. "Principles of Animal Nutrition and Feed Technology" By Reddy D.V. Oxford & IBH Publishing house.
- 2. "A Text book of Animal Husbandry" by Banerjee G.C., Oxford publication.



COURSE CODE	MB305B
COURSE TITLE	MANAGEMENT OF AGRICULTURAL ENGINEERING BUSINESS
COURSE CREDITS	3

Concept of Agricultural Engineering, Farm Structure, Farm Power and Farm Machineries. Introduction to new technologies in green house construction, Farm Pond Construction, Levelling, bunding, Landscaping. Students will get knowledge about mechanization of farm, management of agricultural equipment etc.

Course Objectives:

- 1. To explain the concept of Agricultural Engineering, Food Processing Equipments, Post-Harvest equipments, packaging machines.
- 2. To orient Students about engineering in landscape construction, Financing for equipments, Opportunities for agri engineering in entrepreneurship.

Course Outcomes: On successful completion of the course the students will be able to

course outcomes, on successful completion of the course the statents will be use to		
CO No.	Cognitive Abilities	Course Outcomes
305B.1	Damamhanina	DEFINE the concept, scope, objectives, elements of
303B.1	Remembering	Agricultural Engineering Business
		TO DESCRIBE different agricultural equipments, farm
305B.2	Understanding	power and machinery, their adaptability across the globe,
		current Agri engineering practices, govt. regulations
305B.3	Applying	TO IMPLEMENT best equipment as per cropping pattern
3036.3	Applying	and soil requirement
	4	TO COMPARE domestic Agri engineering practices with
305B.4	Analysing	global practices in terms of farm equipments, shed net
		constructions in Agri engineering, landscaping
205D 5	Typhystins	TO JUDGE current practices in Agri engineering business
305B.5	Evaluating	with value added design of machinery products

Course Outline:

Unit 1: Introduction to Agricultural Engineering

Meaning, Concept, Importance and Scope, Objectives, Indian Agri Business Sector Scenario, Agricultural Engineering elements.

Unit 2: Farm Structure, Power and Machineries

Farm Power tools, Basic mechanism of Engine, Cropping pattern and mechanization in Indian Agriculture, Introduction to different equipments used for cultivation, harvesting and processing of cereals, pulses, legumes, fruits and vegetables, International standards for operating machines.

Unit 3: Landscaping and Bunding

Engineering for landscaping, Engineering tools used in irrigation (Sprinkler, Drip, Micro

Irrigation), Management of maintenance of these equipments, record keeping, financing institution, Contour Bunding opportunities, Soil management.

Unit 4: Linking Engineering to Procurement, Distribution and Transport

Current practices in procurement, Use of Engineering in procurement, use of machineries in distribution, Transport reforms in agri sector, agricultural engineering towards transport.

Unit 5: Government Interventions in Engineering Tools

SWOT analysis of engineering practices, resistance to change, adaptation of new technology, Government subsidies on purchase of high value equipment, project proposal planning.

Prescribed Books:

- 1. Agribusiness Management: Theory and Practical, Bairwa Shoji Lal Et.Al Write & Print Publications.
- 2. Elements of Agricultural Engineering, Jagdishwar Sahay, Standard Publishers.
- 3. Principal of Agricultural Engg. Vol –I, T P & A M Michael Ojha, Jain Brothers.
- 4. Unit Operations of Agricultural Processing, K.M. Sahay, Vikas Publishing House Pvt Ltd.

- 1. A Textbook of Machine Drawing, P.S. Gill, S.K. Kataria & Sons.
- 2. Modern Techniques of Raising Field Crops Second Edition, SINGH C., OXFORD & IBH PUBLISHING.



COURSE CODE	MB306B
COURSE TITLE	MARKETING OF AGRI- INPUTS AND OUTPUTS
COURSE CREDITS	3

Course introduce the student regarding rural market environment, marketing of Agri inputs, outputs strategies for the developments of rural markets and the problems face by farmers. The course would also give better understanding of marketing of Inputsand Outputs to student.

Course Objectives:

- 1. To understand in-depth rural market environment and learn about rural marketing opportunities available for agri inputs and outputs.
- 2. To specify categories of inputsand outputs in agricultural marketing and to understand rural consumer.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306B.1	Evaluating	Students will be able to EVALUATE various facets of rural marketing and develop an insight into rural marketing regarding different concepts and basic practices in this area.
306B.2	Applying	Students will be able to EXPLORE opportunities and challenges in the marketing of various Agricultural inputs like pesticides, fertilizers etc.

Course Contents:

Unit 1: Rural market environment and improvement

Classification of rural markets. Occupation pattern and income generation, location of rural population, Literacy level, land distribution pattern, irrigation facilities and infrastructural facilities, Rural credit institutions, rural retail outlets, print media in rural areas, Demand and supply pattern, problems in rural marketing, rural consumer behavior, Measures to improve the agricultural marketing, regulated markets-their functions, objectives and advantages, Model Act-2003 for Agri marketing, Measures to remove deficiencies in regulated market, grading and use of IT in Agricultural, Marketing, future trading (commodity exchanges), input-profitability analysis, Study of market intelligence and market integration: Meaning, definition, types of market integration, market function, price trends, market information, co-operative agricultural marketing and public agencies involved in agricultural marketing viz. FCI, NAFED, STC etc. functions of price mechanism, interrelationship between prices of inputs and output. Nature and supply of agricultural products, marketable and marketed surplus, Types and reasons for movements and their effect in agricultural price stabilization and price support policies. Hedging: Meaning and features of hedging, kinds, purpose, benefits and limitations of HedgingFuture trading: Characteristics of future trading, organized trade in futures.

Unit 2: Marketing of Agri Inputs and Outputs

Marketing of agri inputs such as seeds, fertilizers, bio-fertilizers, pesticides. Bio-pesticides, tractors and farm implements, fertilizer and pesticide control order, Government policy in

pricing/price commission and marketing of agro inputs, credit facilities, distribution channels, trade practices and availability of financial institutions, Problems faced by Indian farmers in input marketing.

Unit 3: Strategies for rural marketing and Promotion of Agri Products

Strategic view, co-operatives, interdependence of inputs to rural marketing, management of demand and supply, Unique selling propositions, ethics in business, Developing sales force in rural markets, agricultural marketing agencies at village, block and district levels, Basic concept of promotion, Fundamental of advertising, Market Analysis for Agri products segmentation and targeting, Sales management, personal selling and salesmanship, Sales related marketing policies.

Unit 4: Promotion of Agri inputs

Basic concept of promotion, Fundamental of advertising, Market Analysis for Agri products segmentation and targeting, Sales management, personal selling and salesmanship, Sales related marketing policies, Extension Education, Market Assessment, Classification of rural market.

Unit 5: Problems in Rural Marketing

Defects in traditional agri marketing system and suggestions for improvement, Channels of Marketing: Meaning, definition, marketing costs, margin, price spread, factors affecting the cost of marketing, reasons for higher marketing costs of farm commodities, ways of reducing market costs, Supply chain management in agro inputs, Concept of Agri supply chain, Advantages and Disadvantages and challenges of SCM in agriculture, Business processes, Infrastructure requirement, supply chain umbrella, Factors determining the nature of supply chain, Agribusiness supply chains in India, Success of supply chains, Case Studies, Drivers of supply chain performance, The role of transportation in a supply chain, factors affecting transportation decisions, tailored transportation, Managing supply, managing demand in supply chain.

Prescribed Books:

- 1. "Marketing of Agricultural Products", Richards L. Kohls and Joseph N UHL, Eastern Economy Edition.
- 2. Rural Agricultural Marketing, Prof. M V Kulkarni, Everest Publishing House.
- 3. Agri Food Marketing, D I Padberg, C Ritson and L M Albisu, CAB International.
- 4. Agricultural Marketing in India, S S Acharya and N L Agarwal, Oxford and IBH Publishing Co Pvt. Ltd.
- 5. Agriculture and Rural Development, Pratal May, Mohit Publications, New Delhi.
- 6. New Perspectives in Rural and Agri. Marketing, Ramkishen Y, Jaico Publishing House.
- 7. The Rural Marketing Book by Pradeep Kashyap and Siddhartha Raut.
- 8. Agri Marketing Management, Premjit Sharma, Gene Tech Book, New Delhi.
- 9. A text book of Rural Marketing by MinoutiKamat and R.Krishnamoorthy.
- 10. Rural marketing environment, problems and strategies by T.P.Gopalswamy.
- 11. Rural Marketing-Focus on agricultural inputs by Sukhpal Singh.
- 12. Indian Agriculture and agri-Business Management by Dr.SmitaDiwase.

COURSE CODE	MB307B
COURSE TITLE	POST-HARVEST TECHNOLOGY AND MANAGEMENT
COURSE CREDITS	3

The course introduces the student regarding importance of Post-Harvest technology, various aspects of Agro processing Industry & innovation in Agro processing, packing to avoid the national loss due to lack of post-harvest knowledge.

Course Objectives:

- 1. To educate the students about importance of post-harvest technology management for achieving overall growth of agriculture sector.
- 2. To provide technical know-how and to develop managerial skills in order to serve the agriculture Industry efficiently.
- 3. Industrial study of Vegetables, Fruits, Milk, Meat, Fishery and Biodiesel sector with respect to varrious aspects.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307B.1	Applying	Students will be able to convert the observations to meaningful results and DEMONSTRATE managerial skills in order to serve the agriculture industry efficiently.
307B.2	Analyzing	Students will be able to COMPARE various processing methods of post-harvest technology and their outcomes.

Course Contents:

Unit 1: Introduction to Agro processing, Pre & Post harvest management

Introduction to Indian agro-processing sector, SWOT analysis of agro-processing industries in India, Business Environment related to processed food industry, Importance of Pre-Harvest Management, Standard operation practices followed after harvesting the produce at farm level including handling, sorting, grading, post-harvest treatments, storage and transportation of fresh produce.

Unit 2: Aspects in Agro Processing Industry

Factors to be considered while establishing food processing plant including Government norms and requirements, Actual processing of Agri-produce into final products, Different preservation practices followed in food processing sector, Utilization of byproducts in agro processing industry.

Unit 3: Quality control management & Product development in in agro-processing sector

Importance of QCM in agro processing, Different quality certifications in agro-processing, Introduction to the concept of New Product Development in a company, Need and importance of "New Product Development" in processed food industry, Steps required undertaking while going for a new product development, Introduction to functional and novel foods considering demographic, economic aspects of market.

Unit 4: Processed product packaging & labeling

Importance of packaging and labeling, Different kinds of packaging materials, Points to be

considered while selecting a packaging material, Recent trends in packaging & labeling industry Viz. Green Packaging, Intelligent Labeling etc., government's regulations in packaging and labeling of food products.

Unit 5: Managerial aspects & Market study in Food Processing Industry

Different department involved in a food processing company and importance of coordination in those departments etc.Importance of production, marketing & distribution aspects in food processing sector, Introduction to different research institutions and corporations involved in food processing sector, Case studies in agro-processing sector.

Prescribed Books:

- 1. S. N. Misra, 2004, "Commercial Agri-enterprises-Strategy Achievement and Future prospects", Deep & Deep Pulications, New Delhi.
- 2. F. C. Blank, 1999, "Handbook of Food and Nutrition", Agro Botanical Publishers, India.
- 3. B. Misra, G. C. Kar, S. N. Misra, 2004," Agro Industries and Economic Development, A vision of the 21st Century", Deep & Deep Publications Pvt. Ltd., New Delhi.
- 4. Dairy Technology, By Sukumar De, Tata MC Grew Hills Publication, N Delhi.
- 5. Food biotechnology, S N Tripathy, Dominant Publishers and Distributors, New Delhi
- 6. State of Indian Farmer, A millennium Study, Post-Harvest Management, V R Gaikwad, Shreekant Sambrani, V Prakash, S D Kulkarni, P Murari, Academic Foundation, New Delhi.



COURSE CODE	MB308B	
COURSE TITLE	AGRI IMPORT AND EXPORT MANAGEMENT	
COURSE CREDITS	3	

The Course introduces Import and Export of Agriculture commodities, how it will help to develop our economy, Institutional linkage of export promotion, rules and regulation for export and import. Information regarding the agencies involved in EXIM of Agri commodities also documentation require for export.

Course Objectives:

- 1. To understand the fundamentals of International Trading.
- 2. To orient Students about:
 - a. Potentials in international trade in Agri sectors.
 - b. Import and Export management of Agri commodities.
 - c. Agencies / Institutes/ Bodies for EXIM of Agri Commodities.
 - d. Relevant Acts and provisions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308B.1	Remembering	Students will be able to IDENTIFY factors that indicate strong potential agri export markets in order to define market selection models or drive market selection systems.
308B.2	Applying	Students will be able to identify major governmental and non-governmental sources of information and agri import/export assistance and APPLY that knowledge through development of marketing plans tied to global business activity and country-specific business conditions.
308B.3	Remembering	Students will be able to IDENTIFY sources of information on agri export restrictions and documentation associated with foreign shipping in order to facilitate export compliance for the exporting organization.
308B.4	Remembering	Students will be able to IDENTIFY major agri product decisions that are necessary for export markets in order to facilitate product adaptation to the markets in question.

Course Contents:

Unit 1: Recap

Review of EXIM policy / procedures, Potentials and emerging focus area for Agricultural exports (FAO), Constraints in international trading in Agricultural Commodities.

Unit 2: GATT / WTO

Introduction to GATT/WTO, International Trade in Agricultural Commodities (AoA), Policy of GOI for International Trade in Agricultural Commodities, QC and QA for international trading in Agricultural Commodities, Sanitary and Phyto sanitary measures (SPS)- ISPM, Quarantine regulation for Imports and Exports.

Unit 3:Institutional Linkage for export promotion

Commerce Ministry, DGFT and export promotion councils, Commodity boards (Spice Board, Tea Board, and Coconut Board), Trade development authority and trade fair authority, SEZ, FIEO, ECGC, APEDA/GOI/GOM/NHB/NHM/MofPI, Export inspection council, Role of Multinationals in Agricultural Development, Residue Monitoring Plan for export, Advance certification in export (advance packaging, Government support for infrastructural facilities for cold storages, pre cooling, ripening chamber, irrialiatiation).

Unit 4:Acts related to import and export

Acts and provisions for international trading in Agricultural Commodities/ GlobalGap/HALCP/BRC/PGI/India Gap/POP/Organic Certification.

Unit 5: Export Documentation

How to start import and export business of Agricultural commodities (Documentation), Case studies, Use of Information Technologies in Agri Exports.

Prescribed Books

- 1. EXIM Hand Book and Procedure, Min of Commerce, GOI, 2009-14.
- 2. Export Potential of Indian agriculture by Dr. Gursharan Singh Kainth, published by Regency Publication, New Delhi.
- 3. Agri Business Management by SmitaDiwase, published by Everest Publishing House, Pune.
- 4. Agricultural Marketing Management by Premjit Sharma, Published by Gene Tech Books Publishing House, New Delhi.
- 5. Agri Business Management by Dr J Amarnath and Dr. APV Samvel, Published by Satish Serial Publishing House, Delhi.

Website:

- 1. www.mepz.gov.in/eximPolicy.
- 2. www.nic.in/eximpolicy.

COURSE CODE	MB309B
COURSE TITLE	EMERGING TRENDS IN ORGANIC FARMING
COURSE CREDITS	3

Course introduce the student regarding various types of healthy and nutrient rich foods, emerging trends in organic farming management. It discusses the scope of avoidance of food borne diseases and sustainable lively hood.

Course Objectives:

- 1. To introduce the importance of emerging trends in organic farming management towards sustainability.
- 2. To understand various aspects of organic farming Management and its marketing.
- 3. To introduce organic perspectives conventional organic agriculture and National & International Organic Policy.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309B.1	Remembering	TO STATE the major conceptual framework, scope, need
309 D .1		of Emerging trends in Organic Farming
309B.2	Understanding	TO UNDERSTAND background of post-harvest
309 D .2	Onderstanding	technology management for organic farming
309B.3	Annlying	TO APPLY current and emerging trends in marketing of
3090.3	Applying	Organic Farming on field and in domestic market
200B 4	309B.4 Analysing	TO DISTINGUISH between domestic and international
3090.4		standards for certification of organic products
309B.5	Evaluating	TO SELECT most suitable framework and model of
		organic farming

Course Outline:

Unit 1: Introduction to Organic Farming

Meaning, Concept, Importance and Scope, Current scenario of Organic Farming in India, Historical development of Organic Agriculture in India, Soil Management for Organic plantation.

Unit 2: Post Harvest Management of Organic Crops / Fruits / Vegetables

Current Industrial Requirement of Organic Produce, Actual Processing of Organic Produce without making loss of nutrients, Pre and Post harvesting techniques for Organic Produce, Packaging Labelling, Nutrients management in Organic Produce.

Unit 3: Marketing of Organic Farm Produce

Concept of Product, Evaluation of Product, Branding of Product, Marketing in domestic market w.r.t. Milk, Cereals, Pulses, Legumes, Fruits and Vegetables, Opportunities in Export of Organic produce, Use of Digital Marketing for Organic Produce, Pricing Strategy for Organic Produce.

Unit 4: Standards, Inspection and Certification of Organic Unit

Indian certification agencies- National Accreditation Board for Testing and Calibration Laboratories (NABL), Tamil Nadu Organic Certification Department (TNOCD), Agricultural

and Processed food products Export Development Authority (APEDA), Spice Board, Coffee Board, Tea Board, International certification agencies- Argencert, California Certified Organic Farmers (CCOF), International Federation of Organic Agriculture Movements (IFOAM) and standards, The Ecological Farming Association, Organic Farming Research Foundation (OFRF), Organic trade Association, Community Alliance with Family Farmers, Institute for Marketecology (IMO), SKAL, ECOCERT INTERNATIONAL, DEMETER.

Unit 5: Assessment and Evaluation of Organic Products

Product Analysis by machines, Sorting, Grading of Organic Produce, Quality management aspects of Organic Farm Produces- Cereals, Vegetables, Microgreens, Exotic plants, Procedure for Accreditation, Difficulties in Organic Farm Management.

Prescribed Books:

- 1. The World of Organic Agriculture, Helga Willer, Minou Yussefi, Neil Sorensen, Earthscan Publications, 2008.
- 2. Trends in Organic Farming in India, Purohit S.S. & Gehlot, Dushyent (Eds.).
- 3. The Complete Book on Organic Farming and Production of Organic Compost, NPCS Board of Consultants & Engineers.
- 4. Organic Farming: Theory and Practice, S.P. Palaniappan, K. Annadurai Scientific Publishers.
- 5. ABC of Organic Farming, Amitava Rakshit and H B Singh, Jain brothers.

Suggested Readings:

Organic Farming: Everything You Need to Know, Peter V. Fossel, MBI Publishing.

1. The Natural Way of Farming: The Theory and Practice of Green Philosophy, Masanobu Fukuoka.



FINANCIAL MANAGEMENT SPECIALIZATION

COURSE CODE	MB303C
COURSE TITLE	ADVANCED CORPORATE FINANCE
COURSE CREDITS	3

Course Description: This course is designed to introduce students to both the theory and application of corporate decisions in various corporate contexts. This advanced course in corporate finance covers a range of topical corporate finance issues including cost of capital, capital budgeting, and dividend decision. This course will help studentss to generate ideas, concepts and tools managers use to make the right financial decisions.

Course Objectives:

- 1. To understand how corporate finance practices vary.
- 2. Analyze the impact of capital structure, dividend decision on the value of the firm.
- 3. Discuss practices to rationalize capital budgeting decisions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303C.1	Remembering	DEFINE the basic concepts and terminologies of advanced corporate finance and FOREX Markets
303C.2	Understanding	RELATE how capital structure planning can be done by the corporates
303C.3	Applying	DISCOVER dividend distribution policies incorporated by the corporates
303C.4	Analysing	ILLUSTRATE risk and rewards involved in the long-term investment decisions
303C.5	Evaluating	APPRAISE the foreign exchange market transactions and execution

Course Outline:

Unit 1: Capital Structure & Leverage Analysis

Meaning and Significance of capital structure, Features of Optimum Capital Structure, Capital Planning: EBIT – EPS Analysis, Capital structure theories: NI, NOI, MM approach, Meaning & types of leverages, over capitalization and under capitalization, trading on equity.

Unit 2: Capital Budgeting

Overview of capital budgeting, Accounting Profits v/s Cash Flow after tax, Discounted Cash flow methods - Net Present value (NPV), Profitability Index (PI), Discounted Payback Period, Internal Rate of Return (IRR), MIRR, NPV Vs.IRR, Project selection under capital rationing, Inflation and capital budgeting, replacement project cash flows.

Unit 3: Dividend and Share Repurchase Policy

Various aspects of dividend policy, Statutory framework of dividend, Bonus issue - Meaning,

implications & SEBI norms, Rights issue - Meaning, implications & SEBI norms, Different dividend theories - Walter's, Gordon's, MM model, Share split, Buy back of shares.

Unit 4: Financial forecasting and planning

Overview of financial planning, Developing long term financial plan, Developing short term financial plan (cash budget).

Unit 5: International Business Finance

Foreign Exchange rates, Types of foreign exchange transactions, Purchasing-power parity, Interest rate parity, exchange rate risk, Translation exposure, transaction exposure and economic exposure.

Prescribed Books:

- 1. FinancialManagement- I M Pandey, Vikas Publishing.
- 2. Financial Management MY Khan & PK Jain, Tata McGraw-Hill.
- 3. Financial Management Principles and Applications Sheridan Titman, Arthur J. Keown, John D. Martin, Pearson.

- 1. Contemporary Financial Management Rajesh Kothari, Macmillan Publication.
- 2. Principles of Corporate Finance Richard A Brealey, Stewart C Myers, Franklin Allen, Pitabas Mohanty, Tata McGraw Hill.
- 3. International Financial Management O.P. Agarwal, Himalaya Publishing House.



COURSE CODE	MB304C	
COURSE TITLE	FIXED INCOME SECURITIES	
COURSE CREDITS	3	

This course is intended to analyze the fixed income securities market and its importance /implications for investments. It covers the market characteristics and its linkage with money market, etc. Fixed income instruments, the risks associated with various types of FI securities/markets and their measurement and management.

Course Objectives:

- 1. To understand the structure and mechanism of Fixed Income Market.
- 2. To analyze the application of Yield Curve.
- 3. To comprehend the structure of corporate debt market various corporate debt instruments.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DESCRIBE the relevant theories, concepts, terms, models
304C.1	Remembering	& frameworks in the field of Fixed Income Securities
		Market.
304C.2	Understanding	DIFFERENTIATE between the various types of Fixed
304C.2	Understanding	Income Securities traded in capital market.
	Applying	MAKE USE OF theories, Models & Principles of Fixed
304C.3		Income Securities Market for making informed investment
	\	decisions.
304C.4	.C.4 Analysing	INVESTIGATE the investment risks involved in Fixed
304C.4		Income Securities & Fixed Income Derivatives Market.
304C.5	Davida dina	CRITICALLY ASSESS the various Portfolio Management
304C.5	Evaluating	Strategies in Fixed Income Securities Market.

Course Content:

Unit 1: Introduction

Overview of Fixed Income Markets, Institutional Arrangements, Market Participants and Instruments, Investors Perspectives and Market Conventions, Regulation of Fixed Income Market & the role of the regulator, Features of Government securities market, Money Market Instruments, Asset Backed Securities, Corporate Bonds.

Unit 2: Bond Valuation

Time Value of Money, Types of Bond yields – Current Yield, Yield to Maturity, Realised Yield to Maturity, Yield to Call, Valuation & Pricing of Bond under flat term structure, Yield curve, Bond values &; Interest Rates, Term Structure of Interest Rates, Clean price & Dirty price, Bond market volatility, Types of Duration – Macaulay's Duration, Modified Duration, Convexity & Immunisation, Illiquid bonds, Yield Curve Analysis: Par Value, Spot Curve, Bootstrapping

Technique.

Unit 3: Auction Game

Portfolio construction, setting portfolio objectives, interpreting portfolio parameters, Passive vs Active portfolio management strategies, bullet vs barbell, other strategies, global bond markets, foreign currency bonds, dual currency bonds.

Unit 4: Fixed Income Derivative Markets

Interest rate Swaps, swap pricing and swap curve, interest rate futures, Interest Rate Options, Caps and Floors pricing.

Unit 5: Corporate Debt Market

Instruments - Features and Valuation, Valuation of Convertibles, Prime and Subprime Mortgage-Backed Securities.

Prescribed Books:

- 1. Fixed Income Securities Dun and Bradstreet, McGraw Hill Education India.
- 2. The handbook of Fixed Income Securities Frank J. Fabozzi, Steven V. Mann, McGraw Hill.
- 3. Fixed Income Securities: Valuation, Risk, and Risk Management Pietro Veronesi, Wiley.

- 1. Fixed Income Analysis (CFA Institute Investment Series) Barbara S. Petitt Jerald E. Pinto Wendy L. Pirie, 3rd, Kindle Edition.
- 2. Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies Lionel Martellini, Philippe Priaulet, Wiley Finance Series.



COURSE CODE	MB305C
COURSE TITLE	FINANCIAL DERIVATIVES
COURSE CREDITS	3

This course covers financial derivatives such as forward contracts, futures contracts, options, swaps and other recently created derivatives. It follows pragmatic approach and discusses both the derivative markets and the derivative products and their use. The emphasis of the course is on the successful execution of financial strategies using derivatives as product. It focuses on practical understanding of how the derivative markets function, how the derivative products are used and why they are used and how they are usually priced.

Course Objectives:

- 1. To understand the meaning and uses of various derivative products.
- 2. To learn how to value options using various tools.
- 3. To analyze the hedging tools for decision making.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305C.1	Remembering	DESCRIBE the relevant theories, concepts, terms, models
303C.1	Remembering	& frameworks in Financial Derivatives Market.
305C.2	Understanding	DIFFERENTIATE between the various types of
303C.2	Understanding	instruments traded in Financial Derivatives market.
		MAKE USE OF the Theories, Concepts & Principles to
305C.3	Applying	estimate the payoffs for buyers & sellers of Financial
		Derivatives.
305C.4	Analysing	INVESTIGATE the factors impacting the Option
303C.4	Allaryshig	Valuation & Compute the fair price of Options Contract.
305C.5	Evaluating	EXAMINE the various risk measurement parameters in
303C.3	Evaluating	Options Pricing & Hedging the risk involved.

Course Content:

Unit 1: Introduction to Derivatives

Meaning of derivatives. Legal & Regulatory Environment, Types of derivatives. Derivative market – India, World. Reasons for trading derivatives, Derivative pricing, Difference between exchange traded and OTC derivatives.

Unit 2: Forwards and Futures

Meaning of Forwards and Futures, Structure of forward market, Types of forward contracts - Equity forward - Currency forward - Bond and interest rate forward - Forward rate agreement, Types of future contracts - Stock future - Index future - Currency future - Interest rate future - Commodity future Market for forward and futures, Marking to market and margins.

Unit 3: Option market and products

Structure and Role of Global Option Market including OTC and leading Option Exchanges, Concept, characteristics and definition, Option terminologies - Call option -Put option-American and European option-Option writer and buyer-Option premium including intrinsic value and time value -Strike price -ITM, ATM and OTM - Option payoff, Trading mechanism and concept of margins, Types of options- Stock option-Index option- Currency option - Commodity option-Options on futures - Interest rate options, Put -Call Parity, Option strategies (spreads, straddles and strangles).

Unit 4: Valuing Options

Factors affecting option valuation, Binomial model, Black-Scholes model, Monte-Carlo simulation.

Unit 5: Hedging and the "Greeks"

"Greeks" – delta, gamma, vega, theta & rho, Principle of delta-hedging, Delta-hedging, Asset mismatch, maturity mismatch, basis risk, and minimum-variance, hedging, Delta-Gamma hedging using options. Accounting and Taxation of Derivative Transactions.

Prescribed Books:

- 1. Derivatives Theory and Practice Keith Cuthbertson, Dirk Nitzsche, Niall O'Sullivan, Wiley.
- 2. An Introduction to Derivative Securities, Financial Markets, and Risk Management-Robert Jarrow, Arkadev Chatterjea, World Scientific.
- 3. Financial Markets for Commodities Joel Priolon, Wiley.

- 1. Derivatives and Risk Management Janakiraman S, Pearson.
- 2. Options, Futures and Other Derivatives: Global edition John Hull, 8/E, Pearson Higher Education.

COURSE CODE	MB306C
COURSE TITLE	TAXATION
COURSE CREDITS	3

This course introduces students to the accounting for income taxes with a particular focus on analyzing differences between accounting and tax treatments, computing tax provisions, and disclosing tax information in corporate financial statements. The course also provides exposure to the both internal and external uses of tax accounting disclosures. In doing so, the course builds a solid grounding in the preparation of accounting information, but also helps students gain an appreciation for the role of financial accounting in tax planning and compliance decisions.

Course Objectives:

- 1. To develop a broad understanding of the tax laws and accepted tax practices
- 2. To acquaint the students with basic principles underlying the provisions of direct and indirect tax laws.
- 3. To introduce practical aspects of tax planning as an important managerial decision-making process

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306C.1	Remembering	Students will be able to EXPLAIN different types of income and their taxability and expenses and their deductibility.
306C.2	Evaluating	Students will be able to EVALUATE how the provisions in the tax laws can be used for tax planning.
306C.3	Applying	Students will be able to RECOMMEND various deductions available to reduce the taxable income.

Course Contents:

Unit 1: Income Tax Act -1961: Basic Concepts and Definition

Introduction, Brief history of Income Tax in India, Scope of the Act, Concept and definitions-Income, Person, Assessee, Assessment year, Previous year, Residential Status of an Assessee and Tax Liability.

Unit 2: Computation of Taxable Income from Salary and House Property

- a) Income from Salary: Meaning of salary, components of salary, Salient features, allowances and tax Liability- Perquisites and their Valuation- Deduction from salary. (Theory and Problems).
- b) Income from House Property: Basis of Chargeability-Annual Value- Self occupied and let out property- Deductions allowed. (Theory and Problems).
- c) Computation Profits and Gains of Business and Profession: Meaning of Business and Profession, Income chargeable to tax under section 28, Deductions expressly allowed u/s 30 to 35, Expenses allowable as deduction u/s 37, Expenses allowable under specific instruction of CBDT, Computation of Profits and Gains. Presumptive Taxation Scheme. (Theory and Problems).
- d) Income from Capital Gains: Meaning, Short Term and Long term Capital Assets, Types of

Capital Gains, Procedure for computation of Capital Gains. (Theory and Problems).

e) Income from Other Sources: Meaning of Specific Income and Other Income, Practical problems on calculation of Income from Other Sources.

Unit 3: Computation of Total Taxable Income of an Individual:

Meaning and concept, Deduction from Gross TotalIncome, deduction u/s-80C. Determination of Income Tax Liability.

Unit 4: Miscellaneous

Assessment procedure, returns, Advance payment of tax and tax deducted at source, Personal Financial Planning.

Unit 5: Goods and Service Tax Act

Meaning of indirect taxes, history of indirect taxes in India, Origin of Value Added tax (VAT), meaning of VAT, Advantages and disadvantages of VAT, History of GST In India, Meaning of GST, Salient features of GST, Benefits of GST, Dual GST Model, Special features of Dual GST Model, Present GST model in India.

Prescribed Books:

- 1. Singhanar V.K: Students' Guide to Income Fax; Taxmann, Delhi.
- 2. Prasaci, Bhagwati: Income Tax Law and Practice: Wiley Publication, New Delhi,
- 3. Mehrotra H.C: Income Tax Law and Accounts, Sahitya Bhawan, Agra.
- 4. Dinker Pagare, Income Tax Law and Practice: Sultan Chand and Sons, New Delhi.
- 5. Girish Ahuja and Ravi Gupta: Systematic approach to income tax: SahityaBhawan Publications, New Delhi.
- 6. Chandra Mahesh and Shukla D.C.: Income Tax Law and Practice; Pragati Publications, New Delhi.



COURSE CODE	MB307C
COURSE TITLE	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT
COURSE CREDITS	3

Security analysis and portfolio management course is to help students understand the investment field for sound investment decisions making. This course is designed to emphasize both theoretical and analytical aspects of investment decisions and deals with modern investment theoretical concepts and instruments.

Security Analysis is the subject to study the composition and performance of stocks in capital market. The stocks are analyzed using tools of fundamental analysis and technical analysis.

Portfolio management refers to the management or administration of a portfolio of securities to protect and enhance the value of the underlying investment. It is the management of various securities (shares, bonds etc) and other assets (e.g. real estate), to meet specified investment goals for the benefit of the investors. It helps to reduce risk without sacrificing returns.

Course Objectives:

- 1. To devlop an understanding of the changing domestic and global investment scenario in general and Indian capital market in particular with reference to availability of various financial products and operations of stock exchanges.
- 2. To provide an in-depth knowledge of the theory and practice of portfolio management.
- 3. To study the alternative investment decisions in the context of portfolio investment.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307C.1	Understanding	Students will be able to SUMMARIZE various alternatives available for investment.
307C.2	Analyzing	Students will be able to FIND and measure risk and return on investments.
307C.3	Evaluating	Students will be able to EVALUATE the equities for investment decision
307C.4	Applying	Students will be able to APPLY knowledge of various strategies followed by investment practitioners.

Course Contents:

Unit 1: Markets and Financial Instruments

Investment Objectives, Types of Markets- Equity, Debt, Derivatives, Commodities, Various types of Investment Avenues, Difference between Speculation and Investment.

Unit 2 Mutual Funds

The Concept of Mutual Funds, Advantages of Mutual Funds investing, Types of Funds

Unit 3: Risk and Return

Concept of risk and return, Measurement of risk - standard deviation and variance, Factors influencing risk, relationship between risk and return, CAPM

Unit 4: Fundamental Analysis

Economy analysis, industry analysis and company nalysis, weaknesses of fundamental analysis.

Technical Analysis

Tools of technical analysis, important chart formations, price patterns and technical indicators.

Unit 5: Portfolio Theory and Portfolio Management

Efficient Market Theory, Random Walk Theory, Portfolio Management Framework, Guidelines for Investment Decisions.

Prescribed Books:

- 1. P Pandian, Security Analysis and Portfolio Management, Vikas Publishing Houses.
- 2. P Chandra, Security Analysis and Portfolio Management, McGraw Publishers.
- 3. Fischer, Security Analysis and Portfolio Management, Pearson India.

COURSE CODE	MB308C	
COURSE TITLE	ANALYSIS OF FINANCIAL STATEMENTS	
COURSE CREDITS	3	

This course describes the analysis of financial statements and company valuation. Financial statement analysis is the application of analytical tools, technology and techniques to general-purpose financial statements and related data to derive estimates and inferences useful in business analysis. Financial statement analysis comprise of accounting analysis, financial analysis and valuation.

Course Objectives:

- 1. To study the interrelationships between financial statement line items.
- 2. To use ratio analysis to understand and compare firms.
- 3. To understand the effect of accounting disclosures.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308C.1	Remembering	Students will be able to DESCRIBE and apply the basic
306C.1	SUSC.1 Remembering	techniques of financial statement analysis.
		Students will be able to COMPARE and contrast between
308C.2	Analyzing	strategic business analysis, accounting analysis and
		financial analysis.
308C.3	Annlying	Students will be able to conduct APPLIED business
300C.3	Applying	research.

Course Contents:

Unit 1: Introduction to Financial Statements

Introduction, Meaning, Nature, Essentials, Importance and Objectives of Financial Statements, Concept of Published Accounts, Constituents of Financial Statements, Important features of presentation of Balance Sheet as per Schedule III, Limitations of Financial Statements.

Unit 2: Techniques of Financial Statement Analysis

Meaning, Objectives, Methods of Financial Statement Analysis, Comparative Statements - Income Statement and Balance Sheet, Common size statements - Income Statement and Balance Sheet, Consolidated Statements - Income Statement and Balance Sheet.

Unit 3: Ratio Analysis

Definition, Importance of Ratio Analysis, Limitations, Classification of ratios, Functional Classification- Liquidity Ratio, Profitability Ratio, Activity Ratio, Leverage Ratio, Valuation Ratios. Importance and Measurement of each ratio - Theory and Problems, Interpretation of Ratios.

Unit 4: Cash Flow Statement

Meaning of Cash and Cash Equivalents, Benefits, Limitations, Classification of Activities – Operating, Investing, Financing, Ascertainment of Cash Flow from different activities, Preparation of Cash Flow Statement, Analysis of Listed companies Cash Flow Statement.

Unit 5: Miscellaneous

Internal liquidity analysis, Operating / Risk / Growth Analysis, DuPont analysis - Return on equity, Risk analysis, Capitalization vs. Expensing, Depreciation, Inventories, Income Tax, Window dressing, Scandals in financial reporting.

Prescribed Books:

- 1. Wendy McKenzie, Using and Understanding Company Accounts, Prentice Hall, 2003.
- 2. Frank J. Fabozzi, Pamela P. Peterson, Analysis of Financial Statements, Frank J. Fabozzi Associates, New Hope, Pennsylvania, 1999.
- 3. Lyn M. Fraser, Aileen Ormiston, Understanding Financial Statements, Prentice Hall, 2006.

COURSE CODE	MB309C	
COURSE TITLE	FINANCIAL TECHNOLOGY	
COURSE CREDITS	3	

Financial technology, commonly called 'FinTech', is now a highly used buzzword. FinTech is the application of digital technologies to create record, transfer and manage financial value and risk. The financial services industry is undergoing a continuous transformation brought in by the never ending stream of digital disruptions. Over the past decade, many new FinTech firms have disrupted the conventional financial services industry by leveraging these new technologies and offering customized, value-added services in a rapid manner. The Financial Services industry is witnessing a huge transformation driven by innovative technologies such as Blockchain, Artificial Intelligence, Cloud Computing, Internet of Things and Mobile Computing.

Course Objectives:

- 1. To help students develop a broad understanding of FinTech and its impact on the financial system.
- 2. To enable students understand how FinTech corporations are changing the traditional currency regime.
- 3. To engage students in the process of FinTech innovation.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309C.1	Remembering	DESCRIBE the concepts of Transformation, Startups and Emerging Markets in FinTech
		UNDERSTAND the FinTech Regulation and RegTech
309C.2	Understanding	ecosystem ecosystem
309C.3	Analysing	SUMMARIZE the essence of Blockchain and
		Cryptocurrency
309C.4	Evaluating	EVALUATE the role of AI and crowd funding in Digital
3070.4	Evaluating	Finance
309C.5	Applying	RELATE the growth of FinTech in India

Course Outline:

Unit 1: Meaning of FinTech

FinTech Transformation, FinTech Evolution 1.0: Infrastructure FinTech Evolution 2.0: Banks, FinTech Evolution 3.0 & 3.5: Startups and Emerging Markets FinTech Typology, Emerging Economics. Opportunities and Challenges.

Unit 2: FinTech Regulation and RegTech

FinTech Regulations, Evolution of RegTech, RegTech Ecosystem: Financial Institutions, RegTech Ecosystem: Startups, RegTech Startups: Challenges, RegTech Ecosystem: Regulators.

Unit 3: Blockchain and Cryptocurrency

Essence of Blockchain, Blockchain Technology and application from a financial perspective, Bitcoin, Virtual Currencies, Integration of Artificial Intelligence.

Unit 4: Digital Finance and Alternative Finance

History of Financial Innovation, Digitization of Financial Services, FinTech & Funds, Integration of AI in Fintech, Crowdfunding - Regards, Charity and Equity, P2P and Marketplace Lending.

Unit 5: FinTech in India

Digital India and its role in promoting FinTech, Role of FinTech in Financial Inclusion and Financial Integration, Implications of FinTech Developments for Banks and Bank Supervision, Understanding UPI – Unified Payments Interface and its implications, Emerging Payment Systems. Performance of Indian FinTech companies.

Prescribed Books:

- 1. Sonar, Rakesh and Dr Awadhesh Pratap Singh: The Journey of REGTECH, Michael Terence Publishing, 2020.
- 2. Phadke, Sanjay: FinTech Future: The Digital DNA of Finance, Sage Publication.

Suggested Reading:

Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, Steven Goldfeder. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction Princeton University Press.

HUMAN RESOURCE MANAGEMENT SPECIALIZATION

COURSE CODE	MB303D	
COURSE TITLE	HUMAN RESOURCE PLANNING	
COURSE CREDITS	3	

Course Description:

Planning people requirements is critical task of management as companies increasingly depend on intellectual capital as the basis for competitive advantage. This course aims at imparting relevant knowledge required to perform the functions of human resource planning within an organisation.

Course Objectives:

- 1. To familiarize the students with the basic concepts, tools and techniques of work study to assess the human resources requirements quantitatively.
- 2. To familiarize the students with the basic concepts, tools and techniques of qualitative measurement of human resources requirements.
- 3. To enable the students to acquire the knowledge necessary for preparing the manpower plan of a business enterprise and subsequent plans of actions.
- 4. To train them in application of human resource planning techniques.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303D.1	Remembering	STATE the basic concepts, theory, and techniques to quantitatively assess human resources requirements.
303D.2	Understanding	DESCRIBE the models and methods used in forecasting demand and supply of human resources
303D.3	Applying	USE the knowledge of human resource accounting techniques for human resource planning.
303D.4	Analysing	INTERPRET the organization's manpower planning program to measure the human resources requirements.
303D.5	Creating	EXAMINE the recent trends in Manpower planning and Development.

Course Outline:

Unit 1: Manpower Planning and Resourcing: Factors Affecting Manpower Planning, Need for Manpower Planning, Five Steps in Manpower Planning, Importance of Manpower Planning, Obstacles in Manpower Planning, Advantages of Manpower Planning, Consolidated Demand Forecast Development.

Unit 2: Manpower Forecasting: Introduction, Forecasting, Necessity for forecasting, Steps in forecasting, Demand and supply forecasting, Demand Forecasting techniques, Forecasting accuracy, Benefits of forecasting.

Unit 3: Human Resource Accounting: Introduction, Definition of Human Resource Accounting, Need, Significance, Objectives for HRA, Advantages of HRA, Methods of HRA, Objections to HRA, Controlling Manpower Costs, True Costs of Planning and Recruitment, Human Resource Accounting in India.

Unit 4: Developing a Manpower Plan: Introduction, Developing a Manpower Plan, Qualitative Side of Manpower Planning, Behavioral Event Interviewing, Standard Interviews, Competency Mapping (Skill Inventory), Problems in Manpower Planning, Sample Manpower Plan.

Unit 5: Recent Trends in Manpower Development and Planning: Introduction, Competency mapping, Knowledge management, E-Manpower Development, E-Manpower planning.

Prescribed Books:

- 1. Human Resource Planning, D K Bhattacharyya, Excel Books India, 2009.
- 2. Human Resource Planning: Solutions to Key Business Issues Selected Articles, David M. Schweiger, Springer-Verlag.

- 1. The Challenge of Human Resource Planning: Selected Readings, James W. Walker, Karl F. Price, Human Resource Planning Society, 1982.
- 2. Good to Great: Why Some Companies Make the Leap...and Others Don't Book by James C. Collins.



COURSE CODE	MB304D
COURSE TITLE	TALENT ACQUISITION AND STAFFING
COURSE CREDITS	3

The course would give an overview of staffing and selection domain in the organizational context. It touches the concepts of support activities, recruitment, selection, workforce planning. Law affecting recruitment of candidates. Sources of recruitment. Cost & time involved in bringing the candidate on-board. It also stresses on the skills and techniques required in the various activities associated with the recruitment & selection of a prospective or an experienced candidate.

Course Objectives:

The objective is to learn the strategies, concepts and practices essential to the effective selection of personnel to meet the business objectives with an emphasis on recruiting, promoting and retraining employees. It will also focus on interviewing techniques, assessments, testing, background check legal requirements and reporting of results to management. It demonstrates how staffing and an organization's staffing decisions influences an organizations' competitiveness and ability to achieve its strategic objectives.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304D.1	Remembering	DEFINE the various concepts and processes of talent acquisition
304D.2	Understanding	DISCUSS the importance of staffing strategy and review the decisions pertaining to staffing issues
304D.3	Applying	APPLY the appropriate role of competency in hiring decisions for effective acquisition process
304D.4	Analysing	ORGANIZE the process of recruitment and selection through a holistic and integrated assessment approach.
304D.5	Creating	RELATE the talent acquisition strategies in accordance with position requirements using social media.

Course Outline:

Unit 1: Introduction to talent acquisition

Concept of talent acquisition, Role of HR function vis-a vis Talent Acquisition, talent acquisition strategy, talent acquisition process.

Unit 2: Organizational Staffing

Concept of staffing, nature of staffing, staffing models, staffing Strategy, issues in staffing.

Unit 3: Competency Based Recruitment and Selection

Concept of competency, competency assessment and mapping, competency-based HRM Vs traditional HRM, competency based recruitment and selection; competency based interviewing and selection.

Unit 4: Staffing Activities

Trends in recruitment, job analysis; job description and specification, recruitment strategy development, searching and applicant reaction-external, assessment methods; substantive, discretionary, contingent.

Unit 5: Social Media Recruitment

Introduction to social media recruitment, advantages and disadvantages, practice of online assessment, online testing design, candidate data security and privacy.

Prescribed Books:

- 1. Strategic Staffing, Jean M Phillips, Stan M Gully, 3rd edition, Pearson.
- 2. Recruitment & Selection-A Competency Approach, Gareth Roberts, CIPD.

- 1. Competency –Based Recruitment & Selection, Robert Wood & Tim Payne, Wiley.
- 2. Human Resource Planning, Dipak Kumar Bhattacharyya, 2nd edition, Excel Books.
- 3. Online Recruitment and Selection –Innovations in Talent Acquisition, Douglas H. Reynolds & John A. Weiner, Wiley- Blackwell.
- 4. Critical touch points of recruitment, Strategic HR inc. and bookboon.com



COURSE CODE	MB305D
COURSE TITLE	HUMAN RESOURCE DEVELOPMENT
COURSE CREDITS	3

Human Resource is among the most important sources of competitive advantage of the organizations. Competitive advantage can be built and realized depending on the degree towhich the workforce is developed. Effective development of Human Resource is not an outcome of simply conducting standalone training programs. Rather, it requires strategic approach and development of systems around it. This course, distinct from Training and Development (T&D), gives more strategic perspective to the HRD system designing.

Course Objectives:

- 1. To understand the evolution and functions of HRD.
- 2. To identify the content, process and the outcomes of HRD applications.
- 3. To evaluate and understand diversity issues and their impact on organization.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305D.1	Remember	To RECALL the concept of human resource management
303D.1	Kemember	and its relevance in organizations.
		To DEVELOP the understanding of the concept of human
305D.2	Understanding	resource management and to understand its relevance in
		organizations.
305D.3	Understanding	To DEVELOP necessary skill set for application of various
303D.3	Officerstanding	HR issues.
305D.4	Applying	APPLY the understanding of the outcomes of HRD
303D.4	Applying	applications.
305D.5	Evaluating	To understand and EVALUATE diversity issues and their
303 D .3	Evaluating	impact on organization

Course Outline:

Unit 1:Human Resource Development

Evolution of HRD - Relationship with HRM - Human Resource Development Functions - Roles and Competencies of HRD Professionals - Challenges to Organization and HRD professionals - Learning and HRD – Learning Strategies and Styles.

Unit 2:Frame work of Human Resource Development

HRD Processes - Assessing HRD Needs - HRD Model - Designing Effective HRD Program - HRD Interventions- Creating HRD Programs - Implementing HRD programs - Training Methods.

Unit 3:Evaluating HRD Programs

Models and Frame Work of Evaluation - Assessing the Impact of HRD Programs - Human

Resource Development Applications - Fundamental Concepts of Socialization - Realistic Job Review - Career Management and Development.

Unit 4: Management Development

Employee counselling and wellness services – Counselling as an HRD Activity - Counselling Programs - Issues in Employee Counselling - Employee Wellness and Health Promotion Programs - Organizational Strategies Based on Human Resources.

Unit 5: Work Force Reduction, Realignment and Retention

HR Performance and Bench Marking – Managing globalization- Diversity Management - HRD programs for diverse employees.

Prescribed Books:

- 1. Recent Experiences in HRD, Rao, T.V., New Delhi. Oxford & IBH.
- 2. Human resource development & management 1ed, Ghosh Biswanath, Vikas Publication house pvt ltd.
- 3. Evaluation of HRD, Pareek, Udai, Jaipur, Rawat Publications
- 4. Human Resource Management, S.S.Khanka, "S. Chand & Company Ltd.

- 1. Human Resource Management, Gary Dessler, Pearson Education.
- 2. Recruitment and Selection, Gerard V McMohan, Prentice Hall of India.



COURSE CODE	MB306D
COURSE TITLE	PERFORMANCE COMPENSATION MANAGEMENT
COURSE CREDITS	3

This course familiarizes students with the concepts of Performance and compensation management within the wider context of human resource management. It provides students with an understanding of the reward management process which includes pay survey, job evaluation, and the design of pay structure. Students will acquire basic data management techniques and recognize what are the factors that determine the pay levels and benefits of employees in the job market.

Course Objectives:

- 1. To gain a working knowledge of performance management systems
- 2. To gain an enhanced ability to communicate effectively on issues relating toperformancemanagement.
- 3. To learn appropriate terminologies and practices regarding performancemanagement.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306D.1	Applying	Students will be able to establish performance criteria, USE various appraisal formats participate in various exercises to ensure that they fully understand ways to get the best possible performance from employees.
306D.2	Analyze	Students will be able to ANALYZE and conduct performance discussions that are objective, complete, and defensible.
306D.3	Applying	Students will DEMONSTRATE techniques for conducting an effective performance appraisal, and ways to coach members of management.

Course Contents:

Unit 1: Foundations of Performance Management

Concepts of Performance Management, Performance Appraisal to PerformanceManagement, The five-FactorModel, Effective Performance Management and Challenges to PM, Introduction, Aims, Need, Elements, and Functions of PMS, Competency based PMS, E-PerformanceManagement, PerformanceCounselling.

Unit 2: Performance Planning and Managing

Concepts of Performance Planning, Developing PerformancePlan, Process and Barriers of PerformancePlanning, Effective Performance Plan, Performance Managing and CompetencyMapping.

Unit 3: Performance Appraisal

Concepts of Performance Appraisal, Performance Appraisal Interview and Methods of Appraisal, Common Rating Errorsand Pitfalls of PerformanceAppraisal, Good Performance AppraisalSystem, PerformanceMonitoring.

Unit 4: Implementing Performance Management

Hindrances in Implementation of PM, Strategies for effective implementation of PM, Reward Management, Job performance and Job Satisfaction, Arguments for and against Performance based rewards, High Performance teams, HR Ethics and performance management.

Unit 5: Foundations of Compensation Management

Objectives, significance of Compensation, Wage and Compensation, Principles of Compensation Formulation, Theories of Wagedetermination, Types of wages and Significance of Employee Compensation, VIETheory, Compensation Decision, Types of Executive Compensation, Compensation Trends in India.

Prescribed Books:

- 1. A.S. Kohli and T. Deb, Performance Management, Oxford, 10thEdition.
- 2. D.K. Bhattacharya, Compensation Management, Oxford, 6thEdition.

- 1. K. Ashwathappa, Human Resource Management, Tata macgrahill, 4th Edition.
- 2. T. V. Rao, Performance Management, Response Books, 1st Edition.
- 3. Personnel Management by EdwinFlipp.
- 4. Personnel Management by C.B.Mamoria.

COURSE CODE	MB307D	
COURSE TITLE	LABOUR LAWS	
COURSE CREDITS	3	

Labour laws are one of the most far-reaching, crucial aspects of a democracy. Their enshrinement in law and the mere fact of their existence acts as an often reliable safeguard to employment abuses. It provides an outlet for employee grievances, should there be justifiable reasons for suchgrievances.

Course Objectives:

- 1. To be acquainted with the Industrial relations framework in our country. Further, the importance of the maintenance of Industrial peace and efforts to reduce thein cidence of Strikes and Lockout and Industrial Strike are to be emphasized.
- 2. To critically examine the machineries contemplated under the provisions of the Industrial Disputes Act 1947 for the prevention and settlement of Industrial Disputes.
- 3. To impart the students with the knowledge of various laws like andamp; how law affects theindustry and labour.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
CO No.	Cognitive Admittes	
307D.1	Understanding	Students will get to KNOW the development and the
307D.1	Onderstanding	judicial setup of Labour Laws.
		Students will be able to DEMONSTRATE an appreciation
307D.2	Applying	of the industrial, economic and social contexts in which
		labour is regulated.
		Students will be able to demonstrate an
307D.3	Understanding	UNDERSTANDING of the role of law in regulating
		industrial disputes and conflicts.
		Students will be able to ANALYZE many welfare and
307D.4	Analyzing	wage Legislations to integrate the knowledge of Labour
		Law in General HRD Practice.

Course Contents:

Unit 1: Introduction to Industrial Relations

Industrial Disputes, Causes and effects of industrial disputes, Grievance and disciplinary action.

Unit 2: Strikes and Lockouts

Types of strikes, Legal provision in respect of strikes, Lockout and unfair labourpractices Industrial Disputes Act 1947: objectives, definitions, the prohibition of strikes and lock outs, lay-offs, retrenchment and closure. Unfair labour practices, settlement machinery.

Unit 3:Retrenchment:

Legal provisions and formalities of retrenchment, layoff, Voluntary retirements cheme, golden shake handschemes, Closers.

Labour Welfare: Voluntary WelfareMeasures, Bonuscalculation, Statutory WelfareMeasures, PF and gratuitycalculations, Introduction to occupationalhealth, Well-being of employee-Job

insecurity, working hours and control atwork.

Unit 4: Legal framework

Introduction to Factories act1948, Industrial DisputesAct-1947, Workmen's CompensationAct-1923, Standing OrdersAct-1964, Domestic Enquiry and Principles of NaturalJustice, Trade union act1926, Social securityActs: Objectives, applicability and definitions, Procedures for certification and modification of standing orders, matters to be provided in standingorders.

Unit 5: The payment of wages act 1936, The minimum wages act 1948, The Payment of Bonus act 1965, Industrial Employment (standing Order) Act 1946, applicability and definitions, Provisions and permissible deductions, the enforcement machinery, Penalprovisions.

Prescribed Books:

- 1. Mamoria-Dynamics of Industrial relations.
- 2. S. P Jain Industrial and LabourLaws.

- 1. S. C Srivastava Social Security and LabourLaws.
- 2. S. N Mishra Labour Laws.
- 3. Srivastava K. D Commentaries on Industrial Disputes Act, 1947
- 4. V. V Giri Labour problems in IndianIndustry.
- 5. Malhotra O. P Industrial Disputes Act Vol. I and IL.
- 6. Labour Law and Labour Relations Published by Indian Law Institute.
- 7. Madhavan Pillai Labour and IndustrialLaws.



COURSE CODE	MB308D
COURSE TITLE	STRATEGIC HRM
COURSE CREDITS	3

Strategic HRM will deal with various issues of strategic HRM. The course will cover various topics ranging from Organisation theory, Economics, Labor market issues, performance management systems, recruitment training and retention of employees.

Course Objectives:

- 1. To study a strategic framework for integrating and applying HRM.
- 2. To study the global human resources environment in which your organization operates.
- 3. To gain understanding, knowledge, and skills to make strategic human resource management decisions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308D.1	Analyzing	Students will be able to carry out a detailed strategic
		ANALYSIS of human resource management issue in their
		organizations, —
	Evaluating	Students will be able to ASSESS the global environment,
308D.2		economic environment, organizational culture and analyze
300D.2		competencies and the implement human resource
		decisions
308D.3	Applying	Students will be able to DESIGN human resources in a
		way that contributes to improved performance,
		productivity, and morale of employees.
308D.4		Students will be able to work at an optimum level to
	Analyzing	critically ANALYZE HR strategies in relation to their
		application at the workplace.

Course Contents:

Unit 1: Introduction To Strategic HRM

Definition, need and importance; Introduction to business and corporate strategies; Integrating HR strategies with business strategies; Developing HR plans and policies.

Human Resource Environment:

Technology and structure; Workforce diversity; Demographic changes Temporary and contract labour; Global environment; Global competition Global sourcing of labour; WTO and labour standards.

Unit 2: Recruitment and Retention Strategies

Online recruitment; Employee referrals; Recruitment process outsourcing Head hunting; Executive education; Flexi timing; Telecommuting Quality of work life; Work - life balance; Employee empowerment Employee involvement; Autonomous work teams.

Training and Development Strategies:

Creating a learning organization; Competency mapping; Multi-Skilling Succession planning;

Cross cultural training.

Unit 3: Performance: Management System and HR Strategies

Performance Evaluation and diverse functions, Characteristics of Different Performance Evaluation systems. Pay for Performance: Economic, psychological and social arguments opposite each other, Striking the Balance: Some Key Issues and Tactics, If not Pay for Perform ance: Forms, Bases and Distributions of Rewards, How and why you do jobs more exciting and challenging? Job design: Job - enlargement and job- enrichment.

Unit 4: Reward and Compensation Strategies

Performance based pay; Skill based pay; Team based pay Broad banding; Profit sharing; Executive Compensation; Variable pay.

Retrenchment Strategies:

Downsizing; Voluntary retirement schemes (VRS) HR outsourcing; Early retirement plans; Project based employment.

Unit 5: Human Aspects of Strategy Implementation

Behavioral issues in strategy implementation; Matching culture with strategy Human side of mergers and acquisitions; Leadership, power and politics; Employee morale; Personal values and business ethics.

Global HR Strategies:

Introduction to global HR strategies; Developing HR as a value added function.

Prescribed Books:

- 1 Strategic HRM Jeffery Mello, Thompson publication, NewDelhi.
- 2 Strategic HRM Charles Greer, Pearson education Asia, NewDelhi.
- 3 Strategic HRM Michael Armstrong, Kogan page, London.
- 4 Strategic HRM Agarwal, Oxford university press, NewDelhi.
- 5 Human Resource Management Garry Dessler, PHI, NewDelhi.

COURSE CODE	MB309D	
COURSE TITLE	HR ANALYTICS	
COURSE CREDITS	3	

With automation of many HR functions and widely dispersed business units, it has become mandatory on the part of organizations to create rich data source. Not only the creation but also effective utilization of HR data, will help organizations in proper HR value creation. HR analytics is about measuring the ROI on Human capital investment and measuring its impact on performance, production, and profitability of the organization. Analytics of workforce (one of the most important asset) of organization will help HR practices to get aligned with the business strategy of the organization, thereby making HR as a strategic Business partner.

Course Objectives:

- 1. To gain an understanding of the different analytical approaches used by HR Professionals to solve real business problems.
- 2. To examine actual business cases and apply problem solving and critical thinking skills through group case studies.
- 3. To build on presentation skills and demonstrate the ability to work effectively in teams.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309D.1	Evaluate	To understand and EVALUATE diversity issues and their
307D.1	Evaluate	impact on organization
309D.2	Remembering	ENUMERATE the key concepts related to the subject
309D.2	Kemembering	matter
		To gain an UNDERSTANDING of the different analytical
309D.3	Understanding	approaches used by HR Professionals to solve real business
		problems.
309D.4	Understanding	To UNDERSTAND role of analytics in human resource
3090.4	Onderstanding	management.
		To ANALYZE actual business cases and apply problem
309D.5	Analysing	solving and critical thinking skills through group case
		studies.

Course Outline:

Unit 1: Introduction & Concept

Disruptive Technological Era: Evolution of Industry Revolution 4.0 and aspect of HR, Big data in HR, understanding of Machine Learning, sensors and cloud computing, Business Intelligence in HR.

Unit 2: Importance of HR Analytics

Role and Responsibilities of HR Analytics, Framework of contemporary HR Analytics, - Predictive tools and Applications in solving problems using HR analytics. Gartner's Analytics Maturity Model.

Unit 3: Innovation

Concept of innovation, Kinds of Innovation, Developing Innovative culture in an organization. HR analytics linkage to business outcomes, Measuring use of HR analytics impact on businessoutcome.

Unit 4: Strategy Formulation

Redefining HR Policies and Practices, Robust competency mapping, understanding future of work and workplace, Decision framework. Use of HR analytics in workforce planning: talent acquisition, talent development, talent compensation, talent engagement and retention.

Unit 5: Learning from Analysis

Case studies and best practices in use of HR Analytics in industry.

Prescribed Books:

- 1. Winning on HR analytics: Leveraging data for competitive advantage, Ramesh Soundararajan and Kuldeep Singh, Sage Publication.
- 2. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions Paperback, Shonna D. Waters, Valerie N. Streets, Lindsay Mcfarlane, RachaelJohnson-murray.

- 1. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Boyce Byerly, Gene Pease, and Jac Fitz-enz.
- 2. Doing HR Analytics: A Practitioner's Handbook with R Examples, Lyndon, Mr. Sundmar, Createspace Independent Pub.
- 3. The Power of People: Learn How Successful Organizations Use Workforce Analytics to Improve Business Performance, Guenole Nigel, Ferrar Jonathan, Feinzig Sheri, PearsonPublication.

PHARMA MANAGEMENTSPECIALIZATION

COURSE CODE	MB303E
COURSE TITLE	ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION
COURSE CREDITS	3

Course Description:

The course enable healthcare workers, who are not physicians, including medical technicians, emergency medical technicians and physician's assistants as well as paramedical as well as management students and covers all the topics that are expected to confront them.

Course Objectives:

- 1. To acquire knowledge of the healthy man's anatomy and physiology to be able to plan and implement drug treatment based on scientific based knowledge of the structure and function of the human body.
- 2. To describe the relationships between structure and function of the human body.

Course Outcomes: On successful completion of the course the students will be able to

Course automass on successful completion of the course the students will be used to		
CO No.	Cognitive Abilities	Course Outcomes
303E.1	Domamharing	DESCRIBE. Define the anatomic terms used to refer to the
303E.1	Remembering	body in terms of directions and geometric planes.
303E.2	I Indoneton din a	EXPLAIN the major cavities of the body and the organs
303E.2	Understanding	they contain.
303E.3	Annlying	INTERPRET what is cell. Describe the major functions of
303E.3	Applying	the four types of human tissue.
		CONSTRUCT List the major systems of the body, the
303E.4	Analysing	organs they contain and the functions of those systems.
		Define the terms anatomy and physiology
303E.5	Evaluating	FORMULATE Cellular Metabolism; Cell Structure.

Course Contents:

Unit 1: Digestive & Respiratory System

Gross anatomy of the gastro-intestinal tract, functions of its different parts including those of liver, pancreas and gall bladder, various gastrointestinal secretions and their role in the absorption and digestion of food. Disorders of digestive system. Anatomy of respiratory organs & its functions, respiration, mechanism and regulation of respiration, respiratory volumes and vital capacity.

Unit 2 : Central Nervous System & Autonomic Nervous System

Functions of different parts of brain and spinal cord. Neurohumoral transmission in the central nervous system, reflex action electroencephalogram, specialized functions of the brain, Cranial nerves and their functions. Physiology and functions of the autonomic nervous system. Mechanism of neurohumoral transmission in the A.N.S.

Unit 3: Urinary System & Endocrine System

Various parts, structures and functions of the kidney and urinary tract. Physiology of urine formation and acid-base balance. Diseases of the urinary system, Basic anatomy and physiology of Pituitary, Thyroid, Parathyroid. Adrenals, Pancreas, Testes and ovary, their hormones and functions.

Unit 4: Reproductive System & Sense Organs

Male and female reproductive systems and their hormones, physiology of menstruation, coitus and fertilization. Sex differentiation, spermatogenesis & oogenesis. Pregnancy its maintenance and parturition. Basic anatomy and physiology of the eye (vision), ear (hearing), taste buds, nose (smell) and skin (superficial receptors).

Unit 5: Concepts of Health and Disease

Disease causing agents and prevention of disease, Classification of food requirements-Balanced diet, nutritional deficiency disorders, their treatment and prevention, specifications for drinking water, Communicable diseases, First Aid Emergency treatment of shock, snake bites, burns, poisoning, fractures and resuscitation methods.

Prescribed Books:

- 1. Anatomy Physiology and Health Education (PB 2019) Agrawal R.
- 2. Anatomy Physiology And Health Education by Murugesh.

- 1. Human Anatomy, Physiology & Health by Jayaveera K.N., Vrushabendra Swamy B M.
- 2. Anatomy Physiology And Health Education by Rahul Phate, 3rd edition

COURSE CODE	MB304E
COURSE TITLE	MANAGEMENT OF MULTINATIONAL PHARMACEUTICALS
COURSE CREDITS	3

In the pharma industry, with added uncertainties from the process of scientific research, project management becomes more challenging. The course provides a combination of the technical know-how of the pharmaceutical industry with the management of key areas in the industry ranging from economic planning to production to International marketing and sales.

Course Objectives:

The basic objective of this course is to acquaint the students with environmental, procedural, institutional and decisional aspects of International Pharmaceutical Marketing done by Multinational Pharma companies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304E.1	Damamharina	DESCRIBE International environment for Pharmaceutical
304E.1	Remembering	Exports, Competitiveness of Indian Pharma-products.
		EXPLAIN Global market potential for Pharma-products,
304E.2	Understanding	Organization of supply chain for pharmaceutical export –
		from producer to port.
		INTERPRET Pharmaceutical export zones and special
304E.3	Applying	facilities for pharmaceutical exporter, Country risk
		analysis.
304E.4	Analysing	CONSTRUCT Export promotion schemes for pharma-
304E.4		exports by state and central governments, Export financing.
304E.5	Evaluating	FORMULATE WTO regulations with special reference to
	12 varuating	pharma products.

Course Contents:

Unit 1: International Business Environment

Concept of Globalisation, its Effects, Benefits & Costs, Multinationals; Firm-specific and location-specific advantages, Role of MNC's in developing countries. Economic, political, legal and cultural environment of International Business, Scenario analysis & country-wide-risks of investments decisions. International Trade Theories- Absolute Advantage Theory, Comparative Cost Theory, Opportunity Cost Theory, Hecksher-Ohlin Theory, Vernon's Theory of International Product Life Cycle.

Unit 2: International Marketing

An overview of the International Marketing Management Process; International Marketing Environment. International Market Segmentation and Positioning; Screening and Selection of

Markets; International Market Entry Strategies: Exporting, licensing, Contract Manufacturing, Joint Venture M & A, Settingup of Wholly Owned Subsidiaries Aboard, Strategic Alliances. International business Competitive strategies: Porter's model; Prahalad and Doz's strategy model.

Unit 3: International Product and Pricing Strategies

Meaning, Nature and Importance of International Marketing Orientation: E.P.R.G. – Approach: **Product Designing:** Product Standardization Vs. Adaptation; Managing Product Line, New Product Development; **Pricing for International Markets:** Factors Affecting International Price Determination; Price Quotations and Terms of Sale. Managing International Distribution.

Unit 4: International Promotion and Distribution Strategies

Promotion strategies- Advertising, Personal selling, Sales promotion, Public relations, and Direct marketing, Distribution Channel Strategy – International Distribution Channels, their Roles and Functions; Selection and Management of Overseas Agents; International Distribution Logistics; Planning for Trade Fairs and Exhibitions; International Promotion Mix – Advertising and other Modes of Communication.

Unit 5: Balance of Trade and Balance of Payments

Constituents of Capital Account and Current Account, Reasons and remedies for Adverse Balance of Payment. Convertibility of Capital Account. Theories of Foreign exchange; Role of world bodies like World Bank, IMF, IBRD and WTO in International Trade, Critical issues in trade. Import and Export Policy, Procedure and Documents-Registration of Exporters, Export Quotations, Production and Clearance of Goods for Exports, Shipping and Transportation, Insurance, Negotiation of Documents, Instruments of Payments-Open Account, Bills of Exchange, Letter of Credits-Export Finance.

Prescribed Books:

- 1. Aswathappa- International Business (Tata McGraw-Hill, 2002).
- 2. Daniels- International Business (Pearson Education) 2004.
- 3. Paul J- International Business (Prentice-Hall, 2004).

- 1. Onkvisit, Sak and Shaw, J.J-International Marketing: Analysis and Strategy (PHI).
- 2. Deresky H- International Business (PHI, 2003).
- 3. Hill C W- International Business (Tata McGraw-Hill, 2002).
- 5. Varma M L- International Trade (Vikas, 2003).
- 6. Taggart- The Essence of International Business (PHI).
- 7. Thakur, M., Burton & Gene, E-International Management (Tata McGraw Hill).
- 8. Hodgetts, R. and Luthens, F-International Management (McGraw Hill Inc 2003).

COURSE CODE	MB305E
COURSE TITLE	BUSINESS LEADERSHIP IN PHARMA
COURSE CREDITS	3

Course Description: Students acquire an understanding appreciation of the need for leadership skills. The capstone activity of the course is the implementation of service-learning project. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills.

Course Objectives:

- 1. To understand Leadership and what pharma, and device organisations are looking for from leaders.
- 2. To apply leadership to set your strategic direction and develop your leadership style to higher level.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305E.1	Remembering	DESCRIBE difference between leading and managing; group co-ordination; interpersonal skills; new strategies for implementing projects; types of leadership style; Identifying the types of Leaders.
305E.2	Understanding	EXPLAIN key performance indicators (KPI) to reflect effectiveness of group; stress and conflict management; Lewin's Leadership Styles, The Blake-Mouton Managerial Grid, Path-Goal Theory, Emotional Intelligence Leadership, Flamholtz and Randle's Leadership Style Matrix, Dunham and Pierce's Leadership Model, Transformational Leadership, Charismatic Leadership, Fiedler's Contingency Model, Blue-Ocean Leadership, The Tannenbaum- Schmidt Leadership Continuum - and the list goes on
305E.3	Applying	INTERPRET SWOT analysis; organizing conflictual situations; people management; CAPA (Corrective Action Preventive Action) plans;
305E.4	Analysing	CONSTRUCT Leadership in flat organization; Individual Contributor vs. People Manager as Leader; Potential derailment factors for leadership in pharmaceutical sector
305E.5	Evaluating	FORMULATE Crucibles of leadership; The Leadership Challenge in the Pharmaceutical Sector.

Course Contents:

Unit 1: Introduction

Meaning, concept, difference between Pharma Leader and Pharma Manager, Trait Perspective

of Pharma leadership: Leadership traits and its effectiveness during Pharma management, Leadership style, Behavioral Perspective of leadership, Managerial Grid, Transformational Versus Transactional leadership in Pharma selling.

Unit 2: Leadership Theories applicable to Pharma Industry

Modern Pharma leadership theories, relevance of these theories for today's Pharma organisations, Servant leadership, Charismatic leadership, Authentic leadership, Practicing Moral Leadership Ethics/Morality and Leadership, Modern Views of Leadership.

Unit 3: Change Management and Decision-Making and Pharma Leadership

Pharma Leadership for Sustainability - Power, Influence, Impact - Leadership Practices in Pharma Industry - Organizations and Groups: Organizational Culture and Leadership - Leadership in Business Organizations.

Unit 4: Leading without Formal Authority

Lateral leadership – Meaning, concept, influencing co-workers, higher-ranking managers, or clients of Pharma Industry, develop your leadership brand, Navigate the Pharma organizational hierarchy.

Unit 5: Managing Groups and Teams of Missionary Sales People

Definition and characteristics of group, why do people form and join groups, Theories of group formation, Stages of group development, Group Behaviour: Group Norms, Group cohesion, Group Role, Inter group Conflicts.

Prescribed Books:

- 1. Northouse, Peter G., Leadership: Theory and Practice, Sage Publications.
- 2. Daloz Parks, S., Leadership can be taught: A Bold Approach for a Complex World, Boston:Harvard Business School Press.
- 3. Drucker Foundation (Ed.), Leading Beyond the Walls, San Francisco: Jossey Bass.
- 4. Al Gini and Ronald M. Green, Virtues of Outstanding Leaders: Leadership and Character, John Wiley & Sons Inc.
- 5. S Balasubramanian, The Art of Business Leadership Indian Experiences, Sage Publications

- 1. Kavita Singh.Organisational Behaviour text and cases.
- 2. Organisational Behaviour Text and Cases Dr. S.S.Khanka.
- 3. Understanding organization Behaviour Udai Pareek.

COURSE CODE	MB306E
COURSE TITLE	PHARMA PRODUCT AND BRAND MANAGEMENT
COURSE CREDITS	3

This course defines the principles of the product management system which gives a complete overview of the role of product management in the pharmaceutical industry. In order to increase creativity and efficiency of product managers, the course focuses on strategic planning and profit responsibilities and how to make the product manager familiar with the basic marketing concepts.

Course Objectives:

- 1. To develop understanding of strategic planning and profit responsibilities.
- 2. To get understanding of how to familiar with the basic Pharma marketing concepts.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306E.1	Remembering	Students will be able to DESCRIBE, classify, structure and combine concepts, theories, methods and models taught for Pharma Products.
306E.2	Remembering	Students will be able to IDENTIFY and develop relevant issues within pharmaceutical marketing.
306E.3	Analyzing	Students will be able to ANALYZE and synthesize specific issues within pharmaceutical marketing by using the concepts, theories, methods and models taught.
306E.4	Evaluating	Students will be able to ASSESS and communicate problem-solving on a reflective, scientific basis.
306E.5	Applying	Students will be able to APPLY the knowledge, concepts, tools necessary to understand challenges and issues of marketing in a growing international and global Pharma context.
306E.6	Understanding	Students will be able to APPRECIATE the importance of cultural adaptation of international business and marketing through appraisal and critical analysis of the social, technological, political, legal and economic forces that affect business performance of Pharma company.
306E.7	Understanding	Students will be able to UNDERSTAND the role of Pharma marketing as a fundamental organizational policy process.

Course Contents:

Unit 1: Product

Meaning, Classification, Market research and data analysis, product line and product mix decisions, product life cycle, product portfolio analysis; Product strategy and product positioning;New product decisions; packaging and labeling decisions, Product management in pharmaceutical industry, Designing Marketing Programs for New Product launch and Existing

Brands: essential constituents, Brand Plans, purpose and benefits, Medical Marketing support, Ad-Agency support and coordination.

Unit 2: Concept of Brand and Brand Equity

What is a Brand: Brand Name, Brand Image, Brand Value and Brand Awareness, Concept of Brand Equity, difference with brand valuation, Five dimensions of Brand Equity, key influencers of each dimension, prescription loyalty, prescriber coverage frequency, brand exposure through field-force promotion, Quality indicators, Promotional-mix, Benefits of building Brand Equity.

Unit 3: Brand Management as a strategic marketing function

Role of a Pharmaceutical Brand Manager, the 'Little CEO' concept, 'Science meets Commerce' concept; Essential differences between managing Pharmaceutical Brands and Consumer Brands, types of Pharmaceutical Brand Management organization structures, challenges of a Brand Manager; relation of Product Management Teams vis-à-vis Sales Force in Pharmaceutical companies.

Unit 4: Fundamentals of Pharmaceutical Marketing

The 4 'Ps' in a regulated Pharma market, the Strategic Triangle; Market Segmentation in the pharmaceutical context, conceptual difference with consumer products market segmentation, Brand Positioning in the pharmaceutical context, conceptual difference with consumer brand positioning, PLC Management, reinforcing and revitalizing pharmaceutical brands, line-extensions.

Unit 5: Product-mix Optimization & Promotional-mix Optimization

Portfolio Analysis by factoring key determinants, BCG Matrix, brand building decisions; leveraging the Promotional-mix for Brand Building.

Prescribed Books:

- 1 Pharmaceutical Marketing by Mickey C. Smith.
- 2 Pharmaceutical Product Development by N. K. Jain.
- 3 Product Management by Lehman and Winer.

COURSE CODE	MB307E
COURSE TITLE	PHARMA SALES, DISTRIBUTION AND RETAIL MANAGEMENT
COURSE CREDITS	3

This course focuses on the Pharma services, how to obtain orders, and establishes new accounts by planning and organizing daily work schedule to call on existing or potential sales outlets and other trade factors. How to adjust content of sales presentations by studying the type of sales outlet or trade factor and also focuses sales efforts by studying existing and potential volume of dealers.

Course Objectives:

- 1. To study of pharmaceutical sales is different from study of general sales, various factorslike physicians behaviour, promotional strategy, marketing reputations of organizations etc.
- 2. To enable students to understand about selling of medicines and pharmaceutical marketdynamic.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307E.1	A polying	Students will be able to DEMONSTRATE the selling
30/E.1	Applying	efforts and intensity by dealers as well as sales personnel.
307E.2	A polying	Students will be able to DEMONSTRATE to call the
307E.2	Applying	attention to new Pharma products.
307E.3	A polyina	Students will be able to DEMONSTRATE the technique to
307E.3	Applying	inform the buyers about the new brand and new packaging.
		Students will be able to DEVELOP the ability to create
307E.4	Applying	value and execute deals that others might overlook; the
		strategic skill and competencies needed for success.
		Students will be able to DEVELOP the ability to avoid
307E.5	Applying	common mistakes made by sales professionals and
		negotiators.
		Students will be able to DEMONSTRATE the ability to
307E.6	Applying	work with people whose backgrounds, expectations, and
		values differ from your own.

Course Contents:

Unit 1: Need and scope of Pharmaceutical selling

Direct selling – concepts & types, Role & responsibility of medical representatives, Physicians degrees & specialties, Hospitals & Institutions – influencing factors for Prescriptions, Practice, pattern wise, Geographically, Modes of CRM, Various departments in a company, their importance, roles of other Sales staff, Role of MRs – in today's Context, needs, challenges, controls, attritions.

Career in different types, size, cultures.

Unit 2: Distribution channel and network in pharmaceutical industry, Distribution Channels: Manufacturer; Wholesaler; Retailer; Hospital and Government Agencies,

Undercutting / substockist / Semi wholesaler concept.

Unit 3: -Managing the sales force Sales forecasting of pharmaceutical products:

Elements & objectives of Phrama sales management, Modern approach to selling, Sales Hierarchy

Sales Targets – designing sales territories, allocation of targets, Reviewing sales target, evaluation of Sales programmes, Sales Foresting, tools and techniques, Launching new territories, Products, Retail Prescription Audit.

Unit 4: Retail Competition: The Community Level; International Marketing, Current needs of the Retailer (a Chemist), customers, threat, fate of Online pharmacy.

Unit 5: -Principal channel relationship

- Channel management decisions, Resolving Channel conflicts - manage & progress.

Prescribed Books:

- 1. Prahlad, CK and Hart, Stuart L(2002), The Fortune at the Bottom of Pyramid strategy.
- 2. Jaiswal, anand K, (2008), The fortune at the Bottom or the Middle of the Pyramid? Innovations, 3 (1), 85-10.

COURSE CODE	MB308E
COURSE TITLE	PHARMACEUTICAL MANUFACTURING AND REGULATORY AFFAIRS
COURSE CREDITS	3

The Regulatory Affairs function within the pharmaceutical industry is absolutely pivotal to the successful development and licensing of safe and effective medicines, to the benefit of patients' health worldwide. The course focuses on a winning combination of lectures and interactive case studies that afford you the opportunity to put theory intopractice.

Course Objectives:

- 1. To understand all draft amendments of primary legislations dealing in drugs namely, Drugsand Cosmetic Act, and offer suggestions to the Drugs Controller General (India), Government ofIndia, New Delhi.
- 2. To understand the management of the regulatory activities necessary to bring drugs and medical products to market.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308E.1	Applying	Students will be able to demonstrate the principal steps in drug discovery and APPLY the knowledge related to Pharma Industry.
308E.2	Applying	Students will be able to DEVELOP the complete development plan (pharmaceutical, non-clinical and clinical) according to the proposed therapeutic indication.
308E.3	Applying	Students will be able to DEMONSTRATE the pertinent issues involved in the undertaking of clinical research and the regulation of medicines in the various global pharma markets.
308E.4	Applying	Students will be able to demonstrate the management of drug safety issues pre-and post-marketing authorization for development and REVIEW of product-related information to ensure adherence to ethical and legal provisions.
308E.5	Analyzing	Students will be able to ANALYZE the principles of health economics and their application in the development and marketing of medicines.
308E.6	Applying	Students will be able to DEMONSTRATE the management of all lifecycle activities (regulatory and marketing) of a medicine.

Course Contents:

Unit 1: Historical perspective on the impact of Food and Drug laws, Drug regulatory and accrediting agencies of the world (USFDA, TGA, ICH, WHO, ISO etc.).

Unit2: Globalization of drug industry, present status and scope of pharmaceutical industry in India. WHO and NABL certification, ICH guidelines for manufacturing and quality assurance of

drug formulation.

Unit 3: Manufacturing: Introduction, regulatory requirements as per Indian and other regulatory authorities for manufacturing information formula, process, validation of manufacturing process, equipment, documentation, inspection requirement, regulatory guidelines for active ingredients and formulations.

Unit 4: Manufacture of and controls on dosage forms: Manufacturing documents, master formula, batch formula records, standard operating procedures, quality audits of manufacturing processes and facilities. In process quality controls on various dosage forms; sterile and nonsterile, standard operating procedures for various operations like cleaning, filling, drying, compression, coating, disinfections, sterilization, membrane filtration etc.,

Unit 5: Regulatory guidelines for packaging materials, test and evaluation of packaging materials, biological test, microbiological test and evaluation of closures.

Prescribed Books:

- 1. Guidelines for Developing National Drug Policies; WHO Publications, 1998.
- 2. Quality Assurance of Pharmaceuticals—A Compendium of Guidelines and Related Materials, Vol. –1; WHOPublications.
- 3. GMP byMehra.
- 4. How to Practice GMP by P.P. Sharma.
- 5. Good Manufacturing Practices for Pharmaceuticals-A Plan for Total Quality Control by Sidney H. Willing and James R Stoker. (Drugs and Pharm. Sciences) Vol. 78; Marcel Dekker Inc.
- 6. Current good manufacturing practices for pharmaceuticals by Manohar A.Potdar.



COURSE CODE	MB309E
COURSE TITLE	PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEM
COURSE CREDITS	3

Course Description: The pharmacy management system, also known as the pharmacy information system, is a system that stores data and enables functionality that organizes and helps staff at all levels of a country's health system make evidence- based decisions to manage pharmaceutical services. An effective pharmaceutical management information system (PMIS) can synthesize the large volume of data generated by pharmaceutical management operations. Managers integrate manual and electronic tools into a comprehensive strategy to strengthen pharmaceutical systems. A good PMIS provides the necessary information to make sound decisions in the pharmaceutical sector.

Course Objectives:

- 1. To learn concepts of the learn principles, objectives, applications and design of PMIS.
- 2. To learn the types of PMIS designed for different needs of the Pharmaceutical organizations.
- 3. To learn the technological updates in Information systems making the decision making process more easy and sophisticated for Pharmaceutical companies globally as well.
- 4. To learn the Business Applications of Pharmaceutical Management Information Systems.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309E.1	Remembering	DESCRIBE definition of MIS; functions of PMIS in pharma industry; data and information.
309E.2	Understanding	EXPLAIN PMIS record keeping documents; Data Compilation tools; information stages; data reporting forms; feed-back reports.
309E.3	Applying	INTERPRET using the electronic dispensing tool to manage pharmaceutical information at different health care system.
309E.4	Analysing	CONSTRUCT key issues in designing or revising PMIS.
309E.5	Evaluating	FORMULATE implementation of PMIS.

Course Outline:

Unit 1: Introduction to Pharmaceutical Management Information Systems (PMIS)

Definition of a Pharmaceutical Management information system (PMIS), Functions of PMIS, Nature of PMIS, Scope of PMIS, Objectives of PMIS, Importance of PMIS, Limitations of PMIS, Role of MIS in Business functions and Pharma organizations Operating Elements of PMIS, Information Systems Pyramid Structure Based and Management Activity Based role of PMIS, PMIS Structure Based on Organizational Function, Advantages and Disadvantages.

Unit 2: Classification of Pharmaceutical Information Systems

Types of PMIS, Typical components of a PMIS, Record- keeping documents, Data compilation/aggregation tools, Data-reporting forms, feedback reports.

Unit 3: Decision Making Process- Types and Models

Steps in designing or revising PMIS, implementation of a PMIS, processing data, presenting

information, Interpreting information and taking action.

Unit 4: Concepts of Information

Types of Information, concept/Roles/Advantages/Disadvantages, Types of telecommunications networks, concept/Methods/Need/Methods of Defence Networks and Website, Information Security and Cyber security in Pharmaceutical industry, Role and Importance of general technological knowledge in Pharma industry.

Unit 5: ERP- Enterprise Resource planning in Pharmaceutical Industry

Evolution of ERP, what is ERP? Reasons for the Growth of ERP, Scenario and Justification of ERP in India, Evaluation of ERP, Various Modules of ERP, Advantage of ERP, Future Directions of ERP, New markets, new channels, faster Implementation Methodologies, ERP and related Technologies; Business Process Reengineering (BPR), Management Information System (MIS), Executive Information System(EIS), Decision Support System (DSS), Supply Chain management (SCM).

Prescribed Book:

- 1. Introduction to Information Systems- James A O'brien.
- 2. Management Information Systems- Gorden B. Davis & Margretthe H. Olson.

- 1. Management Information Systems-Dharminder Kumar and Sangeeta Gupta.
- 2. Management Information Systems in Knowlwdge Economy- Joseph S. J. Mahapatra.
- 3. Fundamentals of Computers- Peter Norton.



BIOTECH AND BIOINFORMATICS MANAGEMENT SPECIALIZATION

COURSE CODE	MB303F
COURSE TITLE	PRINCIPLES OF IMMUNOLOGY
COURSE CREDITS	3

Course Description:

This course includes detailed description of the immune response made in humans to foreign antigens including microbial pathogens. A description of cells involved in the immune response either innate or acquired. Other topics covered will include the genetic basis of diversity of immune responses in mammals. Role of the Vaccines and importance of Vaccination.

Course Objectives:

- 1. To promote critical thinking among students.
- 2. To provide students with a foundation in immunological processes.
- 3. To provide students with knowledge on how the immune system works building on their previous knowledge from biochemistry, genetics, cell biology and microbiology.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303F.1	Remembering	Memorize the different components of mammalian immune system and their role along with T lymphocytes and B lymphocytes
303F.2	Understanding	Understand the mutation, transcription and antibodies in detail
303F.3	Applying	Use the antigen-antibody information to understand different commercial immuno techniques like ELISA
303F.4	Analysing	Differentiate between different types of vaccines and examine the importance of immunization
303F.5	Evaluating	Check the auto immune diseases, its mechanism and therapies available for the same

Course Outline:

Unit 1: Immune Response

An overview, components of mammalian immune system, molecular structure of Immunoglobulins or Antibodies, Humoral & Cellular immune responses, T lymphocytes & immune response (cytotoxic T-cell, helper T-cell, suppressor T-cells), T-cell receptors, genome rearrangements during B-lymphocyte differentiation, Antibody affinity maturation class switching, assembly of T-cell receptor genes by somatic recombination.

Unit 2: Regulation of Immunoglobulin Gene Expression

Clonal selection theory, all types & idiotypes, allelic exclusion, immunologic memory, heavy chain gene transcription, genetic basis of antibody diversity, hypotheses (germ line & somatic

mutation), antibody diversity, alternate pathways of transcript splicing, variable joining sites & somatic mutation, role of antibody (alone, in complement activation & with effector cells), monoclonal antibodies.

Unit 3: Major Histocompatibility Complexes

Class I & class II MHC antigens, antigen processing. **Immunity to infection** – Immunity to different organisms, pathogen defense strategies, avoidance of recognition, inactivation of hostimmune effector mechanisms. **Immuno-techniques** - Blood grouping, Antigen-Antibody reactions: agglutination, precipitation, Immuno-electrophoresis, Coomb's test, ELISA, RIA.

Unit 4: Vaccines and Vaccination

Adjuvants, cytokines, DNA vaccines, recombinant vaccines, bacterial

Vaccines, viral vaccines, vaccines to other infectious agents, tumor vaccines, principles of vaccination, passive & active immunization, immunization programs & role of WHO in immunization programs.

Unit 5: Auto-Immune Diseases

Autoimmunity & auto-immune diseases, factors contributing development of auto-immune diseases, mechanism of development, breakdown of self-tolerance, rejection of transplants, molecular mimicry, diagnosis & treatment of auto-immune diseases, replacement therapy, suppression of autoimmune processes, nature of auto-antigens, immunodeficiency, AIDS. Immune Response of Plants.

Prescribed Books:

- 1. Essentials of Immunology, Arya Publication, by S.K. Gupta.
- 2. Immunobiology, 6th edition by Janis Kuby.

- 1. Textbook of Microbiology & Immunology, Elsevier India, 2009 by Parija.
- 2. Basic Immunology: Functions and Disorders of the Immune System, 6e: SAE, by Abul K. Abbas Andrew H. Lichtman, Shiv Pillai.

COURSE CODE	MB304F
COURSE TITLE	COMPUTATIONAL BIOLOGY & BIO-INFORMATICS
COURSE CREDITS	3

This course is an introduction to computational biology emphasizing the fundamentals of nucleic acid and protein sequence and structural analysis; it also includes an introduction to the analysis of complex biological systems. Topics covered in the course include principles and methods used for sequence alignment, motif finding, structural modeling, structure prediction and network modeling, as well as currently emerging research areas.

Course Objectives:

- 1. Aims to equip students with basic computational and bioinformatics skill.
- 2. To acquire advanced computational and modelling skills required to address problems of life sciences for computational perspective.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304F.1	Remembering	Understand the genome sequencing, its experimental
3041.1	Remembering	approach and genome information resources
304F.2	Understanding	Understand protein sequencing, its structural importance
3041.2	Onderstanding	and protein information resources
304F.3	Applying	Use of different data bases in biological data analysis
304F.4	A 1 '	Compare different types of sequence alignment techniques
304F.4	Analysing	using BLAST and FASTA algorithm
304F.5	Evaluating	Evaluate the importance of structural data bases and
		protein data bank

Course Outline:

Unit 1:Introduction to Genomics

Information flow in biology, DNA sequence data, Experimental approach to genome sequence data, genome information resources.

Unit 2: Functional Proteomics

Protein sequence and structural data, protein information resources and secondary data bases.

Unit 3: Computational Genomics

Internet basics, biological data analysis and application, sequence data bases, NCBI model, file format.

Unit 4: Sequence Alignment & Data Base Search

Protein primary sequence analysis, DNA sequence analysis, pair wise sequence alignment, FASTA algorithm, BLAST, multiple sequence alignment, DATA base searching using BLAST and FASTA.

Unit 5:Structural Data Bases

Small molecules data bases, protein information resources, protein data bank.

Prescribed Books:

- 1. Fundamentals of Bioinformatics and Computational Biology, Methods and Exercises in MATLAB, by Singh, Gautam B.
- 2. Introduction to Bioinformatics Algorithms by Neil Jones and Pavel Pevzner.

- 1. Bioinformatics by David Mount (2nd edition).
- 2. Introduction to Bioinformatics: A Theoretical and Practical Approach, by: Stephen A. Krawetz, David D. Womble, May 2003, Publisher: Humana Press, May 2003.

COURSE CODE	MB305F
COURSE TITLE	INTELLECTUAL PROPERTY RIGHTS & TECHNOLOGY TRANSFER IN BIOTECHNOLOGY
COURSE CREDITS	3

Course involves basic concepts of Intellectual Properties, Intellectual property Rights, applications, advantages, Government rules and regulations for the same. Major issues concerned to the field of Biotechnology like Biosafety and GMO etc.

Course Objectives:

- 1. Develop fundamental understanding Intellectual properties and IPR in Biotechnology.
- 2. Understand the applications and advantages of IPR in biotech industry.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305F.1	Remembering	Understand the concept of Intellectual property and different types of it
305F.2	Understanding	Explain evolution of patent laws at Indian and International level
305F.3	Applying	Demonstrate different categories and classification of patents
305F.4	Analysing	Interpret duties and rights of patent holder and biosafety measures for plants
305F.5	Evaluating	Analyse different International regulatory bodies and regulations for permit of GMOs

Course Outline:

Unit1: Introduction to Intellectual Property Rights

Concept of IPR, Designs, Trademarks TM, Trade Secret (TS), Domain Names, Geographical Indications, Copyright.

Unit 2: History and Evolution of Patent Law

Evolution of patent Laws, History of Indian Patent System, International Conventions and Treaties, Patent Laws in other countries.

Unit 3: Classification of Patents

Classification of patents in India, Classification of patents by WIPO, Categories of Patent, Special Patents, Patenting Biological products, Classification of patents, Classification of patents in India, Classification of patents by WIPO, Categories of Patent, Special Patents, Patenting Biological products.

Unit 4: Patent Owner

Rights and Duties Ownership of patent, Rights of patent holder and co-owners, Duties of patent holder and co-owners, Transfer of patent Rights, Limitations of patent Rights, Restoration of

Patents, Infringement of patent Rights and Offences, Actions against Infringement: Remedies/Relief, Patent Agent.

Protection of plant varieties and Farmers' Right Acts, Methods of protection of plant and plant products, Essentialities of plant protection, Plant variety protection and Farmers' Right Act, UPOV convention (plant Varieties) 1961. **Introduction to biosafety:** Overview of biosafety, Risk assessment, Cartagena protocol on Biosafety, GMOs: Concerns and challenges transgenic technology, Gene flow, Future opportunities and challenges.

Unit 5: International Regulatory Bodies

National regulatory bodies, Biosafety of Genetically engineered products, Genetically engineered products and recombinant DNA technology, Risk assessment of RDT products, Regulating recombinant DNA technology, Permit for movement and import of GMOs, Web based information of biosafety on GMO, Biosafety database Good Laboratory biosafety practices Importance of good laboratory practices, General good laboratory practices.

Prescribed Books:

- 1. Singh K., Intellectual Property Rights on Biotechnology, BCIL, New Delhi.
- 2. IPR, Biosafety and Bioethics by Deepa Goel and Shomini Parashar, Pearson publisher.
- 3. Basics of Patenting published by GTU.

- 1. Biotechnology in the Welfare of Mankind Ali Khan.
- 2. Sasson A., Biotechnologies in developing countries present and future, UNESCO Publishers, 1993 Biotechnology and Genomics, P.K. Gupta, Rastogi Publications.
- 3. Ganguli Prabuddha "Geographical Indications--its evolving contours" accessible in http://iips.nmims.edu/files/2012/05/main_book.pdf (2009).
- 4. Inventing the Future: An introduction to Patents for small and medium sized Enterprises; WIPO publication No. 917. URL: www.wipo.int/ebookshop.

COURSE CODE	MB306F
COURSE TITLE	FOOD TECHNOLOGY AND FUNDAMENTALS OF PRODUCTION PLANNING
COURSE CREDITS	3

Biotechnology is a knowledge-intensive industry, it is expected that India will have a competitive advantage and will be able to make full use of this opportunity as has been the case with the IT industry. This course is beneficial to the students who want to make their carrier in biotechnologyindustry.

Course Objectives:

- 1. To familiarize the students with the fundamentals of production planning.
- 2. To gain knowledge of Fermentation process and various fermented products

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306F.1	Analyzing	Students will be able to ILLUSTRATE the fermentation
3001.1	Allaryzilig	process
		Students will be able to OUTLINE Fermenter Designing
306F.2	Applying	and get detailed information on commercial fermented
		products.
		Students will be able to DEMONSTRATE the
306F.3	Applying	understanding of quality control measures and policies in
		biotechnology and drug manufacturing.

Course Contents:

Unit 1: Biotechnology in Food Processing

Unit Operation in Food Processing, Quality Factors in processed Food, Food deterioration and its control, Rheology of Food products.

Unit 2: Design of Food Preservation Equipments

General engineering aspects and processing methods, types of equipments and their design: Refrigerator, freezer, dryer, calculation of pasteurization time, time and temperature calculation for HTST sterilization, Design principles of bioreactors, Procurement of material: Material for construction of bioreactors and selection criteria.

Unit 3: Molecular methods and Production

Methods and application of molecular cloning in foods Developmental technique for new plant varities.

Unit 4: Modification and Bioconversion of food raw materials

Bioconversion of whey, molasses and starch and other food waste for value addition.

Unit 5: Quality control management in Biotechnology, General introduction about drugs manufacturing process and policies, Standard operating procedures, Quality control and quality assurance.

Prescribed Books:

1. Process Equipment Design, M. V. Joshi. Mc MillanIndia.

- 2. Process Equipment Design. S. D. Dawande, Dennet and Company.
- 3. Process equipment design by L.E. Brownell and E. Young, John Wiley, New York, 1963.



COURSE CODE	MB307F
COURSE TITLE	ETHICS, BIOSAFETY AND HAZARD MANAGEMENT IN BIOTECHNOLOGY
COURSE CREDITS	3

From the promise of a world without hunger to the possibility to choosing our children's traits, genetic engineering is revolutionizing agriculture, industry, and medicine in the 21st century, transforming our food supply and changing the way we think about health and disease. This course examines biotechnology and genetic engineering in historical, social, political, and ethicalcontexts.

Course Objectives:

- 1. To gain familiarity with bioethical approaches and learn to apply them to the issues raised by biotech.
- 2. To understand what is meant by "The social construction of technology".
- 3. To make students learn about the legal, safety and public policy issues raised due to the rapid progress in Biotechnology and development of new products.
- 4. To understand the regulatory framework important for the product safety and benefit for the society.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		Students will be able to ELABORATE the basic issues of
307F.1	Understanding	Biosafety, Bioethics and IPR and implement in future
		policy making.
		Students will be able to DESCRIBE the regulatory
307F.2	Remembering	framework important for the product safety and benefit for
		the society.
307F.3	Analyzing	Students will be able to ANALYZE case history to discuss
3071.3	Allaryzing	and express their views.

Course Contents:

Unit 1: Biosafety

Introduction and Development of Biosafety Practices, Principles General lab requirements Definitions and Biosafety levels: 1, 2, 3, 4.

Unit 2: Summery Biological safety cabinets

Centrifuges, Shipment of biological specimens, Biological waste management, Decontamination, Biosafety manuals, Medical surveillance, Emergency response.

Unit 3: Bioethics

History and Introduction Ethics and genetic engineering Genetic Privacy Patent of genes Human races Trading Human Life Human Cloning Stem Cells Eugenics Biotechnology and Christian faith Human genome and religious considerations Case Studies Final Considerations.

Unit 4: Intellectual Property Rights

Introduction Types of Intellectual Property Rights Plant and Animal growers rights Patents Trade secretes, Copyrights, Trademarks IPR and plant genetic recourses.

Unit 5: Patenting

Patenting of biological materials International conventions and cooperation Current Issues Patents for higher animal and higher plants Patenting of transgenic organisms and isolated genes Patenting of genes and DNA sequences Indian scenario.

Prescribed Books:

1. Bioethics and Biosafety, 1/e- M K Sateesh- I.K. International Publication house Pvt.Ltd.

2. Biosafety and Bioethics Varsha Gupta, Manjistha Sengupta, Jaya Prakash, Baishnab Charan Tripathy- Springerpublication.

COURSE CODE	MB308F
COURSE TITLE	ENVIRONMENTAL BIOTECHNOLOGY AND ENVIRONMENT MANAGEMENT
COURSE CREDITS	3

It seeks to provide education and training, empower students with technical skill-set, create capacities and build career opportunities in three key domains of biotechnology namely: Research and development, Science education and Policy, regulations andmanagement.

Course Objectives:

- 1. To familiarize the students with the working of Biotechnology plant management in Biotechnology sector.
- 2. To advance education and research in Biotechnology and explore sustainable solutions for agriculture, environment and energy sectors.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308F.1	Understanding	Students will be able to UNDERSTAND the basic requirements in the Biotechnology Plant, fermentation process and some fermented products.
308F.2	Analyzing	Students will be able to COMPARE and choose the sustainable solutions for agriculture, environment and energy sectors.

Course Contents:

Unit 1: Environmental Pollution

Global warming Depletion of ozone layer, Types of Pollution Water pollution, Soil Pollution, Air Pollution, Noise Pollution Sources of pollution.

Unit 2: Air pollution and its control, Active trace gases in air Aerosols in air Control of air pollution through biotechnology.

Unit 3: Waste water management

Domestic and industrial wastewater, types, sources and effects of water pollutants, Waste water characteristics, Aerobic System Biological processes for domestic and industrial waste water treatments; Aerobic systems - activated sludge process, trickling filters, biological filters, rotating biological contractors (RBC), Fluidized bed reactor (FBR), expanded bed reactor, Inverse fluidized bed biofilm reactor (IFBBR) packed bed reactors air- sparged reactors. Anaerobic System Anaerobic biological treatment.

Unit 4: Microbiology of degradation of xenobiotics and Bioremediation

Xenobiotics in environment Decay behavior of xenobiotics, constraints and priorities of Bioremediation.

Unit 5: Industrial waste waters and Pollution Control

Governing bodies, Policies and Amendments, disposal standards; Treatment of industrial effluents: neutralization, proportioning, effluent sampling and characterization, treatment strategies and disposal standards for different industries: paper and pulp, sugar, distillery, textile, tannery.

- 1. Biotechnology:PlantHealthManagementHardcover—byNeetaSharma(Author), H. Singh.
- 2. Handbook of Environmental Biotechnology- 2010th Edition- by Lawrence K. Wang.
- 3. Plant Biotechnology and its Applications in Tissue Culture, Ashwani Kumar.



COURSE CODE	MB309F
COURSE TITLE	FUNDAMENTALS OF NANOTECHNOLOGY
COURSE CREDITS	3

This course is introducing some of the fundamental principles behind nanotechnology and nanomaterials, as well as applications of nanotechnology. The objective of the course is to familiarize the students with the tools and techniques in nanotechnology and nanomaterials. By the end of the course, students will understand the emerging nanotechnologies by providing interdisciplinary scientific knowledge.

Course Objectives:

- 1. To introduce students with basic concepts of nanotechnology.
- 2. To learn about exciting applications of nanotechnology at the leading edge of scientific research.
- 3. To familiarize the students with the tools and techniques in nanotechnology.
- 4. To gain knowledge in the field of nanobiotechnology and its application in industries.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309F.1	Remembering	Define nanotechnology and state its prospects
309F.2	Understanding	Explain different types of nanodevices and electronic devices
309F.3	Applying	Explain different types of biological machines in bio nanotechnology
309F.4	Analysing	Examine impact of nanotechnology on different aspects like energy, health, environment etc
309F.5	Evaluating	Weigh applications of nanotechnology in various fields

Course Outline:

Unit 1: Introduction to nanotech, Definition & Concept, Concept system for nanotech, history, Future prospects and Career opportunities of nanotechnology.

Unit 2: Introduction to nanodevices, Electronic devices- Ballistic transport, depletion layers, spintronics (magnetic devices) Ultrasensitive magnetic Sensors, Spin dependent transistors, photonic devices, Mechanical devices, Fluidic devices, Mixers and Reactors.

Unit 3: Introduction to bio nanotechnology, Concept & definition, Mechanism of biological machines -Biological motors, Microtubule, Assembly and Disassembly. Cost of control, DNA as construction material, Biosensors.

Unit 4: Impact of nanotechnology -Scientific Impact, Technical impact- information technology, energy, health, Commercial impact, environmental impact, impact on individual's psychology.

Unit 5: Applications of nanotechnology in Biotechnology, Nanotech in Modern animal Biotech, Nanotechnology in agriculture and food industry, Nanotechnology in cosmetics, Nanotechnology in tissue engineering, Nanotechnology applied in bioinformatics, Nanotechnology & information technology, environmental nanotechnology, Nanotechnology in Manufacturing, Renewable energy generation, drug delivery, Nanotechnology Health risk, Nanotechnology- Ethics,

Regulation of Nanotechnology.

Prescribed Books:

- 1. Introduction to Nanotechnology 1, Shipra Mital Gupta, Risal Singh.
- 2. Introduction to Nanoscience and Nanotechnology by Chattopadhyay K K.
- 3. Introduction to Nanotechnology by Poole C P and Owens F J, WILEY INDIA.
- 4. Textbook of Nanoscience and Nanotechnology by B S Murthy, Universities press.

- 1. Nanotechnology: Principles and Practices by Sulabha K Kulkarni
- 2. Introduction to Nanoscience and Nanotechnology by Gabor L Hornyak and H F Tibbals
- 3. David E. Reisner. 2009. Bio nanotechnology: Global Prospects. CRC Press.
- 4. Gabor L. Hornyak, John J. Moore, Tibbals HF., Joydeep Dutta. 2008. Fundamentals of Nanotechnology. CRC Press.
- 5. Jesus M. de la Fuente, V. Grazu. 2012. Nanobiotechnology: Inorganic nanoparticles Vs Organic nanoparticles. Elsevier.
- 6. Yubing Xie. 2012. The Nanobiotechnology Handbook. CRC Press.



COURSE CODE	MB303G
COURSE TITLE	CLOUD COMPUTING
COURSE CREDITS	3

This course provides a hands-on comprehensive study of Cloud concepts and capabilities across the various Cloud service models including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Business Process as a Service (BPaaS). Mainstream Cloud infrastructure services and related vendor solutions are also covered in detail. The course also covers the Cloud security model and associated challenges and delves into the implementation and support of High Performance Computing and Big Data support capabilities on the Cloud.

Course Objectives:

- 1. To learn various aspects such as services, infrastructure and addressing of security concern involved in Cloud Computing.
- 2. To understand the students an insight into the basics of cloud computing along with virtualization, cloud computing is one of the fastest growing domain from a while now. It will provide the students basic understanding about cloud and virtualization along with it how one can migrate over it.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DESCRIBE the major concepts Centralized and Distributed Computing, Overview of Distributed
303G.1	Remembering	Computing, Cluster computing, Grid computing. Technologies for Network-based systems- System models
		for Distributed and cloud computing- Software environments for distributed systems and clouds.
303G.2	Understanding	EXPLAIN Cloud Computing, Cloud issues and challenges, Properties, Service models, Deployment models. Cloud resources: Network and API, Virtual and Physical computational resources, Data-storage. Virtualization concepts, Types of Virtualizations- Introduction to Various Hypervisors, High Availability (HA)/Disaster Recovery
		(DR) using Virtualization, Moving VMs.
303G.3	Applying	INTERPRET Infrastructure as a Service (IaaS) – Resource Virtualization: Server, Storage, Network, Case studies. Platform as a Service, Cloud platform & Management:
		Computation, Storage, Case studies. Software as a Service, Web services, Web 2.0, Web OS.

303G.4	Analysing	CONSTRUCT Cloud Programming and Software
		Environments, Parallel and Distributed Programming
		paradigms, Current technologies, Programming support of
		App Engines, Emerging Cloud software Environment.
		FORMULATE Cloud Access, authentication, authorization
303G.5	Evaluating	and accounting, Cloud Provenance and meta-data, Cloud
		Reliability and fault-tolerance, Cloud Security, privacy,
		policy and compliance, Cloud federation, interoperability
		and standards.

Course Outline:

Unit 1: Introduction

History of Centralized and Distributed Computing – Overview of Distributed Computing, Cluster computing, Grid computing. Technologies for Network-based systems. System models for Distributed and cloud computing- Software environments for distributed systems and clouds.

Unit 2: Virtualization

Introduction to Cloud Computing- Cloud issues and challenges – Properties – Characteristics – Service models, Deployment models. Cloud resources; Network and API – Virtual and Physical computational resources – Data-storage. Virtualization concepts – Types of Virtualization-Introduction to Various Hypervisors – High Availability (HA)/Disaster Recovery (DR) using Virtualization, Moving VMs.

Unit 3: Service Models

Infrastructure as a Service (IaaS) – Resource Virtualization: Server, Storage, Network – Case studies. Platform as a Service (PaaS) – Cloud platform & Management: Computation, Storage – Case studies. Software as a Service (SaaS) – Web services – Web 2.0 – Web OS – Case studies – Anything as a service (XaaS) – Micro services.

Unit 4: Cloud Programming and Software Environments

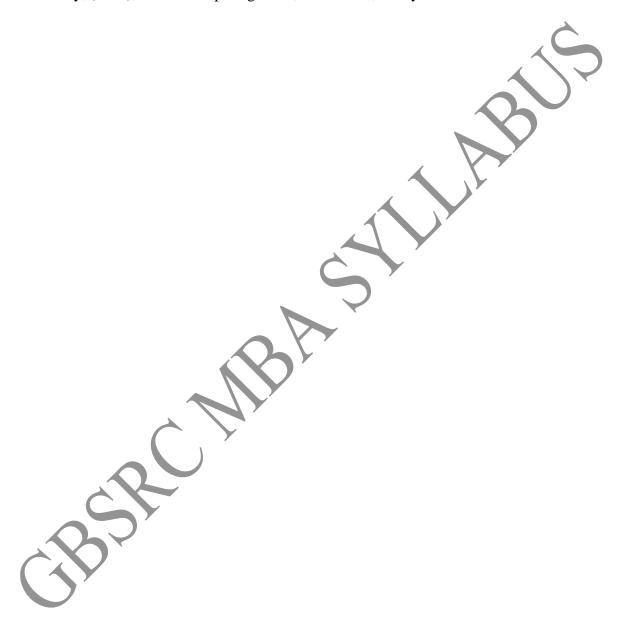
Cloud Programming and Software Environments – Parallel and Distributed Programming paradigms – Current technologies – Programming support of App Engines – Emerging Cloud software Environment.

Unit 5: Cloud Access

Authentication, authorization and accounting – Cloud Provenance and meta-data – Cloud Reliability and fault-tolerance – Cloud Security, privacy, policy and compliance- Cloud federation, interoperability and standards.

- 1. Anthony T Velte, Toby J Velte, Robert Elsenpeter, (2009), Cloud Computing a practical approach, 1st Edition, Tata McGraw –HILL.
- 2. Michael Miller, (2009), Cloud Computing Web Based application, 1st Edition, Pearson Education.
- 3. Judith Hurwitz, Bloor Robin, Marcia Kaufman & Fern Halper. (2009), Cloud Computing for Dummies.1st Edition, Wiley.

- 1. David S. Linthicum, (2009), Cloud Computing and SOA Convergence in Your Enterprise, 1st Edition, Addison Wesley.
- 2. Dan Kusnetzky, (2011). Virtualization: A Manager's Guide, 1st Edition, O'Reilly Barrie Sosinsky, (2011), Cloud Computing Bible, 1st Edition, Wiley India PvtLtd



COURSE CODE	MB304G
COURSE TITLE	SOFTWARE QUALITY MANAGEMENT
COURSE CREDITS	3

The aim and objective of this course is to teach students the concepts and skills needed for SQA and its managment. Software quality assurance (SQA or simply QA) is viewed as an activity that runs through the entire development process. It encompasses activities and related techniques to ensure the implementation of appropriate functionality that satisfy the requirements/needs of its targeted client/users for the intended software system, product, or service as the case may be, both correctly and efficiently.

Course Objectives:

- 1. Understand the basic tenets of software quality and quality factors.
- 2. Understand general concepts about quality, quality assurance (QA), and software quality management.
- 3. Choose appropriate testing strategies.
- 4. Understand how to detect, classify, prevent and remove defects.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304G.1	Remembering	DESCRIBE the Fundamentals of Software Quality Assurance: The Role of SQA, SQA Plan, SQA considerations, SQA people, Quality Management, Software Configuration Management.
304G.2	Understanding	EXPLAIN Managing Software Organizations – Managing Software Quality - Defect Prevention –Software Quality Assurance Management
304G.3	Applying	INTERPRET Software Quality – Total Quality Management (TQM) – Quality Metrics – Software Quality Metrics Analysis Software Quality Program -Software Quality Program Concepts – Establishment of a Software Quality Program –Software Quality Assurance Planning – An Overview – Purpose & Scope.
304G.4	Analysing	CONSTRUCT Software Standards—ISO 9000 Quality System Standards - Capability Maturity Model and the Role of SQA in Software Development Maturity — SEI CMM Level 5 — Comparison of ISO 9000 Model with SEI's CMM
304G.5	Evaluating	FORMULATE PSP – TSP – CMMI – OO Methodology – Clean Room Software Engineering – Defect Injection and Prevention.

Course Outline:

Unit 1 Fundamentals of Software Quality Assurance

The Role of SQA, SQA Plan, SQA considerations, SQA people, Quality Management, Software Configuration Management.

Unit 2 Managing Software Quality

Managing Software Organizations – Managing Software Quality - Defect Prevention –Software Quality Assurance Management.

Unit 3 Software Quality Assurance Metrics

Software Quality – Total Quality Management (TQM) – Quality Metrics – Software Quality Metrics – Software Quality Program –Software Quality Program Concepts – Establishment of a Software Quality Program –Software Quality Assurance Planning – An Overview – Purpose & Scope.

Unit 4 Software Quality Assurance Standardization

Software Standards–ISO 9000 Quality System Standards - Capability Maturity Model and the Role of SQA in Software Development Maturity – SEI CMM Level 5 – Comparison of ISO 9000 Model with SEI's CMM.

Unit 5 Future Trends

PSP – TSP – CMMI – OO Methodology – Clean Room Software, Engineering – Defect Injection and Prevention.

Prescribed Books:

- 1. Gordon G Schulmeyer, (2007). Handbook of Software Quality Assurance, 4th Edition, ArtechHouse.
- 2. Nina S Godbole, (2004).Software Quality Assurance: Principles and Practice, 1st Edition, Alpha Science International Ltd.

- 1. Daniel Galin, (2008). Software Quality Assurance: From Theory to Implementation, 1st Edition, Pearson Education.
- 2. Jeff Tian, (2005). Software Quality Engineering: Testing, Quality Assurance, and Quantifiable Improvement, Wiley-Blackwell.

COURSE CODE	MB305G
COURSE TITLE	E BUSINESS AND BUSINESS INTELLIGENCE
COURSE CREDITS	3

The course gives an overview of how business intelligence technologies can support decision making across any number of business sectors. These technologies have had a profound impact on corporate strategy, performance, and competitiveness and broadly encompass decision support systems, business intelligence systems, and visual analytics.

Course Objectives:

- 1. To appreciate e-Business as a significant business segment of the future.
- 2. To develop capacity to initiate/lead an e-business venture/ business segment:
- 3. To understand principles of BI and Analytics at conceptual level.
- 4. To develop skills to design BI and Analytics projects.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305G.1	Remembering	REMEMBER background and status of E-Business
305G.2	Understanding	UNDERSTAND the concept of E-Business infrastructure
305G.3	Understanding	UNDERSTAND the legal issues & strategy in E-Business
305G.4	Analysing	ANALYZE the need of business intelligence & role of mathematical models
305G.5	Appling	APPLY the business intelligence in different domains

Course Outline:

Unit 1:Introduction, Background and Current Status, Case studies, e-Business Architecture - Enabling Technologies- Information distribution and messaging Technologies- Information Publishing Technology.

Unit 2: e-Business Infrastructure - e-Business Design, Capacity Planning, Performance Modeling- Mobile commerce- framework and models eBusiness Models - e-Marketing, e-CRM, Internet advertising - e-Business. Security/Payment Services - e-SCM, e-Procurement - Portals-Search Engines - Online Community building.

Unit 3:e-Business Strategy into Action, Challenges, Legal Issues - Business Plan Presentation and Demonstration "Launching e-Business: From Idea to Realization".

Unit 4:Business Intelligence: definition, concept and need for Business Intelligence, Case studies BI Basics: Data, information and knowledge, Role of Mathematical models.

Unit 5:BI Applications in different domains- CRM, HR, Production.

- 1. Business Intelligence Success Factors Tools for aligning your business in the global economy by Olivia Parr Rud, John Wiley and sons, 2009.
- 2. The Profit impact of Business Intelligence by Steve Williams and Nancy Williams, Morgan Kauffman Publishers/ Elsevier, 2007.
- 3. Business Intelligence: Practices, Technologies, and Management- Rajiv Sabherwal, Irma Becerra-Fernandez.
- 4. Knowledge Management by Jawadekar, McGraw-Hill.

- 1. E-Government, E-Business, and National Economic Performance Journal: Communications of AIS, Shirish Shrivastava.
- 2. The Great Mind Challenge for Business, Vol. 1 and 2, IBM (I) Pvt. Ltd, Bangalore.



COURSE CODE	MB306G
COURSE TITLE	E-COMMERCE AND SOCIAL MEDIA MARKETING
COURSE CREDITS	3

E-commerce has moved into the mainstream life that have the market brands and financial muscle required for the long term deployment of e-commerce technologies and methods. As the growth of Internet and the popularity of social media among consumers, firms can now communicate with consumers in non-traditional fashion.

Course Objectives:

- 1. To comprehend the marketing strategy applications enabled by the Internet technology.
- 2. To assess the influence of new media and social networks on consumer behavior and marketing response.
- 3. To devlop ability to compare the pros and cons of different online platforms such as blogs, online reviews, or online discussion forums etc.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306G.1	Understanding	Students will be able to UNDERSTAND the various entrepreneurial ventures in e-Commerce and m-Commerce.
306G.2	Creating	Students will be able to CREATE roadmap for any company in terms of Social Media marketing services.
306G.3	Evaluating	Students will be able to EVALUATE and prepare digital marketing strategies using latest trends.
306G.4	Applying	Students will be able to ORGANISE ROI driven digital campaigns across different channels.

Course Contents:

Unit 1: Introduction to E-commerce, Models and Concepts

What is e-commerce?, Difference between e-commerce ande-business, Features of e-commercetechnology. Types ofe-commerce, Types of business models, B2C Business ModelsE.

Unit 2: E-Commerce Infrastructure and Marketing

The Internettoday, The Internet andweb, The Internet Audience and ConsumerBehaviour, Online Consumer behaviormodel, Shoppers: Browsers v/sBuyers, The Revolution in internet marketingtechnologies, B2B and B2C e-commerce marketing and brandingstrategies, Establishing the customerrelationship, Customerretention, Net Pricingstrategies, E-Commerce and marketingcommunications.

Unit 3: Ethical, Social and Political Issues in E-Commerce

Moral dimensions of an internetsociety, Responsibility, Accountability and Liability, Intellectual Property Rights, Copyright, Patents, E commerce Governance, Public safety and welfare.

Unit 4: Online Retail Services and Supply Chain Management

The online retailsector, Online servicesector, Advantages andDisadvantages, B2B e commerceevolution, Trends in supply chainmanagement.

Unit 5: Social Media Marketing

Strategic planning with socialmedia, Social consumers in digitalcommunities, The four zones of socialmedia, Measuring the impact of socialmedia- DigitalMarketing and Viral (Content)Marketing.

- 1. Kenneth Laudon and Carol Traver, E-Commerce: Business. Technology Society; 4th edition, Pearson education.
- 2. Chaffey, Dave ; E-Business and E-Commerce Management, 3rd edition, Pearson Education, England.
- 3. Tuten, Tracy L. and Michael R. Solomon, (2013), Social Media Marketing, Pearson Education, England.

COURSE CODE	MB307G
COURSE TITLE	DATABASE MANAGEMENT SYSTEM
COURSE CREDITS	3

Investigates how database management system techniques are used to design, develop, implement and maintain modern database applications inorganizations.

Course Objectives:

- 1. To learn about the basic concepts of Database, DBMS.
- 2. To learn about types of Databases characteristics and properties.
- 3. To understand mechanism fororganizing, structuring and storing data.
- 4. To understand objectives of a data base management system are to facilitate the creation of datastructures and relieve the programmer of the problems of setting up complicated files.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307G.1	Understanding	Students will be able to develop basic
		UNDERSTANDING of Data Base Management System.
307G.2	Remembering	Students will be able to DEFINE functions & Objectives in
		Data Base Management System (DBMS)
307G.3	Understanding	Students will be able to CLASSIFY Data Models &
		Structure and infer the merits & demerits of DBMS.

Course Contents:

Unit 1: Introduction: History: Advantages and limitations of RDBMS; Users of RDBMS, Software Modules in RDBMS; Architecture of RDBMS.

Unit 2: Modeling Techniques: Different Types of Models, Introduction to ERD.

Unit 3: Hierarchical Database, Data Mining for Business Decision Relational Database Introduction; Codd's Rules; Concept of Domain, Tuple, Cardinality; Comparison between HDB-NDB-RDB.

Unit 4: Normalization Advantages and disadvantages of Normalization; 1NF-2NF-3NF- rules with examples; Anomalies.

SQL commands. Basic Structure, Set Operations, Aggregate Functions, NullValues, Nested Sub queries, Views, Complex Queries, Modification of the Database, Joined Relations, Data-Definition Language, Embedded SQL, Dynamic SQL, Exercises.

Unit 5: Introduction to object oriented database Concept, Object binding in Oracle - Class, Attribute, Methods, Object type, Definition, Declaring and initializing, Methods, Alter and Drop type.

- 1. DATABASE System Concepts, Silberschatz, Korth, Sudarshan.
- 2. SQL by ScottUrman.

COURSE CODE	MB308G
COURSE TITLE	SUPPLY CHAIN MANAGEMENT INFORMATION SYSTEMS
COURSE CREDITS	3

This course studies the advanced design of the SCM operations using e-business connectivity and emerging information systems for visibility, event management and optimization from source of raw materials to the ultimate consumer of products andservices.

The major SCM processes of procurement, production, logistics, after-sales - service, and order commitment must be integrated and linked with customer relationship management (CRM) processes to create customer value at the lowest total system cost to create economic value added(EVA).

The emergence of global competition is creating a need for instant order commitment, rapid delivery, and mass customization of products and services, which is well beyond the capability of most of today's SCM operations. To meet future these future requirements, SCM operations must increase its competence through the internal integration and external collaboration of processes, organizations and newtechnologies.

Course Objectives:

- 1. To introduce process and functions of supply chain management.
- 2. To appreciate the design and network in supply chain management.
- 3. To understand the role of coordination in supply chain management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308G.1	Understanding	Students will be able to UNDERSTAND ERP and Role of
3080.1	Onderstanding	ICT in supply chain Management
308G.2	Analyzing	Students will be able to ANALYSE the IoT and various
3060.2	Allaryzing	systems attached with SCM.
308G.3	Amalyumaa	Students will be able to DIFFERENTIATE the
3000.3	Analyzing	functionality of various IT systems associated with SCM.

Course Contents:

Unit 1: Supply chain Information Systems: Supply chain Processes, Advanced Planning Sysems (APSs), ERP, Development of ERP and SCM: Role of ICT in supply chain Management.

Unit 2: Supply chain management Software Options, Business Process Reengineering in Supply Chains: Implementation of ICT to improve ISCM (Internal Supply Chain Management).

Unit 3: System Selection: ERP System Selection methodology.

Unit 4: Supply Chain Software Installation Project management: Benefits of ICT implementation in Supplychain.

Unit 5: Challenges in CRM (Customer Relationship Management) and SRM (Supplier Relationship Management).

Prescribed Books:

1. Introduction to e-Supply Chain Management by David Ross (St. Lucie Press, 2003) ISBN

- 1- 5444-324-0.
- 2. Supply Chain and Logistics by Bauer, Porrier, Lapide and Bermudez (CLM Press, 2001) ISBN 0-9658653-5-5.
- 3. Innovations in Supply Chain Management for Information Systems: Novel Approaches (Premier Reference Source) 1st Edition by John Wang.



COURSE CODE	MB309G
COURSE TITLE	SOFTWARE PROJECT MANAGEMENT
COURSE CREDITS	3

In depth knowledge is required while developing the software. Basic principles of project management along with framework and process models will help IT professionals to estimate the risk involved in different projects and give them the right directions to complete project efficiently. Important concepts like project reporting structure, project progress and tracking mechanisms using project management principles is core requirement for IT professionals and gaining adequate knowledge of it will help them to become successful in their careers.

Course Objectives:

- 1. To know the Software Project Planning and Evaluation techniques.
- 2. To understand software development life cycle (SDLC).
- 3. To become skilled at activity planning and risk management principles.
- 4. To supervise and Lead software projects and control software deliverables efficiently.
- 5. To understand the importance and issues of people management in Software Project Planning.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309G.1	Remembering	DESCRIBE the fundamental concept of software project management
309G.2	Understanding	EXPLAIN the project life cycle & various process model and cost estimation model
309G.3	Applying	APPLICATION of tools and techniques of cost estimation
309G.1	Analysing	ANALYZE of software configuration management & contract management.
309G.2	Creating	DISCUSS & propose the various models of project management for software business solution.

Course Outline:

Unit 1: Project Evaluation And Project Planning

Importance of Software Project Management – Activities – Methodologies – Categorization of Software Projects – Setting objectives – Management Principles – Management Control – Project portfolio Management – Cost-benefit evaluation technology – Risk evaluation – Strategic program Management – Stepwise Project Planning.

Unit 2: Project Life Cycle And Effort Estimation

Software process and Process Models – Choice of Process models – Rapid Application development – Agile methods – Dynamic System Development Method – Extreme Programming– Managing interactive processes – Basics of Software estimation – Effort and Cost estimation techniques – COSMIC Full function points – COCOMO II – a Parametric Productivity Model.

Unit 3: Activity Planning And Risk Management

Objectives of Activity planning – Project schedules – Activities – Sequencing and scheduling – Network Planning models – Formulating Network Model – Forward Pass & Backward Pass techniques – Critical path (CRM) method – Risk identification – Assessment – Risk Planning – Risk Management – PERT technique – Monte Carlo simulation – Resource Allocation – Creation of critical paths – Cost schedules.

Unit 4: Project Management and Control

Framework for Management and control – Collection of data – Visualizing progress – Cost monitoring – Earned Value Analysis – Prioritizing Monitoring – Project tracking – Change control – Software Configuration Management – Managing contracts – Contract Management.

Unit 5: Staffing In Software Projects

Managing people – Organizational behavior – Best methods of staff selection – Motivation – The Oldham – Hackman job characteristic model – Stress – Health and Safety – Ethical and Professional concerns – Working in teams – Decision making – Organizational structures – Dispersed and Virtual teams – Communications genres – Communication plans – Leadership.

Prescribed Books:

Bob Hughes, Mike Cottrell and Rajib Mall: Software Project Management – Fifth Edition, Tata McGraw Hill, New Delhi, 2012.

- 1. Robert K. Wysocki —Effective Software Project Management Wiley Publication, 2011.
- 2. Walker Royce: —Software Project Management-Addison-Wesley, 1998.
- 3. Gopalaswamy Ramesh, —Managing Global Software Projects McGraw Hill Education (India), Fourteenth Reprint 2013.



INTERNATIONAL BUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	MB303H
COURSE TITLE	INTERNATIONAL BUSINESS ENVIRONMENT & TRADE INSTITUTIONS
COURSE CREDITS	3

Course Description:

The course examines the structure and features of the international markets, how organisations engage with these markets, and how they respond to its complexities. Students are introduced to useful theoretical and analytical frameworks that are crucial to understanding the opportunities and risks derived from the political, economic, social, technological and institutional environment of countries.

The course also reviews aspects of global institutions, such as the World Trade Organization (WTO) and International Monetary Fund (IMF), which set global rules that profoundly affect business strategy and human welfare.

Course Objectives:

- 1. To Remember, Recall and Describe the key concepts of international Business Environment.
- 2. To Understand the relevance of Multinational Corporations (MNCs) in global trade.
- 3. To Apply and Demonstrate the significance of FDI and FPI in respect of developing economy.
- 4. To Analyze the issues related to Labor, Environmental and Global Value chain.
- 5. To Evaluate, Formulate and discuss the case related to various Agreements under WTO and contemporary global business environment.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303H.1	Remembering	DESCRIBE the key concepts of International Business
30311.1		Environment and Trade Institutions
303H.2	Understanding	SUMMERIZE the relevance of Multinational Corporations
30311.2	Onderstanding	(MNCs) in global trade
303H.3	Applying	RELATE the significance of FDI, BOP and BOT in respect
30311.3	Applying	of developing economy
303H.4	Analysing	DEVISE the cases related to various Agreements under
		WTO and contemporary global business environment.
303H.5	Evaluating	PLAN the awareness about Emerging Issues in
30311.3		International Business Environment

Course outline:

Unit 1: Introduction to International Business

Importance, nature and scope of International business, modes of entry into International

Business, internationalization process, Globalization- Meaning, Implications, Globalization as a driver of International Business. The Multinational Corporations (MNCs) - evolution, features and dynamics of the Global Enterprises, Consequences of Economic Globalization, Brexit, Reverse globalization.

Unit 2: International Business Environment

Political Economy of International Business, Economic and Political Systems, Legal Environment, Cultural Environment, Ethics and CSR in International Business, Introduction to Basic Concept of IFRS.

Unit 3: International Financial Environment

Foreign Investments - Pattern, Structure and effects. Theories of Foreign Direct Investment, Traditional and Modern theories of FDI, Modes of FDI - Greenfield, Brownfield Investments, Mergers and Acquisitions, Motives of FDI, FDI contrasted with FPI. Basics of Forex Market.

Unit 4: International Economic Institutions and Agreements

WTO, IMF, World Bank, UNCTAD, Tariff and Non-tariff Barriers, Balance of Payment Account: Concept and significance of balance of payments, Current and capital account components.

Unit 5: Emerging Issues in International Business Environment

Growing concern for ecology, Digitalization, Outsourcing and Global Value chains. Labor and other Environmental Issues, Impact of Pandemic COVID-19 on international trade.

Prescribed Books:

- 1. Global Business Management by Adhikary, Manab, Macmillan Publishers, New Delhi.
- 2. International Business Environment by Black and Sundaram, Prentice Hall of India, New Delhi 3. Economic Environment of Business by Gosh, Biswanath, South Asia Book, New Delhi.
- 4. International Business by Aswathappa Tata Mc Graw Hill publications, New Delhi.
- 5. International Business by P. Subha Rao

- 1. Going International Response Strategies for Indian Sector by Bhattacharya.B, Wheeler Publishing Co, New Delhi.
- 2. International Economies by D.N. Krithani.
- 3. International Business by Roger Bennett.
- 4. Business Environment by C.B. Gupta.
- 5. International Business by Francis Cherunillam.

COURSE CODE	MB304H
COURSE TITLE	INTERNATIONAL BUSINESS ECONOMICS
COURSE CREDITS	3

Understand economic dimensions of foreign trade. Explain economic aspects of foreign trade in particular items. Analyse economic consequences of foreign trade policies.

Course Objectives:

- 1. To Understand Global Economic Institution and their role and Impact of global economy on industry/enterprise.
- 2. To Devise international business economic strategies.
- 3. To Design international business economic programs.
- 4. To develop positive attitude towards international business economics.
- 5. To inculcate attitude of learning and understanding international business economics and markets.
- 6. To enable you to act with confidence as skilled economists in roles such as management consultancy or in a general management role.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304H.1	Remembering	UNDERSTAND the major theories, concepts, & methods
30411.1	Kemembering	in the field of International Trade
304H.2	Understanding	UNDERSTAND the implications of world trade policies &
30411.2	Onderstanding	WTO activities.
304H.3	Applying	APPLY the Fiscal & Monetary policies in various
30411.3	Apprying	International Crisis.
304H.4	Analysing	ANALYSE the role of women entrepreneurs for women
30411.4	Analysing	empowerment in international business economics
304H.5	Evaluating	APPLY the approaches to reorient international banking to
304П.3	Evaluating	achieve economic goals.

Course Contents:

Unit 1: Overview of International Trade & Theories

Meaning of International Trade, theories of international trade- Ricardo and Comparative advantage, (International Trade Theories- Classical theory by Ricardo, Endogenous growth model by Solow-Swan) Heckscher Ohlin model of Factor endowments.

Unit 2: Trade Policies

Unilateral and multilateral trade policies, Tariffs in competitive markets, WTO tariff policy, Quota, Tariff and quota in monopolistic markets, Dumping and Antidumping Duty under the WTO, Subsidies and Countervailing duties under the WTO, Export taxes, Export subsidies, Economic Integration - Custom Unions and Free Trade Areas - Major Regional Trade

Agreements.

Unit 3: Balance of Payment, Macroeconomic Concepts & International Crises

Surplus & deficit Balance of Payment, Current and capital account of Balance of payment, Instruments of Fiscal Policy, Instruments of Monetary Policy, Objectives of both policies and implications on Inflation, Concept of Inflation with Types. Understanding the recent few crises, The Euro Crisis/ crisis in Venezuela, Asian Crises 1997, Financial Crises 2007-08, Russian Financial Crises 2014, Global Pandemic Crises 2020.

Unit 4: International Banking

Reserves, Debt and Risk, Nature of International Reserves, Demand for International Reserves, Supply of International Reserves, Gold Exchange Standard, Special Drawing Rights, International Lending Risk, The Problem of International Debt, Financial Crisis and the International Monetary Fund, Eurocurrency Market.

Unit 5: Women Empowerment in the World Economy: Women's empowerment, women's rights and gender equality, empowering women in economy, initiatives by governments in different countries, Women's economic equality, women employment & business opportunities, case studies on women entrepreneurs.

Prescribed Books:

- 1. International Economics Theory and Policy by Paul Krugman, Maurice Obstfeld, Pearson Education
- 2. International Economics by Robert Carbaugh, Thomson South Western
- 3. International Business by John Daniels, Lee Radebaugh, Daniel Sullivan and Prashant Salwan, Pearson
- 4. International Economics by Thomas Pugel, McGraw-Hill-Irwin

- 1. The World is flat by Friedman Thomas.
- 2. International Economics by Edward Leamer, editor.
- 3. Jagdish N. Bhagwati, Arvind Panagariya, and T. N. Srinivasan, Lectures on International Trade.
- 4. Rethinking International Trade by Paul R. Krugman.

COURSE CODE	MB305H
COURSE TITLE	EMERGING TRENDS IN INTERNATIONAL BUSINESS
COURSE CREDITS	3

As the economy grows slowly, our business may have to look at selling internationally to remain profitable. Before examining foreign markets, we have to be aware of the major trends in international business so we can take advantage of those that might favor our company. International markets are evolving rapidly, and we can take advantage of the changing environment to create a niche for our business.

Course Objectives:

- 1. To understand Global Political, Economic, and Cultural Environment.
- 2. To know impact of trends in international markets iii. Know various terminology used by industry.
- 3. To devise international business strategies.
- 4. To develop positive attitude towards understanding trends in international marketing.
- 5. To inculcate attitude of learning and understanding of international marketing environment and markets before taking international marketing decisions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305H.1	Remembering	UNDERSTAND the major socio-economic trends in the field of international business.
305H.2	Understanding	UNDERSTAND the implications of political trends & political integrations on the international business.
305H.3	Applying	APPLY the Theories, Models, Principles and Frameworks of international business.
305H.4	Analysing	ANALYSE the role of technological trends in international business at large
305H.5	Evaluating	FORMULATE approaches to reorient & manage legal trends in the goals of international business.

Course Content:

Unit 1: Socio – Economic Trends

Growing emerging markets, Slower growth, Liberalization, Trade barriers, Demographic changes.

Unit 2: Political Trends

Political integration fragmentation, Growing nationalism, Terrorism, Growth of identity politics.

Unit 3: Technological Trends

Industrial revolution 4.0, AI, VR, Machine learning etc., Technology development in other areas

- 3 D printing, bio-technology etc.

Unit 4: Legal Trends

Harmonization of laws, Trade laws, Intellectual property laws etc.

Unit 5: Ecological Issues and Trends

Climate change, Sustainable development, other ecological issues.

Prescribed Books:

- 1. International Marketing, 17 th Edition by Philip R. Cateora, John L. Graham, Prashant Salwan Tata McGraw Hill.
- 2. International Marketing Management: An Indian Perspective, 24 th Edition by Varshney, Bhattacharya S Chand.
- 3. Global Marketing Management, 8 th Edition by Warren Keegan.

Suggested Reading:

1. International Marketing: Analysis And Strategy, 4 th Edition by Onkvisit, S. & Shaw, J.J. Prentice- Hall of India Private Limited/ New Delhi.

COURSE CODE	МВ306Н
COURSE TITLE	INTERNATIONAL TRADE, WTO AND TRADE POLICY ISSUES
COURSE CREDITS	3

The purpose of the trade policy courses is to ensure that participants are thoroughly exposed to all WTO-related issues, and develop practical skills as well as an extensive network of contacts. They also serve as a general introduction for those who may become specialists at a laterstage.

Course Objectives:

- 1. To develop a good understanding of all aspects of the WTO, including the Agreements.
- 2. To improve analytical and negotiating skills.
- 3. To learn to use effectively the relevant information and documentation on trade-related issues.
- 4. To strengthen capacity to work in teams and in an international environment.
- 5. To establish and/or strengthen a network of contacts with each other and the trainers/experts.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306H.1	Applying	Students will be able to IMPROVE analytical and negotiating skills (improvement of skills).
306H.2	Applying	Students will be able to STRENGTHEN capacity to work in teams and in an international environment (team work).
306Н.3	Understanding	Students will be able to demonstrate UNDERSTANDING of all aspects of the WTO, including the Agreements (transfer of knowledge).
306Н.4	Applying	Students will be able to learn to USE effectively the relevant information and documentation on trade-related issues (autonomy).

Course Contents:

Unit 1: International Business Environment

Globalization – Forces, Meaning, dimensions and stages in Globalization – Introduction to theories of International Trade by Adam Smith, Ricardo and Ohlin and Heckler – Trading Environment of International Trade – Tariff and Non- tariff Barriers – Trade Blocks – Rise of new economies like Japan, South East Asia and China as compared to India.

Unit 2: Bilateral and Multilateral Trade Laws

General Agreement on Trade and Tariffs, (GATT), World Trade Organization – IPR, TRIPS, TRIMS, GATS – Ministerial Conferences.

Unit 3: EXPORT – IMPORT POLICY 2002-2007

Procedures and Documentation, GSP Rules of Origin, ECGC, Exim Bank / Lines of Credit. Documents prescribed by some importing countries, Trade Fair Authority Exhibitions / International Exhibition / FIEO/ ITPO L/C, B/L etc. Costing, QBAL/ VBAL, DEPB.

Unit 4: Selected Trade Developments and Issues

Unit 5: Case Studies: Cases on theories of International Trade Cases on WTO, Cases on

International Marketing.

- 1. International Business Environment Sundaram and Black
- 2. International Business Environment Bhalla and Raju
- 3. International Financial Management –P.G.Apte
- 4. International Business FrancisCherulinam
- 5. Import Management in a developing economy
- 6. Import ProcurementPlanning
 - a. Registration of factories with concerned authorities DGTD, SSE, in relation to import of CapitalGoods
 - b. Project Import/ EPCG
 - c. Identification, Selection and Evaluation of Suppliers
 - d. Purchase Contract, Terms of Delivery and Payment.

COURSE CODE	MB307H
COURSE TITLE	INTELLECTUAL PROPERTY RIGHTS
COURSE CREDITS	3

The course is tailored to meet industry requirements as well as the needs of aspiring professionals. It includes up-to-date education in US, European and Indian Patent and IP laws and procedures and is designed and delivered by outstanding professionals with rich teaching, research, industry and consulting experience. The course is designed with a view to create IPR consciousness; and familiarize the studentss about the documentation and administrative procedures relating to IPR in India.

Course Objectives:

- 1. To encompass all relevant IP legislations in Indiawith a view to understandand adjustwithchangingneeds of the society becausecreativeworkisuseful to society and lawrelating to innovation/creativity.
- 2. To disseminate information on national and international IPR issues.
- 3. To introduce necessity and importance of IPR.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		Students will be able to UNDERSTAND the creations of
307H.1	Understanding	the human brain as IP which required to be understood and
		protected
		Students will be able to RELATE all relevant IP
307H.2	Applying	legislations in India with view to understand and adjust
		with changing needs of the society because creative work is
		useful to society and law relating to innovation/creativity

Course Contents:

Unit 1: Introduction of Intellectual Property Rights

Meaning, History, Concepts and Types, International Treaties and Conventions for Protection of IPs, Role of Intellectual Property in Growth, Development, Various types of Intellectual Property Rights: Trademarks Basic, Copyright Basics, Trade Secrets, Geographical Indications.

Unit 2: Introduction of WTO in intellectual Property (TRIPS)

Intellectual Property: protection and enforcement, Origins: into the rule-based trade system, Basic principles, National treatment, MFN, and balanced Protection.

Unit 3: Economic Concepts relevant to intellectual Property Rights

Trade secrete law, Protection and Maintenance of IP, Trademark: Statutes, Filing Procedure, Copyright: Statutes, Filing Procedure, Trade secrets: Protection, Patent: Statutes, Filing Procedure.

Unit 4: Registration of IPR in India

Guidelines for IPR, Registration process of IPR, Specification Drafting, Patent Prosecution.

Unit 5: WIPO (World Intellectual Property Organisation)

Functions/Role of WIPO, WIPO & India.

Case Studies: Related to WTO and Intellectual Property Rights.

- 1. Cornish William, IntellectualProperty.
- 2. P. Narayanan, Intellectual Property Law.
- 3. Rahul Matthan, The law relating to Computers and the Internet.
- 4. Copinger and Skine James, Copyright.
- 5. Pal P, Intellectual Property Rights in India.
- 6. Unni, Trade Mark, Design and Cyber Property Rights.
- 7. Rodney Ryder, Intellectual Property and theInternet.
- 8. http://www.ipindia.nic.in/

COURSE CODE	MB308H
COURSE TITLE	INTERNATIONAL BANKING
COURSE CREDITS	3

The course provides an Contents of international banking and deals with recent developments and a solid understanding of international banking. Issues such as the historical evolution and foundation of international banking and its management, risk management, financial crises, commercial banking, investment banking, and regulations, supervision and crashes of international banking will bediscussed.

Course Objectives:

- 1. To understand how international banks operate in global markets.
- 2. To understand regulatory framework governing International Bankingoperations.
- 3. To understand the working of International Credit RatingAgency.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308H.1	Applying	Students will be able to UTILIZE information technology
30011.1		as a tool to perform essential business tasks
308H.2	Analyzing	Students will be able to EXAMINE the nature and
		importance of the international banking business
308H.3	Applying	Students will be able to APPLY critical thinking skills to
		complex international banking issues by identifying and
		evaluating relevant issues and information.

Course Contents:

Unit 1: Introduction to International Banking

Meaning of International Bank, The working of Medici Bank in Renaissance Europe, Globalisation of banking, Structuring overseas operations, Commercial banking vs Investment Banking.

Unit 2: Legal And Regulatory Framework

Regulatory Framework, BASEL Norms, International law, choice of law, conflict of laws, jurisdictional issues, Exchange management and controls, International loan agreements, covenants and clauses, Country risk and bank risk management, International debt management, Anti Money laundering laws.

Unit 3: Global Banking System

American Banking System: Organisation, structure and functions Indian Banking System: Organisation, structure and functionsGerman Banking System: Deutche Bundes Bank, German Central Bank' – Organisation, structure and functions.

Unit 4: International Corporate Finance

Fundamental principles of lending MNC, documentation and monitoring of Corporate Finance, International credit rating agencies and global capital marketsRaising resources and its deployment, ECBs / FCNRs, Syndicated Loans, Role of FIIs, FDIs and EXIM Bank.

Unit 5: International Banking and Development

Bank lending in developing countries MicrofinanceBank lending and sustainability (the Equator Principles) The role of public institutions (IMF, WB, IDB).

- 1. Andrew W. Mullineux (edited), Handbook of International Banking, Edgar El-gar Publishing and J.Hughes.
- 2. S. MacDonald, International Banking: Text and Cases, Addison-Wesley Publishing.
- 3. B. Casu, Introduction to Banking, PrenticeHall.

COURSE CODE	МВ309Н
COURSE TITLE	INTERNATIONAL LOGISTICS & SUPPLY CHAIN MANAGEMENT
COURSE CREDITS	3

Logistics and supply chain management (SCM) are two important inter-related functions of an organization that focus on timely delivery of products to customers. SCM is a broad concept that encompasses all activities involved in the movement of a product from its raw stage to the final delivery to customers.

Course Objectives:

- 1. To study the concept of logistics and supply chain management.
- 2. To know packing requirements for export of goods.
- 3. To learn international transport.
- 4. To understand international logistics and supply chain management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309H.1	Remembering	REMEMBER basic concepts of logistics & supply chain
		management
309H.2	Understanding	UNDERSTAND the process of international trade
309H.3	Understanding	UNDERSTAND the international procurement process
309H.4	Analysing	ANALYZE the transportation selection process
309H.5	Applying	APPLY the international shipping process.

Course Outline:

Unit 1: Basic Concepts of Logistics & Supply chain

Types of Logistics, Evolution of Logistics and Supply Chain Management, International Logistics and Supply Chain Management, Distinguish between Logistics and Supply Chain Management.

Unit 2: International Trade & Globalization

Effects of Globalization on International Trade, Outsourcing and Offshoring as an Emerging Trend in International Trade.

Unit 3: International Procurement and Sale

International Purchasing/procurement system, ISO supply chain management selection, Export sales contract & its constituents.

Unit 4: International Transport

Concept of International Transport, Role of transportation in Logistics, Container Yards, Inland Container Depots, Container Freight Stations, Transportation selection decision, Chartering.

Unit 5: International Shipping

International Commercial Documents, Export Packaging, Customs Clearance Process.

- 1. Logistics and Supply Chain Management, Christopher Martin, Prentice Hall, Fourth Edition.
- 2. International Logistics: Global Supply Chain Management, Long, Douglas, Springer US.

3. Supply Chain and Logistics Management 1st Edition 2020 by Dr. Dixit Garg. New Age International (P) Ltd Publisher.

- 1. Textbook of Logistics and Supply chain Management: Agarwal D K.
- 2. https://www.cargoflores.com/en/service/international -logistics-and-distribution.



HOSPITAL AND HEALTHCARE MANAGEMENT SPECIALIZATION

COURSE CODE	MB303I	
COURSE TITLE	MEDICAL TOURISM AND TRANSNATIONAL HEALTHCARE	
COURSE CREDITS	3	

Course Description:

This course is being introduced to enable the students with the core knowledge of Healthcare ecosystem along with the introduction of Medical Tourism across the national boundaries. The course also elaborates on the scope and challenges faced by the both consumer of medical tourism and the citizen of health-care systems to more easily recognize the emerging set of transnational structures and networks that seek to serve all patients. Also to assess treatment quality and the ethical consequences for international patients within health-care systems.

Course Objectives:

- 1. To understand the scope of medical tourism among cross-border health care system, dependent on science and technology-led medical expert treatment.
- 2. To asses and analyze the quality of services, which can satisfy the needs of patients for health care across national borders and between national health systems.
- 3. To learn more about the advancement in Medical Tourism & Transnational Healthcare in India.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303I.1	Remembering	DESCRIBE the Main Drivers of Medical Tourism and
		Scope of Transnational Healthcare.
		INTERPRETE the Patient's perception on medical tourism
303I.2	Understanding	destinations along with Medical Tourists: Knowledge &
		Globalization
303I.3	Applying	EXECUTE the medical Tourism with Policy management
3031.3		and Business responses.
		DIFFERENTIATE the Levels of Destination Management,
3031.4	Analysing	towards a Model of Sustainable Health Destination:
		Management based Healthcare regions.
		MONITOR a Transnational Healthcare & Cross-
303I.5	Evaluating	culturalism, Policies and Documentation required for
		Medical Tourism in Hospitals.
	Creating	CONSTRUCT a Company's marketing Insurance product
303I.6		for international patients, Acquiring Medical travel
		facilities through Agents/mediators.

Course Outline:

Unit 1: Introduction to Medical tourism

What is Medical tourism? Scope of Medical Tourism, Main Drivers of Medical Tourism, Advantages & Disadvantages of Medical Tourism, Challenges & Barriers, Medical Tourism Popularity, Advancements in Medical tourism, Career Opportunity in Medical Tourism.

Unit 2: Medical tourism and Cross-border Destination Management

Patient's perception on medical tourism destinations, Medical Tourists: Knowledge & Globalization, Cross-border Medical Travel Companies, Medical Tourism sites & destination, Levels of Destination Management, Towards a Model of Sustainable Health Destination: Management based Healthcare regions.

Unit 3: Entanglements with Medical Tourism: Policy Management and Business Responses Ethical management of Medical Tourism, Impact of Internet on Medical Tourism, Impact of Medical Tourism in low & middle income countries, Transnational Healthcare & Crossculturalism, Policies and Documentation required for Medical Tourism in Hospitals.

Unit 4: Medical Travel Health services & its Marketing

Companies marketing Insurance product for International patients, Acquiring Medical travel facilities through Agents/mediators, Global Tie-ups with Healthcare Companies, Marketing of complete packages & effective treatment plan, Price & Cost saving Strategies.

Unit 5: "Tourists as a Patient" OR "Patients as a Tourist"

Transplant Tourism & Organ Trafficking, Beauty & the Beach: Mapping Cosmetic Surgery Tourism, Cross Border reproductive care, Tourist with severe disability, A way through the maze: Exploring differences & overlaps between wellness & medical Tourism.

Prescribed Books:

- 1. David Botterill, Guido Pennings 2013, Medical Tourism and Transnational Healthcare.
- 2. Global Trends in Health and Medical Tourism by Rajesh Kumar, SBS Publishers and Distributors Pvt Ltd.
- 3. Healthcare Tourism in India (English, Hardcover, C. B. Venkata Krishna Prasad).

- 1. Abhyankar, A. 2013. Growth potential of the domestic and international tourism in India. Review of Integrative Business & Economics Research, 2(1):566-576.
- 2. Awadzi, W and D. Panda. 2007. Medical tourism: globalization and the marketing of medical services. The Consortium Journal, 11:75-81.
- 3. Bookman, M. Z., and K. R. Bookman. 2007. Medical tourism in developing countries. Palgrave MacMillan: New York.

COURSE CODE	MB304I	
COURSE TITLE	MANAGEMENT OF MEDICLAIM & TPAs IN HOSPITAL	
COURSE CREDITS	3	

This course is being introduced to provide the students with the knowledge of Mediclaim and third party administrator process among Hospital and Healthcare institute. Also to know how the health insurance is an effective instrument of getting reimbursement of Medical and hospitalization expenditure, as health insurance is emerging fast as an important mechanism to finance the health need of the people in an affordable manner. To know about the cashless hospitalization and challenges associated with the policy holders about the existence of TPAs and their Insurance Policy.

Course Objectives:

- 1. To understand about the process of Health Insurance and monitor Claim services associated with the customers/Patients policy.
- 2. To asses and analyze the challenges, risks and problem faced by the Customer from Hospital end or from TPAs related to the reimbursement processes.
- 3. To learn more about the career opportunities for booming managers for smooth functioning of Insurance Departments and TPAs for delivering hassle-free cashless Hospitalisation and quality healthcare service to customer/patients.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304I.1 Remembering	DESCRIBE the Role of TPAs in health insurance market	
3041.1	Remembering	& Impact of TPA in healthcare services.
	(, .	INTERPRETE the TPA filling the need gap: Access,
304I.2	Understanding	quality & cost, Benefit management, medical management
		and Claim adjudication.
2041.2	304I.3 Applying	EXECUTE the Importance of Health E-card/Insurance
3041.3		card, insurance forms and Documentation for submission.
	h V	DIFFERENTIATE the Knowledge about coverage &
3041.4	Analysing	exclusion in Policies, Challenges with cashless
		hospitalization.
		MONITOR a Roles & responsibilities as a manager of
3041.5	Evaluating	Insurance companies, Future scope, Training and
		Education.

Course Outline:

Unit 1: Introduction to Mediclaim & Role of TPA in Hospital

What is Mediclaim? What is Health Insurance? History & Scope, Types of Health Insurance, structure of Health Insurance, Roles and Responsibilities of Third party administrator for

hospitals, Role of Health Insurance? Role of TPAs in health insurance market, Impact of TPA in healthcare services, Need for medical insurance.

Unit 2: TPA services for Insurance Companies & Policy Holders

Monitor Claim, Control claim ratio, speedy handling of claim, settlements of claim, Customer grievance cell, Service and consumer education by TPA, Policy holders & healthcare providers, Norms of insurance companies.

Unit 3: Impact of TPA service on Hospital Administration

TPA filling the need gap: Access, quality & cost, Benefit management, Medical management, Provider network management, Claim adjudication, Information data management, Misplacement of bills by TPA/corporate, Issues related to authorization.

Unit 4: Policies and Documentation for Cashless Hospitalization Process

Importance of Health E-card/Insurance card, insurance forms, Documentation for submission, Knowledge about coverage & exclusion in Policies, Challenges with cashless hospitalization — Delay in discharge, Releasing funds, Accounts record, Billing issues, Inconvenience caused from patients end, Cashless facilities guidelines.

Unit 5: Careers in Insurance & TPAs in Hospital

Career opportunities at Insurance department in hospitals, Basic Roles & responsibilities as a manager of Insurance companies, Future scope, Training and Education, Fresher as medical advisor, Opportunities and New trends.

Prescribed Books:

- 1. Kshitij Patukale, Mediclaim and Health Insurance.
- 2. Yadnya Investments, How to Choose the Best Health Insurance Policy? Health Insurance in India.

- 1. Dr. Symphony D. Cashless Hospitalisation and Health Insurance Awareness among General Public and Patients. AIHA; Batch XI; 2006, pg. 83, 84.
- 2. Gupta Indrani, Abhijith Roy, Mayur Trivedi. Third Party Administrators: Theory and Practice, Community Health Insurance. 2004. Pg. 3.

COURSE CODE	MB305I
COURSE TITLE	ESSENTIALS OF TRAINING AND DEVELOPMENT FOR HEALTHCARE PROFESSIONALS
COURSE CREDITS	3

This course is being introduced to know the importance of basic training and development required for healthcare professionals. There is an increasing focus on improving healthcare in order to ensure higher quality, greater access and better value for money. In recent years, training programs have been developed to teach health professionals and students formal quality improvement methods. This is an essential area for further exploration. Training professionals & managers may be important not only to ensure that they have the skills needed to improve the quality of healthcare, but also to enhance their motivation towards improving healthcare services.

Course Objectives:

- 1. To assess and analyze how the implementation of effective and efficient training and development of healthcare professionals can improve the quality of patient service.
- 2. To know how the training & grooming practices are crucial to improve safety at all levels of health care.
- 3. To understand how the ongoing care coordination and a person focused approach for people and their families, can contribute in satisfying the need of quality healthcare services.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305I.1	Remembering	DESCRIBE the necessary elements to maintain good interpersonal relationships between management &
		patients for improved patient outcomes
		EXPLAIN the significance of emotional intelligence &
305I.2	Understanding	training for healthcare professionals to resolve patient
		conflicts
		APPLY the clinical skills to tackle administrative,
305I.3	Applying	diagnostic and medication errors with the help of education
		and training
2051.4	305I.4 Analysing	ANALYSE the ways to facilitate learning activities and
3031.4		assessment of competency to take clinical decision making
		FORMULATE practical approaches for professional
305I.5	Creating	development and monitor the trainings to meet improved
		patient outcomes

Course Outline:

Unit 1: Application of Basic Soft Skills Among Healthcare Professionals

Healthy Communication Skills, Telephone etiquettes, Grooming and Personality development,

Assertive verbal skills, good relationship with patients, crisis management, Breaking bad news, Managerial skills, Maintaining good inter personal relationships between management & patients, Advances in simulation based continuing professional development & training.

Unit 2: Training and Development for Patient engagement

Introduction, Scope & Approach, Importance of training & development for healthcare profession, Strategy for solving Patient's Conflict, working with emotional intelligence in healthcare institutes, Proving/receiving patient's feedback.

Unit 3: Planning for clinical skills course & care processes

Education and Training, Human factors, Administrative errors, Diagnostic errors, Medication errors, Multi morbidity, Transitions of care, Basic facilitation skills, Use of audiovisual aids/role play, group dynamics, Trainer as coach.

Unit 4: Competency Development

Introduction, Developing knowledge, skills & attitude, Emphasizing clinical design making, Facilitation learning activities and assessment of competency, conducting skills demonstration and practice session, Competency based training.

Unit 5: Professional Development & Potential Solutions

Practical approaches, Integrating safety education, Infrastructure support, Evaluation and Implementation, Assessment of training given, Monitoring outcomes.

Prescribed Books:

- 1. Hari Singh, 2018, Essentials of Management for Healthcare Professionals.
- 2. Dr. William Rayburn MD MBA, Continuing Professional Development in Medicine and Health Care: Better Education, Better Patient Outcomes.

- 1. Kidd MR. The contribution of family medicine to improving health systems: a guidebook from the World Organization of Family Doctors. 2nd ed. London: Radcliffe, 2013.
- 2. Madigosky WS, Headrick LA, Nelson K, Cox KR, Anderson T. Changing and sustaining medical students' knowledge, skills, and attitudes about patient safety and medical fallibility. Acad Med. 2006;81(1):94-101.

COURSE CODE	MB306I
COURSE TITLE	COMMUNITY HEALTH MANAGEMENT
COURSE CREDITS	3

Community health is fundamental course in the principles of personal health: nutrition, mental health, drugs, exercise, sleep and rest. Community health also explores the principles of community health sanitation, community services and public health agencies.

Course Objectives:

- 1. To understand Modern health issues, Health care organizations structure
- 2. To studyHealthstatistics and also understandEthics in health care.
- 3. To know Health care policy.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306I.1	Remembering	Students will be able to DEFINE and distinguish the concepts of health, quality of life, impairment, activity limitation, and participation restriction. They will also be able to describe study of health and disease.
306I.2	Understanding	Students will be able to UNDERSTAND the essential practice areas of infection prevention and control with an emphasis on practical application for daily practice in a wide variety of health care settings.
306I.3	Applying	Students will be able to RELATE with various injuries

Course Contents:

Unit 1: Contribution to Community Health

Organizations that contribute to community health, communities measure disease, injury and death.

Unit 2: Control of communicable and non-communicable diseases

Communities organize and solve health problems, Community health in schools, Health needs of mothers, infants and children.

Unit 3: Health needs of special populations

Community mental health, Abuse of alcohol, tobacco, and other drugs.

Unit 4: Health care delivery system, Environmental health problems.

Unit 5: Intentional and unintentional injuries and Occupational health and safety.

Prescribed Books:

- 1. Family Health Care Nursing: Theory, Practice, and Research by Joanna RoweKaakinen.
- 2. Foundations of Nursing in the Community: Community-Oriented Practice, 4e by Marcia Stanhope and Jeanette Lancaster.
- 3. An Introduction to Community and Public Health by James F. McKenzie and Robert R. Pinger.

COURSE CODE	MB307I
COURSE TITLE	LAWS RELATED TO HOSPITAL AND MEDICAL SERVICES
COURSE CREDITS	3

This course examines the law relating to the employment relationship. It focuses on the statutory and common law regulations of individual employment contracts. Some consideration will also be given to the role of unions and collective industrial action. The course makes extensive use of outside experts Course is relevant for management- or policy-oriented students who will be working in, or interrelating with, public and private (both for-profit and not-for-profit) health insurance plans and organized delivery systems such as HMOs and hospital/physician integrated delivery systems. Course is also relevant to students who will be researching and analyzing these systems.

Course Objectives:

- 1. To understand the laws related to Hospitals in India.
- 2. To studyvariousHealthrelated issues and HR relatedlaws as well as governancedone by IndiaGovernment.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307I.1	Applying	Students will be able to EXHIBIT knowledge of laws
		governing the commissioning of hospital.
		Students will be able to able to IDENTIFY the legal issues
307I.2	Remembering	relating to medicine, discuss them threadbare, and suggest
		remedial measures.
307I.3	Applying	Students will be able to APPLY HR related laws in
3071.3	Applying	medical field

Course Contents:

Unit 1: Introduction and Legal Procedure

Court, Affidavit, Evidence, complaint, investigation, Oath, Offence, warrant, Summons. Medico Legal Aspects of Emergency Services. Rights and Responsibilities of Medical Person.

Unit 2: Inquest

Police Inquest, Magistrate's Inquest. Criminal Courts in India and Their powers, General Important Legal Knowledge Pertaining to IPC, CRPC, Civil PC, Evidence Act Hippocratic Oath, Declaration of Geneva.

Unit 3: Laws related to medical Procedures

Medical termination of Pregnancy Act 1971 (MTPAct), Prenatal diagnostic techniques, regulations and prevention of misuse Act1994, Code of MedicalEthics, Medical negligence and Compensation, Illustrative cases of medical Negligence inIndia.

Unit 4: Organisational and procedural Laws

Indian ContractAct, Nursing Home-RegistrationAct.

Unit 5: Labour Laws applicable to ahospital

Indian Trade Union Act 1926/Industrial Dispute Act1947, The Workmen's CompensationAct, The Industrial Employment (standing orders) Act1946, Maternity BenefitAct, EmployeeProvident, Payment of Wages Act.

- 1. Parikh`s Text Book of Medical Jurisprudence and Toxicology- By Dr. C.K. Parikh-CBS Publication.
- 2 Medical Negligigence and Compensation By Jagdish Signh- Bharat Law, Jaipur.
- 3. Medico-Legal Aid at Hospitals and Doctors with Consumer Protection aw- By M.S. Pandit and Shobha Pandit-PanditPublications.

COURSE CODE	MB308I
COURSE TITLE	MANAGEMENT OF HOSPITAL INFORMATION SYSTEM
COURSE CREDITS	3

To make the students to understand MIS as a managerial decision making tool and to know the sources and compiling of MIS.

Course Objectives:

- 1. To train Medical and Non-Medical Graduates in the specialty of the Hospital Administration to meet the growing demand of Hospital Administrators at the middle level of management.
- 2. To enable such persons to take up consultancy in the Hospital Planning.
- 3. To enable them to take up higher courses of learning /specialization in the field of Hospital Management in due course of time.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308I.1	Applying	Students will be able to APPLY the knowledge of application software; including spreadsheets; e-mail; word processing; database management.
308I.2	Analyzing	Students will be able to CONSTRUCT an information technology needs assessment of healthcare organizational unit.

Course Contents:

Unit 1: Introduction to Management Information Systems

Decision Making Process Techniques – Major Trends in Technology in Decision Making – Computerized data processing – Decision Support Systems – Expert System – Executive Information System – Health Management Information System.

Unit 2: Health Records

The World of Informatics The Future of healthcare technology - Functions of the health record – Changing functions of the patients record – privacy and confidentiality and Law – Advantages of the paper record – Disadvantages of the paper record – Optically scanned records – The Electronic health record – Automating the paper record – Advantages of the HER – Disadvantages of the HER – Bedside or point-or-care systems – Human factors and the HER – Roadblocks and challenges to HER implementation.

Unit: Telemedicine

Telehealth – Historical perspectives – Types of Technology – Clinical initiatives – Administrative initiatives – Advantages and Barriers of telehealth – Future trends – Summary – The Future of informatics; Globalization of Information. Technology – Electronic communication – Knowledge management – Genomics – Advances in public health – Speech recognition – Wireless computing – Security – Telehealth – Informatics Education – Barriers to Information Technology implementation.

Unit 4: Software Applications in Health Care

Awareness on the application of computer software packages in various functions of hospital –

Internet and Intranet and their application in healthcare.

Unit 5: Practicals of Software Applications

One way ANOVA using Statistical Software.

Suggested Practicals:

Mail Merge using MS Word Profit Analysis using Excel VendorAnalysis using Excel Lead Time Analysis using Excel Electricity billing using Excel Grade Analysis using Excel Budget Consumption using Excel Correlation using Statistical Software Regression using Statistical Software Chi-square using Statistical Software One Sample T Test using StatisticalSoftwareTwoSampleTTestusingStatisticalSoftwareTestofSignificantdifference-Independent Samples Test of significant difference.

Reference Books:

- 1. Green. E. Paul. Danald S. Tull, Gerald Albaum, Research for Marketing Decisions, Prentice Hall, New Delhi, 1996.
- 2. Ghosal, A., Elements of Operations Research, Hindustan Publishing Corporation, New Delhi, 1969.

COURSE CODE	MB309I
COURSE TITLE	QUALITY & ACCREDITATION IN HEALTHCARE SECTOR
COURSE CREDITS	3

Course Description: Quality management is a crucial need for healthcare organizations such as hospitals, nursing homes, clinics, and laboratories. This course enables healthcare managers and implementation health professionals in the of quality management continuous quality development in their settings. In health accreditation a standard is "a desired achievable level performance against actual performance of which measured". Standards enable "health service organizations, large and small, to embed practical and effective quality improvement and patient safety initiatives into their daily operations".

Course Objectives:

- 1. To provide comprehensive coverage of the theoretical and practical aspects as well as various tools and techniques of quality management system at different levels of healthcare delivery and various aspects of accreditation system prevalent in the country and abroad.
- 2. To enable healthcare managers and other health professionals in the implementation of quality management and continuous quality improvement in their settings.
- 3. To achieve healthcare managers and other health professionals a desired and achievable level of performance against which actual performance is measured.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309I.1	Remembering	RECOGNIZE and RECALL theoretical and practical aspects as well as various tools and techniques of quality management system, at different levels of healthcare delivery.
3091.2	Understanding	INTERPRET Dash boards and score cards. COMPARE past present and future of healthcare quality. UNDERSTAND the concepts of TQM and six sigma.
3091.3	Applying	APPLY economic concepts to service evaluation. IMPLEMENT assessment of patient satisfaction evaluation of quality of hospital services, management of hazard and safety in hospital setup.
309I.4	Analysing	OUTLINE process flow diagrams for distinct processes in hospital. PARSE quality aspect of processes in hospitals
309I.5	Evaluating	EVALUATE the objectives and benefits of accreditation systems

Course Outline:

Unit 1: Introduction to Healthcare Quality

Nature, role and concept of Healthcare Quality, Quality Management Theories, Quality Management Tools, Statistics in Quality, Quality in Healthcare Organizations, Development of Quality Manual, Consumer Protection Act and Quality, Stores and Equipment Management –

Planning, Maintenance and Disposal – Equipment Audit, Quality Control – Total Quality Control.

Unit 2: Healthcare Quality Management

Patient Safety and Medical Errors, Dashboards and Scorecards, IT and Quality, National Health Programs of India, The Past, Present and Future of Healthcare Quality, Hospital Management Information System, Concepts, features, benefits and goals of TQM and Six-Sigma.

Unit 3: Evaluation Of Hospital & Health Services

Accreditation - Setting of objective - Health indicators - applying Economic concepts to Service Evaluation - Assessing Patient Satisfaction - Techniques of Hospital Service Evaluation - Indicators of Hospital Efficiency and Effusiveness - Evaluation of Quality of Hospital Services - Management of Hazard and Safety in Hospital Setup - Nursing Services in a Hospital - current - Issues in Hospital Management.

Unit 4: Process Approach To Quality Management In Hospitals

Process Management – Triple Role of Process Team – PDCA Cycle – Preparation of process flow diagrams for distinct processes in a hospital – Quality Aspects of processes in Hospitals Diagnostic services – Nursing services – House Keeping – Blood Bank – Pharmacy – OPD – Surgery – ICU – Emergency and Trauma care – Canteen – Hospital Stores, Quality Certification Systems.

Unit 5: Quality Accreditation In Hospitals

Overview of Accreditation System –NABH Accreditation Process – Procedure – Joint Commission International (JCI) – Mission – Benefits – Value – Accreditation in 15 Areas – JCI for primary care centers – JCI Accredited Hospitals in India – Basic Objectives of National Accreditation Board for Hospitals (NABH) – Standards of NABH – Documentation Procedure – Patient Rights and Education – Benefits of NABH to Hospital – Employees – Patients and TPA's.

Prescribed Books:

- 1. Spath, Patrice, 2013, Introduction to Healthcare Quality Management, 2nd Edition, Copyright 2013, Health Administration Press, Chicago, IL; ISBN 978-1-56793-593-6.
- 2. Health Planning For Effective Management William A. Reinke, 1988, Oxford University Press.

- 1. Health Sector Reform in Developing Countries Peter Berman, Harvard University Press, 1995.
- 2. Health Policy and Management The health care Agenda in a British political contact colum Paton, 1996, Chapman & Hall Publication (Madras).
- 3. Quality Assurance & Methods, K.C.Poornima.

OPERATIONS AND SUPPLY CHAIN MANAGEMENT SPECIALIZATION

COURSE CODE	MB303J	
COURSE TITLE	INVENTORY MANAGEMENT	
COURSE CREDITS	3	

Course Description:

Inventory Management (IM) is concerned with the management of resources and activities about storing & usage of inventory at optimum level for customers. The course focuses on the inventory control techniques. The concept of efficient and effective operations inventory control.

Course Objectives:

- 1. To give an overview of various aspects of inventory.
- 2. To explain the impact of types of inventory costs on inventory management decisions.
- 3. To explain the principles of JIT.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303J.1	Remembering	DESCRIBE the theories, concepts, terms & techniques of
3033.1	Remembering	Inventory Management.
303J.2	Understanding	CLASSIFY & COMPARE the various Inventory Control
3033.2	Onderstanding	Systems.
303J.3	Applying	MAKE USE OF theories & models to determine the
3031.3	Applying	Economic Order Quantity & Stock Levels.
		DECONSTRUCT the various strategic Aspects of Just In
303J.4	Analysing	Time & differentiate with other Techniques of Inventory
		Management.
303J.5	Evaluating	CRITICALLY ASSESS the various factors to arrive at
3031.3	Evaluating	Make or Buy decisions.

Course Outline:

Unit 1:Elements of Inventory Management

Inventory concepts, Impact of Low Inventory and High Inventory, Role of inventory in Operations, Types of inventory – seasonal, cyclic, pipeline, Safety stock. Inventory costs – carrying costs, ordering costs, shortage costs.

Unit 2: Inventory Control systems

Continuous Review (Q) systems, Periodic Review (P) systems, ABC Classification system, Issues in the P and Q systems of inventory control, EOQ Model, JIT.

Unit 3:Economic Order Quantity Models

The Basic EOQ Model, Production Quantity Model, Computer Solution of EOQ model with MS Excel, Quantity Discounts, Computer Solution of Quantity Discounts model with MS Excel, Reorder Point, Safety Stocks, Service Level, Reorder point with variable demand, Computer

Solution of Reorder point with MS Excel, Order quantity for periodic inventory system, Order quantity with variable demand, Computer Solution of fixed period model with MS Excel.

Unit 4: Just-In-Time

Principles of just-in-time, Core logic of JIT, Main features for stocks, Achieving just-in-time operations, Other effects of JIT, Benefits and disadvantages of JIT, Comparison with other methods of inventory management. KANBAN as a control tool. Vendor managed inventory.

Unit 5:Make or Buy Decisions

Factors influencing Make or Buy Decisions-cost, quality, capacity core v/s noncore, management strategy. Evaluation of performance of Materials function: cost, delivery, quality, inventory turnover ratio methodology of evaluation, Use of ratios and analysis like FSN: Fast slow, Nonmoving, HML-High Medium, Low, XYZ. Inventory Management in JIT Environment, Safety Stocks, Inventory Management Systems, MUSIC -3D.

Prescribed Books:

- 1. Purchasing and Inventory Management, by Sarika Kulkarni K. S. Menon.
- 2. Production and Operations Management by Shailendra Kale.

- 1. Essentials of Inventory Management by Max Muller.
- 2. Increasing Retail Inventory Productivity: Secrets to optimizing inventory productivity by Prakash Menon and Andrew Cavanagh.

COURSE CODE	MB304J	
COURSE TITLE	QUALITY MANAGEMENT	
COURSE CREDITS	3	

Quality Management has focusing on Quality and Standardisation aspects, self-certification. The course also deals the knowledge of TQM for business excellence. Quality management describes the importance of Service Quality Management in global, and ethical business practices. It also focuses on team building and achieving quality through quality values & policy.

Course Objectives:

- 1. To explain the meaning of total quality management and identify features of the TQM philosophy.
- 2. To understand the knowledge of TQM for business excellence.
- 3. To describe tools for identifying and solving quality problems.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304J.1	Remembering	Recall the contribution made by various Quality Gurus
304J.2	Applying	Apply the Quality tools for problem solving
304J.3	Understanding	Understand Standards & Excellence Models for Quality
304J.4	Understanding	Understand importance of Service Quality
304J.5	Applying	Interpret importance of various Quality certifications

Course Outline:

Unit 1: Introduction to Quality Management

Introduction to Quality Management: Definition, Evolution of Quality Management, Quality Gurus and their Contributions, Cost of Quality, Quality costs.

Unit 2: Designing Quality

Designing Quality into Products and Services (QFD, DFSS, Reliability, FMEA), Statistical Quality Control (Control Charts), Principles of TQM, Sampling, Operation Characteristics Curve, AQL, AQQL.

Unit 3: Aspects of Quality

Standards and Excellence Models for Quality, Experimental Design and Taguchi Method, transformational process quality, Design Quality and Manufactured Quality.

Unit 4: Service Quality Management

Seven Old and New Tools of Quality, Definition of 5S, Implementation of 5S, Service Quality Management, Human Factors in Quality, Quality Circles, Six Sigma, Theory of Constraint, Lean manufacturing, Gronroos Model, The gap model of Parasuraman –SERVQUAL Quality Strategy for Indian Industries.

Unit 5: Quality Certification

Evolution of ISO 9000 standard, Principles and objectives of ISO 9000 standard, Procedure for registration and certification of ISO 9000 Standards, ISO 9000 standard versus QS 9000, ISO 14001 :2004, ISO 45001 Training, OHSAS 18001 certification.

Prescribed Book:

- 1. Quality control & Total Quality Management by P.L. Jain, McGraw Hill Publications.
- 2. Production & Operations Management, Shailendra Kale, McGraw Hill Publications

- 1. Total Quality Management by N. Srinivasa Gupta, B. Valarmathi.
- 2. Total Quality Management by I. Suganthu, Anand Samuel, TMGH.
- 3. Total Quality Management Principles and Practices by S.K Mandal,

COURSE CODE	MB305J
COURSE TITLE	SERVICE OPERATIONS MANAGEMENT
COURSE CREDITS	3

Service Operations Management has focusing on service and manufacturing continuum. The course also deals with Service Positioning & Implications for Service Delivery Design and Service blue printing.

Course Objectives:

- 1. To understand the relevance of service operations principles.
- 2. To understand global markets relationship to Service Operations.
- 3. To address strategic analysis and operational decision-making process.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
305J.1	Remembering	DESCRIBE the nature and CHARACTERISTICS of
3033.1		services and the services economy.
305J.2	Understanding	DESRCIBE the service design elements of variety of
3033.2	Understanding	services
		USE service blueprinting for mapping variety of real-life
305J.3	Applying	service
		processes
305J.4	Analysing	ANALYSE alternative locations and sites for variety of
3033.4	Anarysing	service facilities.
		JUDGE and EXPLAIN the service orientation at variety of
305J.5	Evaluating	service
		facilities / organizations.
305J.6	Creating	CREATE flow process layouts for variety of services.

Course Outline:

Unit 1: Understanding Services Operations

Defining Service Operations, Global trends in Services in Services Sector; Changing paradigms in Competitiveness of services; Services-Manufacturing Continuum, Recent trends in manufacturing services, increased role of services in manufacturing sector.

Unit 2: Understanding Services Economy

Developing an overall vision for the service system, Pricing Strategies in Services. The primary economic activity is the provision of service, increased importance of the service sector in industrialized economies, a subscription pricing model.

Unit 3: Devising Services Design

Service Positioning & Implications for Service Delivery Design: Degree of Customer contact, divergence, customization; Service Blue Printing, Service Enhancement using internet Case such

as ITC eChoupal.

Unit 4: Performance Issues in Service Systems

Capacity issues in service systems: Notion of capacity, Capacity build up Strategies, Capacity Vs System performance, Services Supply Chain, The gap model of Parasuraman–SERVQUAL.

Unit 5: Service Facility and Process Flows

Environmental Psychology and Orientation, Servicescapes, Behaviors in Servicescapes, Environmental Dimensions of Servicescapes, Facility Design, Nature and Objectives of Service Organizations, Land Availability and Space Requirements, Flexibility, Security, Aesthetic Factors, The Community and Environment. Process Analysis, Types of Processes, Flowcharting, Gantt Chart, Process Terminology, Facility Layout, Flow Process Layout and the Work Allocation Problem, Job Shop Process Layout and the Relative Location Problem.

Prescribed Book:

- 1. Services Sector Management an Indian Perspective, C. Bhattacharjee.
- 2. Production & Operations Management, Shailendra Kale, McGraw Hill Publications.

- 1. Operations Management for competitive advantage, Chase, Jacobs, Aquilano and Agarwal, TMGH, 13th Edition.
- 2. Service operations management Improving service delivery, Robert Johnston, GrahamClark, Pearson Publication



COURSE CODE	MB306J
COURSE TITLE	OPERATIONS RESEARCH AND MANAGEMENT
COURSE CREDITS	3

Operations research helps in solving peoblems in different environments that needs dicisions. The module conver topics that include: linear programming, Transportation, Assignment, and CPM/ MSPT techniques. Analytic techniques and computer packages will be used to solve problems facing business managers in decision environments

Course Objectives:

- 1. To familiarize the Operations Management concepts.
- 2. To introduce various optimization techniques with managerial perspective

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306J.1	Applying	Students will be able to facilitate the USE of Operations
3003.1		Research techniques in managerial decisions.
306J.2	Applying	Students will be able to USE written formats to
3003.2	Applying	communicate marketing strategies for its implementation.
	Applying	Students will be able to APPLY the introduced conceptual
306J.3		frameworks theory and techniques to various operation
		Management concepts.
		Students will be able to RELATE various techniques of
306J.4	Analyzing	operation management for increasing effectiveness and
		efficiency of the organization.

Course Contents:

Unit 1: Introduction to Operations Management - Process Planning - Plant Location - Plant Lay out - Introduction to Production Planning.

Unit 2: Stages of Development of Operations Research- Applications of Operations Research- Limitations of Operations Research- Introduction to Linear Programming- Graphical Method-Simplex Method - Duality.

Unit 3: Transportation Problem- Assignment Problem - Inventory Control - Introduction to Inventory Management - Basic Deterministic Models - Purchase Models - Manufacturing Models with and withoutShortages.

Shortest Path Problem - Minimum Spanning Tree Problem - CPM/PERT - Crashing of a Project Network.

Unit 4 : Game Theory- Two Person Zero-sum Games -Graphical Solution of (2 x n) and (m x 2) Games - LP Approach to Game Theory - Goal programming - Formulations - Introduction to Queuing Theory - Basic Waiting Line Models: (M/M/1) :(GD/a/a), (M/M/C):GD/a/a).

Unit 5: Operations Strategy and Competitiveness: World of operations in 2020 – Operations Management in the organizational chart - Operations as a service – Historical role of Operations Management – Current perspectives. Behavioral Operations Management. Operations Strategy and Competitive dimensions – Operations and Corporate Strategy – Strategic Fit – A framework

for Operations Strategy in Manufacturing, Services.

[Note: Distribution of Questions between Problems and Theory of this paper must be 60: 40 i.e, Problem Questions: 60 % and Theory Questions : 40 %]

Suggested Books:

- 1. Operations Strategy -- David Walters -- PalgvaveMcmillan.
- 2. Kanishka Bedi, Production and Operations Management, Oxford, NewDelhi, 2007.
- 3. Panneerselvam, R, Operations Research, Prentice-Hall of India, New Delhi, 2002.
- 4. G.Srinivasan, Operations Research, PHI Learning, NewDelhi, 2010.
- 5. Tulsian and Pandey, Quantitative Techniques, Pearson, NewDelhi, 2002.
- 6. Vohra, Quantative Techniques In Management, Tata McGrawHill, NewDelhi, 2010

COURSE CODE	MB307J
COURSE TITLE	LOGISTICS MANAGEMENT
COURSE CREDITS	3

Logistics Management is the part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements.

This course provides a practical, management perspective of the following areas of logistics: distribution, transportation, international logistics, inventory control, sustainable logistics practices, key performance indicators, supply chain finance, leadership in a supply chain role, and an introduction to logistics technology including RFID and ERP systems. The course is designed for students who have had little or no previous coursework or professional experience in logistics.

Course Objectives:

- 1. To introduce process and functions of logistics system.
- 2. To understand the major building blocks, functions, business process.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307J.1	Applying	Students will be able to USE performance metrics and
3073.1	Applying	decision making in supply chain network.
307J.2	Understanding	Students will be able to PROVIDE an insight into the role
3073.2	Officerstanding	of Internet Technologies in Logistics Management.
307J.3	Applying	Students will be able to IMPLEMENT Inventory control
3073.3	Applying	techniques for improving logistic management process.
		Students will be able to APPLY theory concept of logistic
307J.4	Applying	management in practicality so that work efficiency of the
		organization will increases.

Course Contents:

Unit 1: Introduction to logistics management

Definition, scope, functions, objectives - Integrated logistics management, role of logistics in the Supply chain - Logistics and customer service, Role of logistics in competitive strategy, Logistics organization and performance measurement, Basics of ERP –SAP – ORACLE.

Unit 2: Inventory planning

Inventory costs, classifying inventory, Nature and importance of warehousing, types of warehouses, warehousing functions, warehouse layout and design. Material handling - objectives, guidelines and principles, selection of material handling equipments.

Packaging-role of packaging, packaging materials, consumer and industrial packaging, material handling efficiency.

Unit 3: Transportation

Role of transportation in logistics, transportation selection decision, basic modes of

transportation- Rail, Road, Water, Air, Pipeline- characteristics of different modes- transport economics - Inter modal operations.

Unit 4: Containerization

Concept, types, benefits, Types of carriers- indirect and special carriers, Role of intermediaries-shipping agents, brokers- freight management- route planning Role of ports, ICDs, CONCOR - Global shipping options.

Unit 5 : Reverse logistics

Scope, design, e-logistics- logistics information system-application of IT in logistics- automatic identification technologies- bar coding, RFID, Logistics outsourcing- 3PL and 4PL, Global logistics- operational and strategic issues, Pricing and revenue management.

References:

- 1. Ailawadi C Sathish and Rakesh Singh, Logistics Management, Prentice Hall, India, 2005.
- 2. Agrawal D K, Textbook of Logistics and Supply Chain Management, Macmillan India Ltd, 2003
- 3. Coyle et al. The Management of Business Logistics, Thomson Learning, 7th edition, 2004.
- 4. Bowersox Donald J, Logistical Management- The Integrated Supply Chain Process, Tata McGraw Hill, 2000.

COURSE CODE	MB308J
COURSE TITLE	SUPPLY CHAIN MANAGEMENT
COURSE CREDITS	3

Supply Chain Management is about the management of material, information, and finance flows in multi-stage production-distribution networks. Driven by fierce global competition and enabled by advanced information technology, many companies have taken initiatives to reduces costs and at the same time increase responsiveness to changes in the marketplace. This course will provide students with the knowledge and the tools necessary to develop, implement, and sustain strategies for managing supply chain issues. The topics include building a strategic framework to analyze supply chains, designing the supply chain network, planning demand and supply, managing inventories, sourcing, transporting, pricing and revenue management, and coordinating a supply chain.

Course Objectives:

- 1. To introduce process and functions of supply chain management.
- 2. To appreciate the design and network in supply chain management.
- 3. To understand the role of coordination in supply chain management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308J.1	Analyzing	Students will be able to ANALYZE the manufacturing operations of a firm.
308J.2	Applying	Students will be able to APPLY sales and operations planning, MRP concepts.
308J.3	Analyzing	Students will be able to RELATE logistics and purchasing concepts to improve supply chain operations.
308J.4	Applying	Students will be able to UTILISE quality management tools for process improvement.

Course Contents:

Unit 1: Introduction to Supply Chain Management

Supply chain – objectives – importance – decision phases – process view – competitive and supply chain strategies – achieving strategic fit- supply chain drivers – obstacles – framework – facilities – inventory – transportation – information – sourcing – pricing. Concept of Supply ChainVisibility.

Unit 2 : Designing the Supply Chain Network

Designing the distribution network – role of distribution – factors influencing distribution – design options – e-business and its impact – distribution networks in practice – network design in the supply chain – role of network – factors affecting the network design decisions – modeling for supply chain.

Unit 3: Planning Demand and Supply

Role of forecasting – demand forecasting – approaches – role of IT. Planning and Managing Inventories- Safety inventory and its appropriate level – impact of supply uncertainty,

aggregation and replenishment policies.

Unit 4: Strategic Approach in Managing Logistics Supply Chain

Logistics Outsourcing- Need/ Benefits of Logistics Outsourcing, Clearing and Forwarding Agent –Cand F Agent, Third –Party Logistics (3PL), Fourth – Party Logistics (4PL), Procurement – Manufacturing-Logistical Interface, Quality tool kit for managers, Sales and Opération Planning

Unit 5 : Coordination in a Supply Chain

Lack of supply chain coordination and the Bullwhip effect – obstacle to coordination – managerial levels – building partnerships and trust – continuous replenishment and vendormanaged inventories – collaborative planning, forecasting and replenishment.

Information Technology framework: Information System Functionality-Comprehensive Information System Integration-Communication Technology- Rationale For ERP Implementation-ERP System Design-Supply Chain Information System Design.

References

- 1. Sunil Chopra and Peter Meindl, Supply Chain Management Strategy, Planning and Operation, PHI, 4th Edition, 2010.
- 2. Wisner, Keong Leong and Keah-Choon Tan, Principles of Supply Chain Management A Balanced Approach, Thomson Press, 2005.
- 3. Coyle, Bardi, Longley, The Management of Business Logistics A Supply Chain Perspective, Thomson Press, 2006.
- 4. Gattorna J L and Walters D W, Managing The Supply Chain A Strategic Perspective, Palgrave1996.
- 5. Sahay B S, Supply Chain Management In The Twenty-First Century, Macmillan 2000.
- 6. Jeremy F Shapiro, Modeling The Supply Chain, Thomson duxbury2002.
- 7. Mohanty R P, Deshmukh S G, Supply Chain Management, Theories And Practices, biztantra.

COURSE CODE	MB309J
COURSE TITLE	OPERATIONS STRATEGY
COURSE CREDITS	3

Operations Strategy (OS) is concerned with the strategic management of resources and activities that produce and deliver goods and services for customers. The course focuses on the basic concepts, interdependence of the operating strategy with other key functional areas of the firm.

Course Objectives:

- 1. To understand the strategic role of operations management.
- 2. To understand the role of operations strategy in the overall business strategy of the firm.
- 3. To identify and evaluate comparative approaches to operations strategy in a global context.
- 4. To understand the interdependence of the operating strategy with other key functional areas of the firm.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309J.1	Understanding	Understand the concept of operation strategy in global economy
309J.2	Understanding	Interpret quality as a strategic factor in process technology
309J.3	Analysing	Examine the role of sustainable operations strategy in evaluating the process technology
309J.4	Understanding	Understand the challenges in new product development
309J.5	Applying	Implement operations strategy for business solutions

Course Outline:

Unit 1:Introduction to Operations Strategy

The content of operations strategy – an overview, The operations strategy matrix. The overall level of operations capacity, Operations function and operations strategy interrelations. Interdependence of the operating strategy with other key functional areas of the firm. Plant Capacity, Location and linkage with corporate strategy, Operation strategy in global economy.

Unit 2: Process Technology Strategy

The capacity of each unit of technology, Degree of automation/analytical content, Degree of coupling/connectivity, the product–process matrix, Evaluating process technology. Evaluating various trade-offs alternatives – Focused manufacturing – Product or process focus – Make or Buy – merits /demerits – Value Chain approach – Just in Time – Jidhoka – Quality as strategic factor.

Unit 3: Sustainable Operations Strategy

Operations strategy and its sustainable alignment over time, Formulation process & its achievements, Analysis for formulation, Formulation models for alignment, The challenges to operations strategy formulation substitutes for strategy, New approaches to operations, Total Quality Management (TQM), Lean Manufacturing, Business Process Reengineering (BPR), Enterprise Resource Planning (ERP), Six Sigma, 5S technique.

Unit 4: Dynamic Markets & Generic Strategies

Technology strategy issues in new product development -time to market- strategic nature of process business implication of process choice Hybrid process. Change management, sustainability and Green Manufacturing.

Unit 5: Operations Strategy Implementation

Evaluating various trade-offs alternatives – Focused manufacturing – Product or process focus – Make or Buy – merits /demerits, Development and improvement in operations strategy, Setting the direction, role of performance mapping, Case studies in Indian context.

Prescribed Book:

- 1. Manufacturing Operations Strategy: Texts and Cases, Terry Hill 3ed. Palgrave Macmillan.
- 2. Operations Management for competitive advantage, Chase, Jacobs, Aquilano and Agarwal, TMGH, 13th Edition.
- 3. Production & Operations Management, Shailendra Kale, McGraw Hill Publications.

- 1. Nigel Slack and Michael Lewis (2010): Operations Strategy, Pearson Education.
- 2. Sara L. Beckman, Donald Barry Rosenfield, Operations Strategy, McGraw-Hill Higher Education.
- 3. Global Operations Strategy: Fundamentals and Practice: Springer; 2013 edition.



BUSINESS ANALYTICS SPECILAIZATION

COURSE CODE	MB303K
COURSE TITLE	WORKFORCE ANALYTICS
COURSE CREDITS	3

Course Description:

Workforce Analytics is a data-driven approach to managing people at work. Workforce analytics, also known as HR analytics, People analytics, or Talent analytics, revolves around analyzing people problems using data to answer critical questions about your organization. This enables better and data-driven decision-making.

Course Objectives:

- 1. To ENUMERATE the use of Workforce Analytics.
- 2. To UNDERSTAND the process of creating and using HR analytics.
- 3. To USE dashboards, pivot tables for data driven decision making in HR.
- 4. To ILLUSTRATE the use of various tools and frameworks for predictive analytics.
- 5. To BUILD and DERIVE a variety of metrics and quantify key outcomes in multiple areas of HR.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
303K.1	Remembering	To ENUMERATE the use of Workforce Analytics.
303K.2	Understanding	To UNDERSTAND the process of creating and using HR analytics
303K.3	Applying	To USE dashboards, pivot tables for data driven decision making in HR.
303K.4	Analysing	To ILLUSTRATE the use of various tools and frameworks for predictive analytics
303K.5	Evaluating	DERIVE a variety of metrics and quantify key outcomes in multiple areas of HR
303K.6	Creating	BUILD value for HR departments by showing clear links between HR and Business outcomes

Course Outline:

Unit 1: Workforce Analytics – Overview: Workforce Analytics: definition, evolution, function of Workforce analytics, Use of Workforce / People / HR metrics to measure results in HR - Process vs Outcome, Efficiency vs Effectiveness, Lead vs Lag, challenges in measuring human capital, HR Business Framework, Concept of Balanced Score Card, identifying key workforce questions, Strategic Case for Workforce Analytics, Data Sources, Power of combining data sources, Good, Important & Key Metrics.

Unit 2: Recruitment Metrics: Fill-up ratio, Time to hire, Cost per hire, Early turnover, Page | 245

Termination during probation, Channel efficiency mix in terms of Direct hires, Employee referral hires, Agency hires & Lateral hires, Offer reject and renege, Fulfilment ratio, Quality of hire, Recruitment to HR cost. Diversity Metrics: Workforce diversity index, Gender mix, Differently abled index, Implementation challenges.

Unit 3: Talent Metrics: Retention index, Voluntary and involuntary turnover, Turnover by department, grades, performance, and service tenure, Internal hired index. Learning & Development Metrics: Training need identification, Make or Buy Model, Training effectiveness evaluation, Percentage of employee trained, Internally and externally trained, Training hours and cost per employee, ROI calculation. Learning & Development Metrics: Training need identification, Make or Buy Model, Training effectiveness evaluation, Percentage of employee trained, Internally and externally trained, Training hours and cost per employee, ROI calculation. Unit 4: Internal Mobility Metrics: Career Progression Indices - Promotion index, Rotation index, Career path index, Level wise succession readiness index. Internal Mobility Metrics: Career Progression Indices - Promotion index, Rotation index, Career path index, Level wise succession readiness index. People Deployment Metrics: Employees per Manager, Employee service profiling, Workforce age profiling, Workforce service profiling, Churn index, Separation clearance time.

Unit 5: HR Cost Metrics: Revenue per employee, Operating cost per employee, PBT per employee, HR cost per employee, HR to operating cost, Compensation to HR cost, HR budget variance, HR ROI. HR KPI Dashboard: Calculating HR KPI, Scorecard based on recruitment, training and development, Calculating HR KPI, Scorecard based on employee retention, and turnover. HR Predictive Analytics: Regional and country level differences in turnover data, predicting individual and team turnovers, Turnover costs for business implications, Selection decisions from previous performance data, Predictive modelling of individual and team performance, Identifying flight-risk candidates, Report generation.

Prescribed Books:

- 1. Winning on HR analytics: Leveraging data for competitive advantage, Ramesh Soundararajan and Kuldeep Singh, Sage Publication.
- 2. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions Paperback, Shonna D. Waters, Valerie N. Streets, Lindsay McFarlane, Rachael Johnson-Murray.
- 3. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Boyce Byerly, Gene Pease, and Jac Fitz-enz.

Suggested Reading:

1. Doing HR Analytics: A Practitioner's Handbook with R Examples, Lyndon, Mr. Sundmar, CreateSpace Independent Pub.

2. The Power of People: Learn How Successful Organizations Use Workforce Analytics to Improve Business Performance, Guenole Nigel, Ferrar Jonathan, Feinzig Sheri, Pearson Publication.



COURSE CODE	MB304K
COURSE TITLE	ANALYTICS FOR MARKETING
COURSE CREDITS	3

Analytics in Marketing comprises the processes and technologies that enable marketers to evaluate the success of their marketing initiatives. This is accomplished by measuring performance (e.g. blogging versus social media versus channel communications). Marketing analytics uses important business metrics, such as ROI, marketing attribution and overall marketing effectiveness. In other words, it tells you how your marketing programs are really performing.

Course Objectives:

- 1. To DESCRIBE the use of Voice of the Customer data in making data driven marketing decisions.
- 2. To DEMONSTRATE an understanding of utility theory to measure customer preferences and choices.
- 3. To IDENTIFY what customers' value in a product and assess what they are willing to pay for it.
- 4. To ILLUSTRATE the use of various tools and frameworks to solve strategic marketing problems using marketing data.
- 5. To DETERMINE and DESIGN the most effective target markets.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
304K.1	Remembering	To DESCRIBE the use of Voice of the Customer data in
304K.1		making data driven marketing decisions.
304K.2	Understanding	To DEMONSTRATE an understanding of utility theory to
304K.2		measure customer preferences and choices.
304K.3	Applying	To IDENTIFY what customers' value in a product and
304K.3	Applying	assess what they are willing to pay for it.
		To ILLUSTRATE the use of various tools and frameworks
304K.4	Analysing	to solve strategic marketing problems using marketing
	Y	data.
304K.5	Evaluating	DETERMINE the most effective target markets.
304K.6	Creating	DESIGN a study that incorporates the key tools of
		Marketing Analytics.

Course Outline:

Unit 1: Segmentation Analytics

Market Segmentation Variables, Market Segmentation Types, Marketing Data Landscape, Data

for Segmentation, Analytics for Need Based Segmentation - Voice of the Customer, managing "Voice of the Customer" Data, Customer Co-Creation, RFM Analysis, Life Cycle Segmentation, Cross Tabulation Segmentation, Regression based segmentation, Clustering, Conjoint Analysis Segmentation, The Cluster Analysis + Discriminant Analysis Approach.

Uniot 2: Approaches to Choosing Target Segment/s

Rationale for Segment Targeting, Analytics for Perceptual Mapping and Product Positioning, Product Positioning, Multi-Dimensional Scaling (MDS) and Factor Analysis, Relevance of Mapping for Product Positioning, Preference Mapping, Incorporating Preferences in Perceptual Mapping. Analytics for Product/Service Design:The Relevance of Trade-off Approaches, Conjoint Analysis, Approaches to Conjoint Analysis, Interpreting Conjoint Results, Optimizing Design using Conjoint Results.

Unit 3: Analytics on Forecasting and Pricing Analytics

Forecasting- Correlation, Simple Regression and Multiple Regression to forecast sales, Modelling Trend and Seasonality, Ratio to Moving Average Method, Forecasting New Product sales -Using 'S'curves, Concepts-The Bass diffusion model, The Copernican principle to predict duration. Pricing Analytics - Optimization, Practical applications of price analytics, ROI concept, Consumer preference, choice, Conjoint Analysis, Logistic regression.

Unit 4: Analytics for Tracking Customer Growth

Rationale for Customer Analytics, Customer acquisition cost, Customer Churn, Customer Attrition models, Customer lifetime value, Net promoter score, Calculating the number of new customers, Calculating average customer age & Days to convert, Calculating customer acquisition cost & Average purchases, Calculating touch points & Lead conversion, Analysing age demographics, First contact with customer, Customer satisfaction, Understanding customer engagement, Diffusion Models - The Bass Model.

Unit 5: Modelling New Marketing Initiatives

Introduction to modelling, evaluating new ad channels, Modelling tips and best practices, Projecting ad revenue, Projecting organic follower revenue, Projecting expenses, Calculating net profit and breakeven, Understanding ROI, Calculating returns, Creating a single-variable sensitivity table. Creating a multi-variable sensitivity table.

Prescribed Books:

- 1. Marketing Analytics by Wayne L. Winston, Publisher John Wiley& Sons Inc.
- 2. Business Analytics by U. Dinesh kumar, Publisher John Wiley& Sons.
- 3. Data Mining Techniques in CRM by Konstantinos K. Tsiptsis, Antonios Chorianopoulos Publisher John Wiley& Sons.

- 1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wayne L. Winston.
- 2. Data Science for Marketing Analytics: Achieve your marketing goals with the data analytics power of Python by Tommy Blanchard, Debasish Behera, et al. | Mar 30, 2019.

3. Python for Marketing Research and AnalyticsMarketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques by Mike Grigsby.



COURSE CODE	MB305K
COURSE TITLE	RETAIL ANALYTICS
COURSE CREDITS	3

Retail analytics is any information that allows retailers to make smarter decisions and manage their businesses more effectively. Retail analytics can identify your best customers and where they live and predict future spending.

Course Objectives:

- 1. To ENUMERATE the characteristics, opportunities and challenges of New Age Retailing, Digital Consumers Dynamics, List the data required for retail analytics.
- 2. To UNDERSTAND Consumer Buying Behavior and Trends in new age retailing.
- 3. To USE various kinds of data and tools for performing Retailing Analytics.
- 4. To ILLUSTRATE the use of various tools and frameworks for predictive retail Analytics.
- 5. To BUILD and DERIVE a variety of metrics and quantify key outcomes in multiple areas of Retail and value for Retail and Marketing by deriving Marketing ROI metrics respectively.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		To ENUMERATE the characteristics, opportunities and
305K.1	Remembering	challenges of New Age Retailing, Digital Consumers
		Dynamics, List the data required for retail analytics.
305K.2	Understanding	TTo UNDERSTAND Consumer Buying Behavior and
303 K .2	Understanding	Trends in new age retailing.
305K.3	Annlying	To USE various kinds of data and tools for performing
303 K .3	Applying	Retailing Analytics
305K.4	Analysina	To ILLUSTRATE the use of various tools and frameworks
303 K .4	Analysing	for predictive retail Analytics.
305K.5	Evaluating	DERIVE a variety of metrics and quantify key outcomes in
		multiple areas of Retail.
205V	Creating	BUILD value for Retail and Marketing by deriving
305K.6		Marketing ROI metrics.

Course Outline:

Unit 1: Retailing Analytics

An Introduction- Retailer Goodwill, Retail Organization (Real Estate Marketing, Creative Advertising Marketing, Marketing Research, Strategic Marketing), Communicating to Retail Organization, Point of Sale Vs Market Basket Data, Data is Gold, Data is Revenue: The Price of Retail Data.

Unit 2: Retail and Data Analytics

Market Basket, Data Storage, Data without is Overhead, Case studies and practical examples of

data related: Retail Projects, Trade Area Modelling, Real Estate Site Selection Modelling, Competitor Threat Analytics, Merchandise Mix Modelling: Combining Multiple Data Sources, Celebrity Marketing: Tracking Effectiveness, House Brand Vs Name Brand, Affinity Merchandising: Merchandising Cross Cell Case Study, Store Departmental Cross Celling, Single category affinity Analysis (Paper Towels).

Unit 3: In-Store Marketing and Presentation

Understanding the different Store Designs, Old and New theories of Merchandise Placement, All about Pricing: Everyday Low Price, Loyalty Discount Philosophies, Tiered Pricing, Types and Size: Retail Store Strategies, Store in store, What's in Store: Convenience Store to Hyper-mart Stores, Warehouse Clubs, Shopping by Design: Traffic Patterns- Category Management, Merchandise Placement, Speciality Departments, Receiving Dock, Stocking the Counters, In-Store Media: Advertising or just displays? , Receipt Messages, In-Store Events, Holidays, Analytics: Tracking a Moving Tegets, Marketing Outside of Store.

Unit 4: Store Operations and RetailData

Setting up Store for Success Strategic uses of Data, Labour Forecasting, The Cost of doing Business, Consumer Differentiation at the point of sale Register, Heating and Cooling: Centralized Thermostats, Intra-store Communication, Replenishment and POS Sales (Cause and Effect), In-Store Career Path- (Stock Person to Store Manager).

Unit 5:Loyalty Marketing

Loyalty Programs, Total Programme Incentive, Consumer Finance Credit Card Retail Perspective, Loyalty Segments, Loyalty at POS, social Media.

Prescribed Books:

- 1. Retail Analytics The Secret Weapon, Emmett Cox
- 2. Business Analytics for Managers Wolfgang Jank Springer Science+Business Media, LLC 2011
- 3. Business Analytics in Retail For Dummies, ® 2ndIBM Limited Edition by Jennifer Le Claire, Danielle Dahlstrom, and Vivian Braun, John Wiley & Sons, Inc.
- 4. The Predictive Retailer, ANDREW PEARSON, Intelligencia Limited
- 5. Behavior Analytics in Retail, Ronny Max 6. The Little Book on Big Data: Understand Retail Analytics Through Use Cases and Optimize Your Business, MahoganyBeckford

- 1. Retail Survival of the Fittest 7 Ways to Future-Proof Your Retail Store. Francesca Nicasio
- 2. Data Analysis and Decision-Making S. Christian Albright. Wayne L. Winston 5thEdition Cengage Learning

COURSE CODE	MB306K
COURSE TITLE	ANALYTICS FOR BUSINESS FUNCTIONS
COURSE CREDITS	3

In this course, student will learn to identify, evaluate, and capture business analytic opportunities that create value. Toward this end, students will learn basic analytic methods and analyze case studies on organizations that successfully deployed these techniques. In the first part of the course, we focus on how to use data to develop insights and predictive capabilities using machine learning, data mining and forecasting techniques. In the second part, we focus on the use of optimization to support decision-making in the presence of a large number of alternatives and business constraints. Finally, throughout the course, we explore the challenges that can arise in implementing analytical approaches within an organization.

Course Objectives:

- 1. To build data models to analyse market potential, use historic data to quantify strategic milestones.
- 2. To conceptualise review mechanisms to measure performance against established objectives.
- 3. To exploit synergies between various departments to jointly contribute to organisational growth.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
306K.1	Understanding	Students will be able to INTERPRET data and justify their decisions.
306K.2	Applying	Students will be able to UTILIZE marketing analytics to measure brand and customer assets
306K.3	Evaluating	Students will be able to EVALUATE and optimize marketing campaigns as per market trend.
306K.4	Applying	Students will be able to make USE of marketing analytics to predict outcomes and systematically allocate resources.

Course Contents:

Unit 1: Measurement of Organisational Performance

Identifying key metrics, Contribution of each business function (e.g. Marketing, Finance, HR, Operations), Planning and forecasting, evaluating the performance of an organisation, Balanced Score Card.

Unit 2: Customer Analytics

Customer Acquisition Cost, Customer LifeTime Value (CLV/CLTV), Point of Sales (PoS) Data collection and collation, Market Basket Analysis, Product Affinities, Loyalty Programs, Digital Marketing, SEO vs SEM, Web Analytics.

Unit 3: Financial Analytics

Financial Modelling, Financial Portfolio Analysis and Risk Management, Planning and Budgeting, Fraud detection, Actuarial science, measuring Credit Score and establishing qualifier criteria, Loan Asset Management.

Unit 4: People Analytics

HR's value proposition, benchmarking of relevant success factors on the basis of individual Industry Standards, HR Policy definition process, measurement of compliance, implementing procedures and guidelines, assessment of employee satisfaction and retention.

Unit 5: Process Optimisation

Measuring throughput, establishing vital metrics for evaluating efficiencies, Business Process Re-engineering to improve efficiency, Cost Saving initiatives, reducing Time-to-Market, predict operational fault and failures, schedule Preventive Maintenance.

Prescribed Books:

- 1. R.S.N. Pillai, V. Bagavathi," Statistics", S. Chand Limited, 7th Ed, 2008.
- 2. N.D. Vohra, "Business Statistics", Tata McGraw-Hill Education, 2nd Ed, 2013.
- 3. G. V. Shenoy, Uma K. Srivastava, S. C. Sharma," Business Statistics", New Age International, 2nd Ed, 2005.
- 4. Beri,"Business Statistics"TataMcGraw Hill, 2nd Ed, 2009.

COURSE CODE	MB307K
COURSE TITLE	PERFORMING ANALYTICS WITH PYTHON
COURSE CREDITS	3

Learn how to analyze data using Python. This course will take you from the basics of Python to exploring many different types of data. You will learn how to prepare data for analysis, perform simple statistical analysis, create meaningful data visualizations, predict future trends from data, and more!

Course Objectives:

- 1. To become industry ready by building applications using the Python platform.
- 2. To learn the semantics of Python software and apply statistical models for Business Analytics.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
307K.1	Understanding	Students will be able to INTERPRET data behavior related
		to various Financial Transactions.
307K.2	Applying	Students will be able to DISCOVER the interplay of
		financial data during the various functions of Finance.
307K.3	Applying	Student can IMPLEMENT various Autoregressive Models.

Course Contents:

Unit 1: Introduction to Python environment

Python 2 and Python 3, Jupyter Notebooks, PyCharm IDE, navigation controls, input and output commands, understanding data types, data manipulation, summary calculations.

Unit 2: NumPy

Data creation, Arrays, indexing and slicing, concatenation and splitting, aggregates, broadcasting, sort, data structures.

Unit 3: Pandas

Data manipulation, Objects, Series, DataFrames, handling missing data, combining data sets (concat, append, merge, join), Pivot Tables, Vectorised String Operations, Time Series.

Unit 4: MatPlotLib

Data visualisation, setting Styles, Line Plots, Scatter Plots, Histograms, Customising plots, multiple plots.

Unit 5: SciPy

Linear algebra, optimisation, integration, statistics.

Prescribed Books:

- 1. Mastering Python for Data Science- Samir Madhavan.
- 2. Python for Data Analysis Andreas Muller and Sarah.
- 3. Introduction to Device Studying with Python.
- 4. Think Stats: Probability and Statistics for Programmers.
- 5. Probabilistic Development and Bayesian Methods for Hackers.

6. Understanding Machine Learning: From Theory to Algorithms.



COURSE CODE	MB308K
COURSE TITLE	MACHINE LEARNING WITH R PROGRAMMING
COURSE CREDITS	3

This course will cover the basic algorithm that helps us to build and apply prediction functions with an emphasis on practical applications. Students, at the end of this training, will be technically competent in the basics and the fundamental concepts of Machine Learning.

Course Objectives:

- 1. To understand and practice big data analytics and machine learning approaches, which include the study of modern computing big data technologies and scaling up machine learning techniques focusing on industry applications.
- 2. Toconceptualize and summarize of big data and machine learning, trivial data versus big data, big data computing technologies, machine learning techniques, and scaling up machine learning approaches.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
308K.1	Understanding	Students will be able to UNDERSTAND, visualize, and perform statistical tests on HR data through a series of HR analytics case studies
308K.2	Evaluating	Students will be able to CRITICIZE and summarize data, present clear evidence of its findings, and tell engaging stories all through data graphics.

Course Contents:

Unit 1:Programming with R

R, CRAN, RStudio, Libraries, Data Sets, Objects and Operation, Basic Data Structures, Vectors, Arrays, Matrices, Lists, Data Frames, Built-in functions, User defined functions, controlling code flow.

Unit 2:Machine Learning Fundamentals

Steps of Machine Learning, Types of Machine Learning, examples from key industries (e.g. Retail, BFSI, Pharma, Travel and Hospitality), Logistic Regression.

Unit 3: Supervised Machine Learning

Classification, Linear Regression, K-Nearest Neighbours, Support Vector Machines (SVM), Classification and Regression Trees (CART).

Unit 4:Unsupervised Machine Learning

Clustering, Association Rule Learning, Apriori, K-means.

Unit 5:Case Studies in ML

Predicting Customer Shopping Trends, Recommendation Engines (e.g. online news, products on eCommerce portal, content on entertainment apps), Credit Risk Detection and Prediction, Social Media Analysis, Sentiment Analysis – Subjectivity, Sentiment Polarity, Opinion summarisation, Feature extraction.

Prescribed Books:

- 1. T. Hastie, R. Tibshirani, and J. Friedman. The Elements of Statistical Learning. Springer 2011.
- 2. Kevin P. Murphy. Machine Learning: A Probabilistic Perspective, MIT Press 2012.
- 3. Christopher M. Bishop. Pattern Recognition and Machine Learning, Springer 2007.
- 4. S. Haykin. Neural networks and learning machines. Pearson 2008.



COURSE CODE	MB309K
COURSE TITLE	DESCRIPTIVE ANALYTICS (USING TABLEAU)
COURSE CREDITS	3

Descriptive Analytics is the examination of data or content, usually manually performed, to answer the question "What happened?" (Or "What is happening?"), characterized by traditional business intelligence (BI) and visualizations such as pie charts, bar charts, line graphs, tables, or generated narratives.

Tableau is a data analytics and visualization tool used widely in the industry today. Tableau's ease of use comes from the fact that it has a drag and drop interface. This feature helps to perform tasks like sorting, comparing and analyzing, very easily and fast. Tableau is also compatible with multiple sources, including Excel, SQL Server, and cloud-based data repositories which makes it an excellent choice for Data Scientists.

Course Objectives:

- 1. To define Tableau terminology and show how to connect to data, Edit and save a data source.
- 2. To illustrate the use of the Tableau interface to effectively create powerful visualizations and charts.
- 3. To make use of descriptive statistical techniques to analyze data, parameters, and input controls to give users control over certain values.
- 4. To integrate data sources using data blending and Combine data from multiple tables in the same data source using joins. And to create basic calculations including basic arithmetic calculations, custom aggregations and ratios, date math, and quick table calculations.
- 5. To build spatial visualizations of non-geographic data by using advanced geographic mapping techniques and custom images and geocoding.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
309K.1	Remembering	To Define Tableau terminology and show how to connect
30711.1		to data, Edit and save a data source.
309K.2	Understanding	Describe various concepts and features related to
309K.2	Onderstanding	Descriptive Analytics and Tableau
		To make USEof descriptive statistical techniques to
309K.3	Applying	analyze data, parameters, and input controls to give users
		control over certain values.
		To integrate data sources using data blending and Combine
309K.4	Analysing	data from multiple tables in the same data source using
		joins
309K.5	Evaluating	To illustrate the use of the Tableau interface to effectively
		create powerful visualizations and charts.
309K.6	Creating	DESIGN a study that incorporates the key tools of Tableau
		used for Descriptive Analytics.

Course Outline:

Unit 1: Data Connections:

Tableau terminology, Tableau interface/paradigm, Create and save data connections, Create a live connection to a data source, Explain the differences between using live connections versus extracts, Create an extract, Save metadata properties in a .TDS, Modify data connections, Add a join, Add a blend, Add a union, Manage data properties, Rename a data field, Assign an alias to a data value, Assign a geographic role to a data field, Change data type for a data field (number, date, string, boolean, etc.), Change default properties for a data field (number format, aggregation, color, date format, etc.)

Unit 2: Organizing and Simplifying Data:

Organize data and apply filters, Filter data, Sort data, Build groups, Build hierarchies, Build sets, Add a filter to the view, Add a context filter, Add a date filter, Apply analytics to a worksheet, Add a manual or a computed sort, Add a reference line or trend line, Use a table calculation.

Unit 3: Field & Chart Types:

Discrete v. continuous, Measure Names and Measure Values, Generated Fields, Use bins and histograms, Heat maps, Tree maps, Bullet graphs, bar chart, line chart, stacked bar, Combined Axis Charts, Dual Axis Charts, Scatter Plots, Data Highlighter, Cross tabs, Motion charts, Bar in bar charts, Box plots, Gantt Bar Charts, Paretos, Sparklines, geocoding, spatial visualizations of non-geographic data, Using titles, captions and tooltips, Editing axes, Mark labels and annotations.

Unit 4: Calculations:

Manipulating string and date calculations, Create quick table calculations, Use LOD calculations; types of LOD calculations, Use Ad-hoc calculations, Work with aggregation options, Build logic statements, Build arithmetic calculations, Build grand totals and sub-totals, Use calculations in join clauses, Create a calculated field (e.g. string, date, simple arithmetic), Add a parameter.

Unit 5: Sharing Insights:

Format view for presentation, Use color, Use bolding, Use shapes, Change size of marks, Select fonts, Create and modify a dashboard, Create a dashboard layout, Add interactive or explanatory elements, Add dashboard actions, Modify existing dashboard layout for mobile devices, Create a story using dashboards or views, Share a twbx as a PDF, Share a twbx as an image.

Prescribed Books:

- 1. Mastering Tableau, David Baldwin.
- 2. Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations, Ben Jones.
- 3. Learning Tableau, Joshua N. Milligan.
- 4. Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master, Ryan Sleeper.

Suggested Reading:

- 1. Information Dashboard Design: Displaying Data for At-a-glance Monitoring by Stephen Few.
- 2. Beautiful Visualization, Looking at Data Through the Eyes of Experts by Julie Steele, Noah Iliinsky.
- 3. The Accidental Analyst: Show Your Data Who's Boss by Eileen and Stephen McDaniel.

4. The Visual Display of Quantitative Information by Edward R.Tufte.



COURSE CODE	MB310
COURSE TITLE	INTRODUCTION TO CYBER SECURITY
COURSE CREDITS	1

Introduction to Cyber Security was designed to help studentss develop a deeper understanding of modern information and system protection technology and methods. The learning outcome is simple: We hope studentss will develop a lifelong passion and appreciation for cyber security, which we are certain will help in future endeavors. Students, developers, managers, engineers, and even private citizens will benefit from this learning experience. Special customized interviews with industry partners were included to help connect the cyber security concepts to live business experiences.

Course Objectives:

- 1. To give basic understandingabout system security.
- 2. To understand the salient facets of information security basics and the basics of risk management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		Students will be able to UNDERSTAND the concepts
310.1	Understanding	related to network and system level security, basics of
310.1		computers and networking including Internet Protocol,
		routing, Domain Name Service, and network devices.
		Students will be able to EXTEND the knowledge of basic
310.2	Applying	cryptography, security management, and network security
		techniques.
		Students will be able to look at policies as a tool to
310.3	Applying	effectively change an organization's culture towards a
		better secure environment.
310.4	Evaluating	Students will be able to EXAMINE security system at
	Evaluating	conceptual level.

Course Contents:

Unit 1: Overview of Networking Concepts

Basics of Communication Systems, Transmission Media, Topology and Types of Networks, TCP/IP Protocol Stacks, Wireless Networks, Internet.

Unit 2: Information Security Concepts

Information Security Overview, Background and Current Scenario, Types of Attacks, Goals for Security, E-commerce Security, Computer Forensics, steganography.

Unit 3: Security Threats and Vulnerabilities

Overview of Security threats, Weak / Strong Passwords and Password Cracking, Insecure Network connections, Malicious Code, Programming Bugs, Cyber crime and Cyber terrorism, Information Warfare and Surveillance.

Unit 4: Cryptography / Encryption

Introduction to Cryptography / Encryption, Digital Signatures, Public Key infrastructure, Applications of Cryptography, Tools and techniques of Cryptography, Security Management.

Unit 5: Security Management Practices

Overview of Security Management, Information Classification Process, Security Policy, Risk Management, Security Procedures and Guidelines, Business Continuity and Disaster Recovery, Ethics and Best Practice, Security Laws and International Standards, Security Audit.

Prescribed Books:

- 1. Behrouze A Forouzan, Cryptography and Network Security, McGraw Hill Publishers.
- 2. William Stalling, Cryptography and Network Security: Principles and practices, 4th ed, Prentice Hall Publishers

COURSE CODE	MB311
COURSE TITLE	SUMMER INTERNSHIP PROJECT (SIP)
COURSE CREDITS	6

The Internship aims to offer students the opportunity to apply their knowledge in real-life environments through an industry placement for eight-weeks. It is expected that the skills students will gain from working with an organization will help them perform better on their jobs after graduation. In addition, the Internship greatly increases the chances for students to obtain full time employment after graduation

Course Objectives:

- 1. To expose the student to the environment and expectations of performance on the part of accountants in professional accounting practice, private/public companies or government entities.
- 2. To get hands-on experience about real world problems in a field relevant to their major of studies.
- 3. To acquire confidence for employment after graduation.
- 4. To acquire skills important for time management, discipline, selflearning, effective communication and so on.
- 5. To learn practically about team-work, collaboration, and leadership.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
311.1	Applying	Students will acquire the ability to make links across different areas of knowledge and to generate, DEVELOP and evaluate ideas and information so as to apply these skills to the project task.
311.2	Applying	Students will ACQUIRE the skills to communicate effectively and to present ideas clearly and coherently to specific audience in both the written and oral forms.
311.3	Evaluating	Students will be able to learn on their own, REFLECT on their learning and take appropriate actions to improve it.

Course Contents:

At the end of Second Semester each student shall undertake Summer Internship Project (SIP) for a minimum of 60 days / 08 weeks. SIP shall have 6 credits. It is mandatory for the student to seek advance written approval from the faculty guide and the Director of the Institute about the topic and organization before commencing the SIP.

The SIP may or may not have a Functional Focus, i.e. the student may take up a SIP in his/her intended area of specialization or in any other functional area of management. Ideally the SIP should exhibit a cross-functional orientation. SIP can be carried out in a Corporate Entity / NGO / SME / Government Undertaking / Cooperative Sector. SIP may be a research project — based on primary / secondary data or may be an operational assignment involving working by the student on a given task/assignment/project/ etc. in an organization / industry. It is expected

that the SIP shall sensitize the students to the demands of the workplace.

Each student shall maintain SIP Progress Diary detailing the work carried out and the progress achieved on a daily basis. The student shall submit a written structured SIP report based on work done during this period. The student shall submit the SIP Progress Diary along with the SIP Report.

Students shall also seek a formal evaluation of their SIP from the company guide. The formal evaluation by the company guide shall comment on the nature and quantum of work undertaken by the student, the effectiveness and overall professionalism. The learning outcomes of the SIP and utility of the SIP to the host organization must be specifically highlighted in the formal evaluation by the company guide . The SIP evaluation sheet duly signed and stamped by the industry guide shall be included in the final SIP report.

The SIP report must reflect 60 days/08 weeks of work and justify the same. The SIP report should be well documented and supported by –

- 1. Institute's Certificate
- 2. Certificate by the Company
- 3. Formal feedback from the company guide
- 4. Executive Summary
- 5. Organization profile
- 6. Contents of the problem/task undertaken
- 7. Research methodology & data analysis (in case of research projects only)
- 8. Relevant activity charts, tables, graphs, diagrams, AV material, etc.
- 9. Learning of the student through the project
- 10. Contribution to the host organization
- 11. References in appropriate referencing styles. (APA, MLA, Harvard, Chicago Style etc.)

The completion of the SIP shall be certified by the respective Faculty Guide & approved by the Direc tor of the Institute. The external organization (Corporate / NGO/ SME/ Government Entity/ Cooperative/ etc.) shall also certify the SIP work.

The students shall submit a spiral bound copy of the SIP report. The Institute shall conduct an internal viva-voce for evaluation of the SIP. The Panel shall comprise of two evaluators appointed by the Director of the Institute / Head of Department (for MBA departments in engineering colleges). Institutes are encouraged to involve senior alumni, industry experts, recruiters to conduct the internal viva-voce. The internal viva-voce panel shall provide a detailed assessment of the SIP report and suggest changes required, if any.

After the internal viva-voce, the student shall finalize the SIP report by incorporating all the suggestions and recommendations of the internal viva-voce panel. The internal guide shall then issue the Institute's Certificate to the student.

The student shall submit TWO hard copies and one soft copy (CD) of the project report Sem III. One hard copy of the SIP report is to be returned to the student by the Institute after the External Viva -Voce. In the interest of environmental considerations, students are encouraged to print their project reports on both faces of the paper. Only black bound copies are accepted.

There shall be an external viva-voce for the SIP. The external viva -voce shall be conducted after the theory exam of Semester III.

The Internal & the External viva -voce shall evaluate the SIP based on:

- 1. Adequacy of work undertaken by the student
- 2. Application of concepts learned in Sem I and II
- 3. Understanding of the organization and business environment
- 4. Analytical capabilities
- 5. Technical Writing & Documentation Skills
- 6. Outcome of the project sense of purpose
- 7. Utility of the project to the organization
- 8. Variety and relevance of learning experience

Course Duration: 60 days/08 weeks

GLOBAL BUSINESS SCHOOL AND RESEARCH CENTRE DR. D. Y. PATIL VIDYAPEETH, PUNE

(Re-accredited by NAAC with ACGPA of 3.62 on four point scale at 'A' grade)
An ISO 9001:2015 Certified University

Name of the Programme: MBA

Name of Semester: SEMESTER IV

MARKETING MANAGEMENT SPECIALIZATION

COURSE CODE	MB401A
COURSE TITLE	CASES IN MANAGEMENT (MARKETING)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyze source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		REMEMBER the Universal facts, observations, concepts,
401A.1	Remembering	patterns, structure, setting and psychological aspects of
		Marketing Management.
401A.2	Understanding	UNDERSTAND the facts and figures which is mentioned
401A.2	Understanding	in the case study.
401A.3	Applying	APPLY the general principles of Marketing to establish
401A.3	Applying	relationships to specific decision-making situation.
401 A 4	401A.4 Analysing	ANALYSE the customer, competitor, market, and external
401A.4		environment with respect to given case study.
401 A 5	401A.5 Evaluating	EVALUATE the feasibility of the given solutions on the
401A.3		basis of internal and external environmental factors.
401A.6	Creating	CONSTRUCT a case on anyone of the Marketing concepts
401A.0	Creating	or Scenario.

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of

CASES IN MANAGEMENT (MARKETING)

- 1. Five cases to be discussed analyzed and presented from the following topics
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Segmentation & Target Marketing
 - 2. New product development
 - 3. Sales and Distribution
 - 4. Advertising & Brand promotion
 - 5. Marketing Consultancy Services
 - 6. Consumer Behavior
 - 7. Integrated Marketing Communication
 - 8. Services Marketing
 - 9. Marketing Research
 - 10. Marketing Plan, Marketing Mix

COURSE CODE	MB402A	
COURSE TITLE	SERVICES MARKETING	
COURSE CREDITS	3	

This course examines the important and growing role services marketing plays in consumer and organizational target markets. Discussing current issues in services marketing and customer service strategies, this course focuses on effective customer relationship management; key service delivery elements; and service recovery strategies that lead to the successful implementation of a customer focus in service-basedbusinesses.

Course Objectives:

- 1. To provide an in-depth appreciation and understanding of the unique challenges inherent in managing and delivering quality services. Participants will be introduced to and have the opportunity to work with tools and strategies that address these challenges.
- 2. To explain the unique challenges of services marketing, including the elements of product, price, place, promotion, processes, physical evidence, and people.
- 3. To describe how customer relationship marketing (CRM), including retention strategies, creates an environment that achieves excellence in customer service.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402A.1	Evaluating	Students will be able to OUTLINE the challenges facing the services marketing in traditional commercial marketing,
		e-marketing and non-commercial environments.
402A.2	Remembering	Students will be able to IDENTIFY the difference between marketing physical products and intangible services, including dealing with the extended services marketing mix, and the four unique traits of services marketing.
402A.3	Creating	Students will be able to DEVELOP professional business writing skills.
402A.4	Analyzing	Students will be able to ANALYSE the nature and scope of services marketing and present about this in a professional and engaging manner.
402A.5	Evaluating	Students will be able to contruct a theoretical and practical basis for ASSESSING service performance using company examples and report on this in a professional, logical and coherent way.
402A.6	Remembering	Students will be able to IDENTIFY and discuss characteristics and challenges of managing service firms in the modern world including cultural implications.

Course Contents:

Unit 1: Introduction

Difference between product and services marketing; Characteristics of services; Classification of

services; Paradigms in services marketing. Service marketing system: Service quality; Understanding customer expectations and zone of tolerance; Segmentation and zone of tolerance; Targeting and positioning of service. Role of Services in Economy.

Unit 2: Services Marketing Mix:

Augmented marketing mix; Developing the service product/intangible product; Service product planning; Service pricing strategy; Services promotions; Services distributions. Physical evidence: Role of communication in service marketing; People and internal communication; Process of operations and delivery of services; Role of technology in services marketing.

Unit 3: Service Quality

Quality Issues and Quality Models (Gaps model, SERVQUAL); Demand-supply Management. Services failure, service recovery, Customer retention, Customer Relationship management, designing of service strategy.

Unit 4: Marketing of Services in Practice - Tourism Services Marketing, Marketing of Transportation & Logistics Management, Marketing of Financial Services, Marketing of Communication Services, Media & Advertising Service Marketing, Marketing of Healthcare Services, Marketing of Consultancy Services, Marketing of Retail Services, Educational Services, Marketing of Public Services.

Unit 5: Services in global perspective: International marketing of services; recent trends; Principal driving force in global marketing of services. Key decisions in global marketing; Services strategy and organizing for global marketing.

Prescribed Books:

- 1. Services Marketing Zeithaml, Bitner, Gremler and Pandit, TMGH, 4thed.
- 2. Services Marketing Christopher Lovelock.
- 3. Services Marketing Rampal and Gupta.
- 4. Essence of Services Marketing Ardian Payne.



COURSE CODE	MB403A	
COURSE TITLE	B2B MARKETING	
COURSE CREDITS	3	

Business-to-business (B2B) refers to a situation where one business makes a commercial transaction with another. This Course typically covers how a business is sourcing materials for their production process.

Course Objectives:

- 1. To study industrial or business to business marketing concepts and strategyinvolved in the planning, conception, promotion, distribution and sale of productsfrom one business firm or organization to another.
- 2. To understand the ideas and reasoning that underlie these concepts, to be measured by performance on examinations.
- 3. To demonstrate preparation for entry into a career in industrial marketing, to be measured by overall performance in meeting the courses requirements.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403A.1	Understanding	Students will be able to OUTLINE the challenges facing
		the services marketing in traditional commercial marketing,
		e-marketing and non-commercial environments.
		Students will be able to IDENTIFY the difference between
403A.2	Remembering	marketing physical products and intangible services,
403A.2	Remembering	including dealing with the extended services marketing
		mix, and the four unique traits of services marketing.
403A.3	Createing	Students will be able to CREATE professional business
403A.3	Createing	writing skills.
		Students will be able to ANALYSE the nature and scope of
403A.4	Analyszing	services marketing and present about this in a professional
		and engaging manner.
		Students will be able to DEVELOP a theoretical and
403A.5	Creating	practical basis for assessing service performance using
403A.3		company examples and report on this in a professional,
		logical and coherent way.
	7	Students will be able to IDENTIFY and discuss
403A.6	Remembering	characteristics and challenges of managing service firms in
		the modern world including cultural implications.

Course Contents:

Unit 1: Nature of B2B Marketing

B2B Marketing Vs. Consumer Marketing Relational approach to B2B Marketing- The Nature of Industrial Demand and Industrial Customer, Major Equipment; Accessory Equipment; Raw and Processed Materials; Component Parts and Sub- Assemblies; Operating Supplies; Standardized

and Non-standardized parts, Industrial services.

Unit 2: Factors influencing Organizational Buying

Buying Roles; Organizational Buying Decision Process; Environmental and organizational Influences, Buying Roles; The Buy Grid Model; The Organizational Buying Decision Process, Industrial Product Life Cycle –Industrial Product Mix determinants viz. Technology – competition – operating capacity – shift in location of customers – government controls – changes in level of businessactivity.

Unit 3: Channel Structure for Industrial Products

Geographical, size, operating characteristics – manufacturers' and sales agents – Brokers - Channel Logistics.

Unit 4: Pricing for Industrial Products

Pricing Objectives - Price Decision Analysis - Breakeven analysis - net pricing - discount pricing - trade discounts - Geographic pricing - factory pricing - freight allowance pricing - Terms of Sale - Outright purchase - Hire-purchase - Leasing - Auctions-Documentation - bids - order placement - follow up - receipt and inspection.

Unit 5: Promotion for Industrial products

Supporting salesman – Motivating distributors – Stimulating primary demand – Sales appeal – Publicity and sponsorships – Trade shows – exhibits – Catalogs – Samples – promotional letters – Promotional novelties.

Prescribed Books:

- 1. Industrial Marketing Hill, Alexander, Cross.
- 2. Industrial Marketing –Hawaldar.

Additional Reading:

- 1. Industrial Marketing Analysis, Planning and Control Reeder, Brierty, Reeder.
- 2. Industrial Marketing P. K.Ghosh.



COURSE CODE	MB404A
COURSE TITLE	RETAIL MANAGEMENT
COURSE CREDITS	3

This course examines the important and growing role retali marketing plays in consumer and organizational target markets. The emerging issues in retail marketing and customer service strategies are incorporated in the course.

Course Objectives:

- 1. To describe how technology (e.g. customer databases, integrated systems, and buying and sales forecasting systems) is used to support retail businesses.
- 2. To evaluate the effectiveness of merchandising decisions in the retail industry.
- 3. To explain the factors relating to visual merchandising, such as store layouts and presentation.
- 4. To describe the flow of goods and services in a retail environment (e.g. inventorycontrol, supply chain, and risk management).

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404A.1	Remembering	Students will be able to DEFINE the concept of retailing.
		Students will be able to UNDERSTAND the ways that
404A.2	Understanding	retailers use marketing tools and techniques to interact with
		their customers.
404A.3	Remembering	Students will be able to IDENTIFY the strategies that are
404A.3	404A.3 Remembering	used within the different stages of a product life cycle.
		Students will be able to ANALYZE how logistics and
404A.4	Analyzing	supply chain management achieve a sustainable
		competitive advantage.
		Students will be able to EVALUATE the impact of laws
404A.5	Evaluating	and regulations pertaining to the role and responsibilities of
		a retail Manager.
		Students will be able to CONSTRUCT strategic plan for a
404A.6	Creating	business, including financial strategy and financial
		performance measures.

Course Contents:

Unit 1: Introduction to the world of retailing

Meaning of retailing, Social and Economic significance of retailing, Opportunities in retailing, Types of retailers, Theory of retailing: Wheel of retailing, the Accordian, Emerging trends in retailing, The retail scenario in India, Multichannel Retailing, customer buying behaviour.

Unit 2: Retailing Strategy

Retail Strategy: Definition, Building a sustainable competitive advantage, Growth strategies, Retail locations, Retail site location, Retail organization and HRM, Gaining competitive advantage through CRM, Retail communication mix: Methods of communicating with customers.

Unit 3: E-Tailing

Introduction, Features of e-tailing, Advantages and Disadvantages, Scope of e-tailing, Growth drivers to e-tailing, E-Tailing strategies, Retailing V/s E-Tailing.

Unit 4: Merchandise and Store Management

Merchandise management process, Sales forecasting, developing an assortment plan, store management: Responsibilities, store layout and design, space management, visual merchandising.

Unit 5: Customer Service and Supply Chain Management

Customer service strategies, Gap Model: standard and delivery, service recovery, Supply Chain Management and information system.

Prescribed Books:

- 1. Retailing Management SwapnaPradhan.
- 2. Retail Management GibsonVedamani.
- 3. Physical Distribution and Logistics Management Dr. SubhashBhave
- 4. Channel Management and Retail Management MeenalDhotre.

COURSE CODE	MB405A
COURSE TITLE	INTERNATIONAL MARKETING
COURSE CREDITS	3

International marketing is adopted by majority of brands now so it becomes essential for managers to understand it. International marketing is the export, franchising, joint venture or full direct entry of a marketing organization into another country. This can be achieved by exporting a company's product into another location, entry through a joint venture with another firm in the target country, or foreign direct investment into the target country.

Course Objectives:

- 1. To understand the fundamentals of International Marketing.
- 2. To bring countries closer for trading purpose and to encourage large scale free trade among the countries of the world.
- 3. To bring integration of economies of different countries and thereby to facilitate the process of globalization of trade.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405A.1	405A.1 Remembering	DESCRIBE the major theories, concepts, terms, models,
403A.1	Remembering	frameworks are adopted by majority of brands.
405A.2	Understanding	EXPLAIN the implications of International Marketing by
403A.2	Onderstanding	understanding the fundamentals
405A.3	405 A 2 Applying	MAKE USE OF the Theories and Frameworks to bring
403A.3	Applying	countries closer for trading purpose
405 A 4	05A.4 Analysing	INTEGRATING Models to encourage large scale free
403A.4		trade among the countries of the world.
405A.5	Evaluating	FORMULATE approaches to bring integration of
403A.3	Evaluating	economies of different

Course Outline:

Unit 1: International Marketing

Meaning, Definition, Scope and Significance of International Marketing, The importance of international marketing, Differences between international and domestic marketing International environment, International Social & culture Environment, the political legal environment and regulatory environment of international marketing. Globalization, Internationalization, International Marketing Issues.

Unit 2: International Market Entry Strategies

Indirect Exporting, Domestic Purchasing, Direct Exporting, Foreign Manufacturing Strategies without Direct Investment, Foreign Manufacturing Strategies with Direct Investment. Entry Strategies of Indian Firms.

Unit 3:International product management

International product positioning, Product saturation Levels in global Market, International product life cycle, Geographic Expansion–Strategic Alternatives. New products in Intentional Marketing, Product and culture, brands in International Market.

Unit 4:International Marketing Channels

Channels –Distribution Structures, Distribution Patterns, Factors effecting Choice of Channels, the Challenges in Managing an international Distribution Strategy Selecting Foreign Country Market intermediaries. The management of physical distribution of goods, Advertising and Branding, Grey Market goods.

Unit 5:Developing Global Marketing Strategy

Benefits of global marketing, planning for global markets, the planning process, Obtaining export credit insurance, Golden rules for successful Exporting, Export Marketing: Introduction to Export Marketing, Export Policy Decisions of a firm, ECGC – Insurance policies and Financial Guarantees, Rules for successful exporting, EXIM Bank.

Prescribed Books:

- 1. International Marketing Analysis and Strategy, Sak Onkvisit, John J. Shaw, PHI.
- 2. International Marketing, Michael R.Czinkota, Likka A Ronkainen, Cengage.
- 3. Global marketing Management, Keegan, Green, 4/e, Pearson.

Suggested Readings:

- 1. International Financial Management by Thummulur; Siddiah.
- 2. International Financial Management by Madhu Vij --- excelbooks.
- 3. International Finance and Trade ICFAI publication –2volumes.



COURSE CODE	MB406A	
COURSE TITLE	STRATEGIC MARKETING	
COURSE CREDITS	3	

This course is designed to provide exposure to students pertaining nature and scope of strategy in marketing department. The purpose of the course is to understand and implement various strategic tools and techniques which can be useful in marketing.

Course Objectives:

- 1. To create awareness about strategic marketing tools & techniques among students.
- 2. To make students aware about implementation of strategy in real marketing scenario.
- 3. To make the students aware about strategy evaluation with real life cases.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406A.1	Remembering	REMEMBER various basic concepts of strategic marketing
406A.2	Understanding	UNDERSTAND the environmental analysis process.
406A.3	Analysing	ANALYZE the competitiveness in industry and factors affecting strategy formulation
406A.4	Applying	APPLY strategic marketing processes in real life scenarios
406A.5	Evaluating	EVALUATE the implemented strategy and to get control on process.

Course Outline:

Unit 1: Basics of Strategy

Strategy definition - concept of strategic marketing management & its objectives - vision, mission, objectives and goals of business and its relationship with strategic marketing management – impact of 4P's on strategic marketing.

Unit 2: Environment Analysis

Concept of environment – components of environment – environment scanning & appraisal – organizational appraisal – strategic advantage analysis - SWOT Analysis Strategic marketing overview - Global meltdown and India evolving - changing rules of marketing - competitive advantage - Corporate strategy vs. Marketing strategy.

Unit 3: Marketing Strategy Formulation

Industry analysis – competitor analysis – GAP Analysis – Porter's 5 forces Model of competition, BCG Matrix, GE 9 Cell Model, McKinsey's 7S framework – SPACE matrix – distinctive competitiveness – strategic choice – factors affecting strategic choice – cost, differentiation, leadership, value chain, bench marking.

New product development strategies - planned or unplanned strategy withdrawals - contingency/alternative strategic planning - brand Strategies in FMCG markets - rural & export

marketing strategies - marketing strategies for IT and ITES industries.

Unit 4: Strategic Marketing Implementation

Marketing strategy and customer analysis – consumer behavior – customer adoption process – classification and grouping of buyers – market segmentation – customer motivation – positioning – developing and testing brands – industry trends and global competition – technological revolution and strategic marketing – internet and strategic marketing, Implementation of marketing strategies in different business sectors – FMCG, Industrial & Services - constraints in marketing strategy implementation.

Unit 5: Marketing Strategy Evaluation

Marketing control process – types of marketing control - marketing audits & its scope – measurement of marketing performance – importance of evaluation and feedback.

Prescribed Books:

- 1. Strategic Management: Text and Cases S. Shajahan, Viva Books.
- 2. Strategic Marketing Management: Text & Cases U.C. Mathur, Macmillan Publication.
- 3. Marketing Strategy, TMH Ed. Boyd Walker, Mullins Larrech.

Suggested Readings:

- 1. Business Policy & Strategic Management Azar Kazmi.
- 2. Strategic Marketing A. Nag, Macmillan Publication.

COURSE CODE	MB407A
COURSE TITLE	MARKETING OF FINANCIAL SERVICES
COURSE CREDITS	3

This course is to introduce students to the marketing of financial services. All financial institutions, including consumer banks and corporate finance services, practice some form of marketing. Some firms market themselves better than others, as evidenced in the competitive value of their brands. This course will demonstrate to students the benefits of using an analytical approach to marketing in the financial services industry, and will show students how to undertake that analysis

Course Objectives:

- 1. To understand the fundamentals of marketing for financial services
- 2. To evaluate how marketing contributes to success in modern financial institutions
- 3. To know the strategies of marketing the financial products and services to target markets.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
	Remembering	DESCRIBE the major concepts of marketing, Service
407A.1	Kemembering	Industry, Financial Services, Segmentation, Pricing
		Strategy, Target Market.
407A.2	Understanding	EXPLAIN the Marketing Mix with respect to Financial
		Services.
407A.3	Applying	MAKE USE OF Advertising and Communications Tools
40/A.3	Applying	to create the awareness regarding Financial Services.
407A.4	Analysing	ANALYSE the role of Integrated Marketing approach to
		Market the Financial Services.
407A.5	Creating	FORMULATE the Marketing Strategy for New Products
40/A.5		of Banks and Financial Institutions.

Course Outline:

Unit 1: Marketing of Financial Services

Definition of marketing; four pillars of marketing (customer orientation, profit, total company effort, social responsibility);Introduction to Service Industry, Financial Services Industry overview selling versus marketing Segmentation – Concept, basis, strategies; Target market selection and market positioning strategies Pricing Strategy - Role of price in marketing of financial services; pricing strategies; pricing decisions.

Unit 2: Marketing Mix for Financial Services

7 Ps - Product, People, Process, Promotion, Price, Place and Physical evidence (Case study discussions on Marketing mix for banks, insurance companies, mutual funds, stock broking

firms).

Unit 3: Advertising and Communication

The Roles of Advertising- Advertising Channels- Promotions- Publicity- The Contribution of Advertising and Communications to Marketing Programmes of Financial Institutions. Branch Location and Distribution: • Introduction- Means of Distributing Financial Services- Locating Bank Branches- New Technology and Branching- Creating the Branch Image.

Unit 4: Relationship Marketing

Introduction to Relationship Marketing, Transactional Marketing Vs Relationship Marketing, Reasons for Relationship Marketing, Characteristics of Relationship Marketing- 5 E's, Three Types of Customers, Aims of Relationship Marketing, Lifetime Value of a Customer (LTV), Retention Strategies.

Unit 5: Marketing Strategies of Financial Institutions

Introduction- Corporate Planning- Formulating a Marketing Strategies for Banks and Financial Institutions, Implementing Marketing Strategy. Marketing Strategy of New Products. Marketing Research in Financial Institutions, The Role and Functions of Marketing Research in Financial Institutions, Applications of Marketing Research in Financial Institutions.

Prescribed Books:

- 1. Andrew, Kenneth. Bank Marketing Handbook.
- 2. Arthur, Mechian. Bank Marketing Management.

Suggested Readings:

https://lavdimhalimi.files.wordpress.com/2019/10/the-financial-services-marketing handbook.pdf

AGRI BUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	MB401B
COURSE TITLE	CASES IN MANAGEMENT(AGRIBUSINESS)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DESCRIBE the major concepts, terms, models,
401B.1	Remembering	frameworks and research findings in the field of
		Agribusiness
401B.2	Understanding	SUMMARIZE the impact of current trends in Agribusiness
		MAKE USE OF the Theories, Models, Principles and
401B.3	Applying	Frameworks of Agriculture in analysing the cases of
		agribusiness
401B.4	Analysing	ATTRIBUTING the Agribusiness Case with reference to
401D.4	Alialysing	Theories, Models, frameworks of Agriculture
401B.5	401B.5 Evaluating	TEST a given Case of Agribusiness with reference to the
401 D .3	Evaluating	Current Trends, Best Practices in Agribusiness
401B.6	Crooting	CONSTRUCT a Case on any one of the given
401 B .0	Creating	Agribusiness concepts or problem or scenario

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of

learning case studies.

CASES IN MANAGEMENT (AGRIBUSINESS)

- 1. Five cases to be discussed analyzed and presented from the following topics
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Doubling the Farmer's Income
 - 2. Woman Entrepreneur
 - 3. Impact of Rural entrepreneurship on migration
 - 4. Evolution of organic farming
 - 5. ICTs in Indian agriculture
 - 6. Innovation generating revenue for rural women
 - 7. Farming for ecosystem services
 - 8. Building a Climate-Resilient Value Chain
 - 9. Empowering Procurement Professionals toward Sustainable Procurement
 - 10. A Sustainable Supply Chain for Agribusiness

COURSE CODE	MB402B
COURSE TITLE	AGRICULTURAL ECONOMICS
COURSE CREDITS	3

Meaning of Agricultural Economics, Importance of Agriculture in Economy, various economic theories. It will focus on practical exposure of principles and theories in agri business management. This course will deal with the decision making in agri business, food processing w.r.t. economics.

Course Objectives:

- 1. To explain different concepts, theories, principles of agricultural economics.
- 2. To know about different cost concepts, cost sheet.
- 3. To orient students about cost calculations in agricultural activities including farming and agro industries.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402B.1	Remembering	TO IDENTIFY the nature, scope and economies of scale in
402D.1	Remembering	Agricultural Economics
402B.2	Understanding	TO DESCRIBE the Short-, Medium- and Long-Term
402D.2	Understanding	economic growth, cost concepts in agril economics
402B.3	Applying	TO IMPLEMENT Law of Diminishing Returns
402B.4	Analysing	TO ANALYSE Economic policies related to Seeds,
		Fertilizers, Pesticides, Irrigation, Credit Policy, Food
		Policy, Laws
402B.5	Evaluating	TO EVALUATE projects, policies, and regulations in
		financial market with reference to agril economics

Course Outline:

Unit 1: Nature and Importance of Agricultural Economics

Nature, Scope, Importance of agricultural economics, production process, economies of scale in production, agricultural production function, Micro and Macro Economics.

Unit 2: Economic growth and agricultural development

Short, Medium and Long Term growth, Development of Economics, Economic progress of developing countries, Economics Institutions and their role, functions etc.

Unit 3: Agricultural Cost Concepts

Different costs associated with economics, cost curves, meaning of cost sheet, cost sheet preparation and presentation, Law of Demand and Supply, Law of Diminishing Returns / Law of Equi Marginal Utility, Demand and Supply function.

Unit 4: Agri Business Management Economics

Economic Principles Applied to Financial Management of the Farm, Economic policies related to Seeds, Fertilizers, Pesticides, Irrigation, Credit Policy, Food Policy, Laws related to WTO / Farmers Rights Act / Farmer Bill, Agri Poverty Measurement and Suggestions, Project Planning and Costs associated with agricultural project.

Unit 5: Financial Economics

Basic difference between finance and economics, Introduction to share market, Concept of securities, stocks, bonds, Financial institutions in India, Derivatives analysis, regulations of financial markets.

Prescribed Books:

- 1. Bhalla, G. S. and Singh G., 2001, Indian Agriculture: Four Decades of Development, Sage Publications.
- 2. Dhondyal, S.P. "Farm Management -An Economic Analyst & quot; Friends Publications. Meerut.
- 3. Ghatak, S and K Ingersent (1984) Agriculture and Economic Development, Select Book Service Syndicate, New Delhi.
- 4. Ramaswami, Bharat ; Shamika Ravi And S.D. Chopra (2004), Risk Management, State of the Indian Farmer- A Millennium Study, Volume 22, Academic Foundation, New Delhi.

Suggested Readings:

- 1. Chandra, P. (2000), Financial Management, Tata McGraw Hill.
- 2. Chadha G. K. (2003), WTO and Indian Economy. Deep and Deep Publications.



COURSE CODE	MB403B
COURSE TITLE	FRAMEWORK OF ICT IN AGRI BUSINESS MANAGEMENT
COURSE CREDITS	3

Meaning of ICT in Agri Extension and Agri Business Management, Use of IoT in Agri Business Management, Different websites, Use of AI in agriculture.

Course Objectives:

- 1. To acquaint the students with scope of ICT in agriculture, networking and communication media.
- 2. To give knowledge about updated IT tools in Indian Agricultural System

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403B.1	Remembering	DEFINE Role of communications in ICT Concept,
403 D .1		elements & their characteristics of ICT
		SUMMARIZE the various models Farmer Call Centre,
403B.2	Understanding	SMS Broadcast Service, m-Krishi. ICT initiatives of NGOs
		and Private Companies
403B.3	Applying	IDENTIFY ICT initiatives by ICAR and SAUs, Value
4030.3		Added Services, Fisher Friend Project
		ANALYZE aAQUA, Digital Green, e-Agrik, e- Sagu,
403B.4	Analysing	Karshaka Information Systems Service and Networking,
		Solutions through Information etc
	,	EVALUATE Blog extension practices, voice enabled
403B.5	Evaluating	extension services, SWOT analysis of ICT based
		agriculture projects.

Course Outline:

Unit 1: Introduction & scope of ICT in Agriculture

Need for ICT in Agricultural Extension. National Policies on ICT in Agricultural Extension. Role of communications in ICT: Concept, elements & their characteristics. Message: meaning, dimensions of a message characteristics of a good message, message treatment and effectiveness, distortion of message. Methods of communication: meaning and function. Forms of communication. Role of Mass Media in dissemination of farm technology. Modern communication media: electronic video, tele text, teleconference, computer assisted instruction.

Unit 2: Telephone/Mobile Technology

Farmer Call Centre, SMS Broadcast Service, m-krishi. ICT initiatives of NGOs and Private Companies. ICT initiatives by ICAR and SAUs, Value Added Services, Fisher Friend Project, SMS Services to farmers by Department of Agriculture.

Unit 3: Practices of ICT for Agricultural Extension

aAQUA, Digital Green, e-Agrik (e- Agriculture), e- Sagu (e-cultivation), KISSAN (Karshaka Information Systems Service and Networking), Solutions through Information, VASAT-Virtual Academy for the Semi-Arid Tropics, Touch Screen Kiosk, e-Extension (e-Soil Health Card Program). Village.

Unit 4: Village Knowledge Centre (VRC/VRC/CIC)

Introduction, concept, process for setting VRC. Warana Wired Village Project, Web Portals: AGRISNET, DACNET, InDG, DEAL, i-KISAN, e- Krishi, ASHA, IFFCO- Agri-Portal, Agriwatch Portal, i-Shakti. ICTs for market information and Agri-Business: AGMARKNET, e-KRISHI VIPNAN, ICT-e-CHOPAL, EID Garry-Indiagriline.

Unit 5: Cloud Based Extension Approaches

Blog extension practices, voice enabled extension services, SWOT analysis of ICT based agriculture projects.

Prescribed Books:

- 1. G.L. Ray, 2006. Extension communication and management. Kalyani Publ.
- 2. A.S. Sandhu, 2004. Text book on Agricultural communication process and methods. Oxford &TBH.
- 3. R Saravanan, C Kathiresan & T Indra Devi, 2011. Information & communication technology for agriculture and rural development. New India Publ. Agency.
- 4. R Saravanan 2010. ICTs for agricultural extension, New India Publ. Agency.

Suggested Readings:

- 1. B Jirli, Deepak De & GCKendadamth 2005. Information and communication technology (ICT) and sustainable development, Ganga Kaveri Publ. House, Varanasi.
- 2. Shaik N Meera, 2008. ICTs in agricultural extension tactical to practical. Ganga Kaveri Publising House, Varanasi.

COURSE CODE	MB404B	
COURSE TITLE	RURAL CREDIT AND URBAN FINANCE FOR AGRICULTURE	
COURSE CREDITS	3	

There is an ever increasing need to invest in agriculture due to drastic rise in global population and changing dietary preference of the growing middle class in emerging market toward higher value agriculture product. In addition, climate risk increase the need for investments to make the agriculture resilient to such risk. Agriculture rural finance are strategically important for eradicating extreme povertyand boosting shared prosperity.

Course Objectives:

- 1. To appraise the students about details of activities those come under agriculture finance in general and procedure of rural credit to farmers/entrepreneurs/infrastructure development.
- 2. To explain the role of RBI, NABARD, Commercial Banks, Nationalized Banks, Cooperative Banks and Regional rural Banks in Rural Development in general and Agriculture in particular
- 3. To understand the classification of priority sector loans into agriculture, small scale industries and other priority sector loans and national targets there-under.
- 4. To explain the concept of technical feasibility, economic viability and bankability of agriculture projects as also balance sheet study etc.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to EXPLAIN how access to
		financial services can help the rural poor to improve and
404B.1	Remembering	secure their livelihoods, and critique both the concepts that
		underpin this understanding and the practicalities of
		interventions for improvements.
		The students will be able to DESCRIBE, compare and
404B.2	Remembering	critically appraise different types of intervention that have
		attempted to provide rural finance in the past and today.
		The students will be able to IDENTIFY needs and develop
404B.3	Understanding	appropriate policies and interventions for the provision of
		rural finance depending on the particular needs identified.

Course Contents:

Unit 1: Agriculture Finance

Definition and concept of agri finance, various activities under agri finance, Eligibility of proponents, Kisan Credit Card Scheme, Role of Banking in Rural Development with respect to District Credit Plans(DCP), Branch Expansion procedure, Banks Nationalization, Lead Bank Scheme, Priority Sector Lending, poverty alleviation and employment generation.

Unit 2: Agri Finance Institutions

RBI, NABARD, Commercial Banks, Nationalized Banks, Cooperative Banks and Regional rural Banks and State Finance Corporations, Agriculture Loans- Assessment of credit needs, short term loans, medium term loans, long term loans.

Unit 3: Agriculture Activities

Eligibility for credit-crop production, land development, minor irrigation, farm mechanization and implements/equipment, dairy and poultry development, plantation and horticulture cropsPisciculture development, Financing Hi-tech Agricultural projects.

Unit 4: Other Agri related activities

Finance against storage receipts, Bio-Gas plants, and construction of godowns, cold storagesMarket yards, Gold loan scheme, Financing SF/M/F for acquiring shares, Microfinance to self Help groups, Financial Inclusion, Documents required for microfinance.

Unit 5: Banking Norms

Proposal Forms, Margin/security norms, Interest rates, Relief measures to the victims in areas affected by natural calamities, Security documents, Loan Repayment, over dues, Non-Performing Assets, etc., NABARD Refinance, Problems in Rural Credit System, Documents required for banking.

- 1. Rural Development in India by Vasant Desai (PP313-401).
- 2. Bank Financing and Agriculture Development by M. H. Ansari (PP57-189).
- 3. Agricultural Risk Management- Challenges and Strategies by BVS Prasad and SuchitraMohanty (PP 69-74).
- 4. Role of Agriculture in Indian Economy by N.K. Sharma and Sarita Sharma (pp55-60).
- 5. Agriculture and rural development by B. Mohanty (pp250-275).
- 6. Handbook for financing Agriculture by Bank of India.



COURSE CODE	MB405B
COURSE TITLE	PROCUREMENT AND WAREHOUSE MANAGEMENT
COURSE CREDITS	3

Among various pain areas of agriculture in India are insufficient infrastructure and knowhow of warehousing, logistics and related aspects. It also becomes opportunity for next growth of agriculture industry in India. This course gives necessary insight into the details of procurement practices, warehousing processes and technology associated with it and the details of various transportation options available.

Course Objectives:

- 1. To understand the concepts and importance of agricultural procurement and warehousing.
- 2. Co correlate the concept of logistics as a bridge between procurement and warehousing.
- 3. To apply modern day technological advancements in the field of logistics and warehousing.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405B.1	Remembering	The students will be able to DEFINE the concepts and
403 D .1	Kemembering	importance of agricultural procurement and warehousing
		The students will be able to COMPARE & contrast the
405B.2	Analyzing	concept of logistics as a bridge between procurement and
		warehousing.
		The students will be able to DEMONSTRATE modern day
405B.3	Applying	technological advancements in the field of logistics and
		warehousing.

Course Contents:

Unit 1: Introduction, Overview, Materials and Parameters

Stages and varying storage needs, Quantity, Properties, Availability, Consumption, Safety and PHM.

Unit 2: Availability, Consumption, Storage Needs and Finance Related to Procurement

Regional crops and use around year, Preservation, Toensure availability when needed, Stocking for future needs- No crop season, Processing and packing, Finance availability and payments.

Unit 3: Warehousing

Pest control, Security and safety, Systems – LIFO, FIFO etc., Large Warehouses and auto handling – material handling equipment's, Arrangements/AMCs, SWC, FCI, CWC, APMC PvtWarehouses.

Unit 4: Inland and Overseas Transports

Modes of transportation, Large-solids, liquids (Mechanized), Locals and small.

Unit 5: Intervention and Role of Government

Agri inputs- Seeds, fertilizers, power, water etc., Implements, Modern tech trainings, Harvested crops, Food safety, Self-dependence /Sufficient, Imports and Exports and ts Regulation.

- 1. Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern warehouse, 2nd edition.
- World- Class warehousing and material handling 1st edition By Edward Frazelle.
 Transportation: A Global Supply Chain Perspective, 8th Edition.
- 4. Facilities Planning 4th Edition.
- 5. Warehouse Management with SAP ERP (SAP WM).



COURSE CODE	MB406B
COURSE TITLE	MANAGEMENT OF AGRI COOPERATIVES
COURSE CREDITS	3

Cooperative businesses exist in a wide variety of sectors within the Indian economy, and represent a distinctive model for organizing labor, capital, and knowledge to produce goods and services. Studying cooperatives aids understanding of all aspects of industrial structure and business organization, and challenges conventional thinking about what it means for an economic system to be "capitalist". Fundamentally, cooperative firm represents a unique form of business ownership where "patrons", rather than financiers, are business owners.

Course Objectives:

- 1. To apply the principles of management to agriculture cooperatives and to provide in depth understanding about agriculture products and their marketing through cooperatives at different levels.
- 2. To emphasize need for cooperative marketing for major agricultural products and to know difference between rural marketing and cooperative marketing.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406B.1	Applying	The students will be able to PROPOSE rural organizations with the best possible solution.
406B.2	Analyzing	The students will be able to DETERMINE the difference between rural marketing and co-operative marketing and use co-operative marketing for distribution of agricultural products.
406B.3	Remembering	The students will be able to EXPLAIN the rationale for the appropriate role of cooperatives in a market economy

Course Contents:

Unit 1: Introduction to agriculture cooperatives

Principles of cooperation, Cooperative management, Need and features of cooperative management, rural marketing scenario, Factors for success of cooperative management, Objectives and special goals of co-operative management.

Unit 2: Management in cooperative marketing

Integration of principles of management and cooperation, advantages and disadvantages of cooperatives, Management in direct marketing, private sector marketing, public sector marketing and cooperative sector marketing, Comparison of principles of cooperation and management practices.

Unit 3: Functional areas of cooperative marketing

Functional areas of management as applied to cooperatives, broad cooperative laws, institutional net working for cooperatives, Management of Co-op Banks, marketing cooperatives and consumer cooperatives, Management of industrial and processing cooperatives, Management of

dairy Cooperatives, case studies in cooperatives, Role of agricultural cooperatives in rural marketing, Model Act-2003 for AgriCooperatives.

Unit 4: Issues in cooperative management

Managerial problems of Indian cooperatives, Democracy in cooperatives, Govrnment schemes and Interventions.

Unit 5: Structure of cooperatives

Board of Directors, its role and functions, General Body-mouth piece of cooperative management, How to judge operating efficiency of cooperatives.

- 1. Cooperative Management- Principles and Techniques by Dr. S. Nakkiran.
- 2. Rural marketing- Environment, problems and strategies by T. P. Gopalswamy.
- 3. The rural marketing book: by Pradeep Kashyap and S. Raut.
- 4. New prospects in rural and agriculture marketing by Ramkishen Y.
- 5. Cooperative movement in India (1904-2004) by Dr. V.V.Ghanekar.
- 6. Rural and Agricultural Marketing by Ramkishen Y.
- 7. Cooperative Agri-Business Management by A.N.Sarkar.
- 8. Indian Agriculture and Agri-Business Management by Dr. SmitaDiwase.
- 9. Journal of Agriculture Marketing, Directorate of Agri. Marketing, Ministry of Agriculture, Govt. of India, New Delhi.

COURSE CODE	MB407B
COURSE TITLE	AGRICULTURAL RISK MANAGEMENT AND CROP INSURANCE
COURSE CREDITS	3

Agriculture risk management course is of importance to Agri business students expecting to deal with business and professional lives in the future. Course focuses on what can be done at the farm, local area/community, and national levels to manage risks in agriculture. Basically, it purports to help students realize, understand, and master various state-of- the-art risk management and crop insurance and practices for their advancement in the future.

Course Objectives:

- 1. To provide an understanding and an appreciation of the principles and practices of risk management in order to enable production of the optimum strategy for the handling of risk in an organization.
- 2. To understand the various types of agriculture insurance available in the market.
- 3. To understand the nature of various on-farm tools relevant for farmers or communities to judge their suitability for a given area or farm situations.
- 4. To understand the latest technology in natural agricultural calamities management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407B.1 Remembering	Remembering	TO DESRIBE the Meaning, Concept and Importance,
40/B.1	Kemembering	Different types of hazards on field
407B.2	Understanding	TO UNDERSTAND the parameters of risk, framework of
407B.2	407B.2 Understanding	policies for hazards
407B.3	Applying	TO APPLY Crop insurance policies, risk minimizing
40/ D .3	Applying	factors in Agril Risk Management and Crop insurances
		TO ANALYSE Current practices and products in Agril
407B.4	Analysing	Insurance policies, Govt. interventions and goregin funding
		for risk management
		TO EVALUATE proposals, schemes, eligibility for crop
407B.5	Evaluating	insurance and TO EVALUATE current risk management
	hY	techniques

Course Outline:

Unit 1: Introduction to Agricultural Risk

Meaning, Concept and Importance, Different types of hazards to agriculture and Agri operations – Wind, Frost, Mist, Unusual rainfall, drought, Typology for Agri Risks, Farmer's or Grower's views on Risk.

Unit 2: Agri- Risk Management

Parameters of Market Risk, Distribution Risk, Transport Risk, Accidental policies, Financial Risk, Plantation Risk, Procedures to deal with Risk – Insurance, Financial Packages, Remedial measure, Different acts to overcome Risk, RBI / NABARD policies for Risk.

Unit 3: Agricultural Risk Factor

Factors affecting Risk, Risk pattern and its consequences, Agri Business Plan for Agri-Risk after understanding the factors, Factors act on Horticulture, Floriculture, Sericulture, Apiculture etc. from Marketing and Transportation point of view.

Unit 4: Crop Insurance

Insurance sector at a glance, Need, Importance of CI, Documentation and procedure for crop insurance, Claim process, Government interventions in CI.

Unit 5: Sources of Crop Insurance

Private sector financial firms, Nationalized bank's schemes for CI, Government initiatives towards different crop insurance in detail – Sugarcane, Mango, Banana, Flowers, Vegetables, Rice etc., Selection of Insurance, Evaluation of Insurance agencies.

Prescribed Books:

- 1. Agricultural Risk Management, J. Deviprasad, B. Gangaiah, K. Suman Chandra, B S Publication.
- 2. Crop Insurance in India: An Analysis, Narendra K. Rustagi, BR Publishing Corporation.
- 3. Rural Insurance Potential and Challenges, Ramchandran, Insurance World.
- 4. Report on Comprehensive Crop Insurance Scheme 1985-95, Government of Karnataka. (1996). Directorate of Economics and Statistics and the State Agriculture Census Commissioner.

Suggested Readings:

- 1. The essentials of risk management, Michel Crouhy, Mc Graw Hill Publication.
- 2. Implementing Enterprise Risk Management: From Methods to Applications James Lam, Wiley Publication.

ELECTIVE II: FINANCIAL MANAGEMENT

COURSE CODE	MB401C
COURSE TITLE	CASES IN MANAGEMENT (FINANCE)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401C.1	Remembering	DESCRIBE the major theories, concepts, terms, models, frameworks, and research findings in the field of Financial Management.
401C.2	Understanding	SUMMARIZE the impact of Current Financial Management trends
401C.3	Understanding	MAKE USE OF the Theories, Models, Principles and Frameworks of Financial Management in analysing the cases of Financial Management
401C.4	Evaluating	ATTRIBUTING the Financial Management Cases with reference to Theories, Models, frameworks of Financial Management
401C.5	Applying	APPRAISE a given Case of Financial Management with reference to the Current Trends, Best Practices in Financial Management

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and

relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (FINANCE)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Capital Budgeting
 - 2. Working Capital
 - 3. Evaluating Project Risk
 - 4. Ratio Analysis
 - 5. Cash flow Analysis
 - 6. Mutual Fund Analysis
 - 7. Share Market Analysis
 - 8. Bond Analysis and Valuation
 - 9. Financial Forecasting
 - 10. Valuation of Common Stock

COURSE CODE	MB402C
COURSE TITLE	CORPORATE FINANCIAL RESTRUCTURING
COURSE CREDITS	3

The course aims to facilitate understanding of corporate merger and acquisition activity, restructurings and corporate governance. The focus will be on fundamental concepts of valuation and analytical tools of corporate finance related to restructuring. It combines applied theoretical approach with the case study method through detailed analysis of domestic and global restructuring cases.

Course Objectives:

- To understand basic concepts related corporate restructuring, Mergers and Acquisitions, Valuation Aspects of Corporate Restructuring and Corporate Governance Aspects of Restructuring.
- 2. To understand and explain the motivations, decision processes, transaction execution, and valuation consequences of financial, business, and organizational restructuring by corporate units.
- 3. To evaluate the impact of corporate financial restructuring on all stakeholders.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402C.1	Remembering	IDENTIFY the need, scope, concept, and application of Internal and External Corporate Financial Restructuring.
402C.2	Understanding	UNDERSTAND the corporate reorganization strategies in corporate Financial restructuring
402C.3	Applying	MAKE USE OF the corporate restructuring framework to infer merger and acquisition decisions
402C.4	Evaluating	Evaluate the Valuation of the Firm to arrive at Corporate Financial Restructuring decisions.
402C.5	Analysing	ANALYSE various Domestic and International norms relating to corporate restructuring

Course Content:

Unit 1: Basic Concepts

Meaning of Corporate Restructuring, Need, Scope, Concept of Internal and External Restructuring and motives, applications of corporate restructuring.

Unit 2: Overview of Corporate Finance and Corporate Restructuring

Financial Restructuring and Divestiture, Funding Options for M and A, Strategic Alliances and Joint Ventures, Going Private and Leveraged Buyouts, Corporate Reorganization Strategies-Spin-Offs, Equity Carve- Outs, Target Stock and Divestures, Financial perspective in

restructuring, Reorganization strategies, Financial Distress and Bankruptcy, Liquidation, Net Operating Losses, Sources of Funding and Problem of changing Capital Structure, Strategic and Financial Sponsors, Pros and Cons of different Sponsors, Capital Cash Flows Vs. Equity Cash Flows.

Unit 3: Dimensions of Corporate Restructuring

Mergers and acquisitions -concept, types and process, Accounting for Mergers and Demergers, Regulatory framework of mergers and acquisitions, Due diligence for M and A, Cross-Border Mergers and Acquisitions, Take-over and Defense Tactics, Structural Defenses vs. Non Structural Defenses, Contribution Analysis, Duties of Board of Directors.

Unit 4: Valuation Aspects of Corporate Restructuring

Different Concept of Value- Book Value, Market Value, Intrinsic Value, Liquidation Value, Replacement Value, Salvage Value and Fair Value, Approaches to valuation of business- Asset based, Earning based, Market value based, Fair value based, EVA and MVA.

Unit 5: Corporate Governance Aspects of Restructuring

Domestic and International trends relating to governance practices pertaining to Corporate Restructuring, Indian Companies Act (Amended) 2013 norms relating to Corporate Restructuring, SEBI Regulations, Listing Agreement, Role of investors, creditors, non-executive directors in restructuring process, Disclosures norms on the part of Board of Directors.

Prescribed Books:

- 1. Financial Management, R. P. Rustagi, Galgotia Publishing.
- 2. Strategic Financial Management, Ravi M. Kishor, Taxmann.
- 3. Mergers, Acquisitions and Corporate Restructurings, Gaughan, P.A., John Wiley and Sons.

Suggested Reading:

- 1. Mergers and Acquisitions, B Rajesh Kumar, TATA McGraw Hill.
- 2. Takeovers, Restructuring, and Corporate Governance, James J. Fred Weston, Mark L. Mitchell, J. Harold, Pearson.
- 3. Corporate Finance, Ashwath Damodaran, Wiley India.

COURSE CODE	MB403C
COURSE TITLE	EQUITY RESEARCH
COURSE CREDITS	3

This course is about the analysis of financial information – particularly firms' financial reports - for making decisions to invest in businesses. The primary focus is on equity (share) valuation. This course on Equity Research focuses on developing the necessary skills for the purpose of advising investors and financial institutions to make profitable investment decisions in the capital market.

Course Objectives:

- 1. To identify value created for shareholders.
- 2. To understand the role of financial statements in calculating equity values.
- 3. To be able to prepare equity research reports.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403C.1	Remembering	DESCRIBE the Process of Equity Research and Valuation
403C.1	Remembering	of business enterprise.
403C.2	403C.2 Understanding	EXPLAIN the need for conducting Equity Research and
403C.2	Onderstanding	valuation of a business enterprise.
403C.3	Applying	MAKE USE OF the Methods, Models and Frameworks for
403C.3	Applying	making financialprojections.
403C.4	C.4 Analysing	ANALYSE the Corporate annual Reports, Financial
403C.4		Statements, Audit reports etc.
402C 5	O3C.5 Evaluating	EVALUATE the corporate governance practices using
403C.3		Porter's five forces & MOAT model.

Course Outline:

Unit 1: Equity Research: Introduction

Meaning, Goals of equity research, Elements of equity research, Process of equity research, Types of equity research, Classification of stocks, Market participants, Role of equity research in capital market and Different approaches to equity research.

Unit 2: Introduction to Research Analyst Profession

Role of research analyst, Responsibilities of research analyst, Basic principles of interaction with Clients/Companies, Qualities of Research Analyst.

Unit 3: Equity Analysis & Investing

Introduction, When to invest – stocks are high/low, Buy Low And Sell High proposition, Maximising Wealth through Investing in Growth Stocks, Defensive vs Cyclical Stocks, Growth vs Value Stock, Blue-Chip Stocks and Reasons to Invest in Them.

Unit 4: Annual Report Analysis: Interpreting the Income Statement, Balance Sheet, Cash Flow Statement, Chairman's report, Auditor's report, Company ratios.

Unit 5: Porter's Five Forces & Moat Application

Introduction, Michael Porter's Five Force Model, Moats vs Floats, Margin of safety, Evaluating Management and Corporate Governance.

Prescribed Books:

- 1. Financial Statement Analysis and Security Valuation Stephen Penman, McGraw-Hill.
- 2. Valuation: Measuring and Managing the Value of Companies- Copeland T, Koller T, Murrin J, Wiley.
- 3. Financial Reporting and Statement Analysis- A Strategic Perspective, Stickney P and Brown P, Dryden Press.

Suggested Reading:

- 1. The Analysis and Use of Financial Statements White G, Sondhi A and Fried D, Wiley.
- 2. Best Practices for Equity Research Analysts James Valentine, The McGraw Hill.



COURSE CODE	MB404C	
COURSE TITLE	FINANCIAL MODELLING	
COURSE CREDITS	3	

Presents the theory and practice of financial management, emphasizing computer-based modeling and forecasting. Uses spreadsheets and other software products to analyze the impacts of financial decisions related to financial statement analysis, cash budgeting, and cost of capital determination, capital budgeting, and capital structure choices. The course covers a variety of techniques, such as sensitivity and scenario analysis, optimization methods, Monte Carlo simulation, and regression analysis.

Course Objectives:

- 1. To provide students of an overview of various aspects building models in different areas of finance including investments, corporate finance, derivatives, valuation, project evaluation, deal structuring, portfolio management.
- 2. To acquaint the students with the model building skills required to build Powerful models in finance with the help of excel.
- 3. To provide students a platform to understand how risk can be built into the model to enhance decision making process.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to CREATE a cadre of competent
404C.1	Creating	practitioners of financial managers / counselors with
		required financial modelling (using excel) skills.
		The students will be able to acquire the needed skills and
404C.2	Applying	knowledge to MAKE USE of the basic and advanced
		features of excel.
404C.3	Analyzing	The students will be able to EXAMINE basic knowledge
404C.3	Anaryzing	on how to build models in excel to suit one's purpose.
		The students will be able to DEMONSTRATE their
404C.4	Applying	expertise required in identifying and controlling the key
		sensitivities with advanced spreadsheet simulation.

Course Contents:

Unit 1: Basic Excel for Financial Modeling

Formatting of Excel Sheets, Use of Excel Formula Function, Data Filter and Sort, Charts and Graphs, Table formula and Scenario building, Lookups: V lookup Match and offset, Pivot tables.

Unit 2: Modeling and projecting the financial statements

Introduction to Financial Modeling, Understanding the links between the financial statements, Understanding circularity, Setting up and formatting the model, Selecting model drivers and assumptions.

Unit 3: Relative Valuation I (Trading Comparables)

Introduction to Trading Comparables, Filings and Sources, Methodology - Equity and Equity

Linked Information, Balance Sheet Information, Balance Sheet – Adjustments, Market Cap – Adjustments, Income Statement Information, Income Statement – Normalization, Calculating Last Twelve Months in Income Statement, Understanding Multiples, Interpretation and Analysis of Trading Multiples.

Unit 4:Relative Valuation II (Transactions Comparable Analysis)

Transaction Comparables – Introduction Transaction Overview, Transaction Value, Types of Consideration, Target Financials – LTMs, Target Financials: Sources, Premium Analysis, Amendment of Deal Terms, MandA Deals Identification.

Unit 5: Absolute Valuation [Discounted Cash Flow (DCF)]

Discounted Cash Flow, Approaches to DCF Valuation, Discount Rate, Weighted Average Cost of Capital, Components of Weighted Average Cost of Capital, Free Cash Flows, Steps to DCF, Sensitivity Analysis, Approach to Calculate Terminal Value, Calculation of Enterprise Value, Calculation of Equity Value from Enterprise Value in a DCF Model, Revenue Drivers, Cost Drivers.

- 1. Financial Modelling by Simon Benningo
- 2. Financial Analysis and Modelling by ChandanSengupta
- 3. Financial Modelling in Practice by Michael Rees
- 4. Financial Modelling and Valuation by Paul Pignataro
- 5. Financial Modeling for Business Owners and Entrepreneurs by Tom.Y Sawyer



COURSE CODE	MB405C
COURSE TITLE	INSURANCE AND RISK MANAGEMENT
COURSE CREDITS	3

Risk management course is of importance to business students expecting to deal with business and professional lives in the future. This subject is designed to introduce and discuss various risk management concepts, tools, and techniques in global context. Using integrated approaches, the course will emphasize discussion on the design and implementation of risk management practices. Basically, it purports to help students realize, understand, and master various state-of-the-art risk management theories and practices for their advancement in the future.

Course Objectives:

- 1. To provide an understanding and an appreciation of the principles and practices of risk management in order to enable production of the optimum strategy for the handling of risk in an organisation.
- 2. To understand the various types of insurance available in the market.
- 3. To understand the various risk management tools available for hedging risk.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405C.1	Applying	The students will be able to DEMONSTRATE knowledge of insurance contracts and provisions, and the features of property-liability insurance, life and health insurance, and employee benefit plans.
405C.2	Analyzing	The students will be able to FORMULATE knowledge of the operation and management of insurance entities, and the economic implications of organizational design and structure.
405C.3	Understading	The students will be able to DEVELOP skills to facilitate insurance product cost and pricing, marketing, and distribution.
405C.4	Analyzing	The students will be able to ACQUIRE practical skills in insurance and risk management.
405C.5	Evaluating	The students will be able to EXAMINE the role of public policy including social insurance in personal financial planning and risk management.

Course Contents:

Unit 1: Introduction to insurance

Purpose and Need of insurance; Insurance – a social tool; Role of insurance in economic development. Business of insurance – pooling of risk, Fundamental principles of insurance (both Life and General Insurance to be discussed) Perils in Insurance.

Unit 2: Legislative and Regulatory Matters (overview of all the acts to be discussed)

Insurance Act, 1938 Insurance Regulatory and Development Authority Act, 1999, Insurance

Ombudsman.

Unit 3: Life Insurance

Meaning of life insurance, Life Insurance Products: Traditional/Unit Linked Policies; Individual and Group Policies; with profit and without profit policies; Whole life products; Annuities; Term Assurance/ Endowment Assurance; Interest Sensitive Products.Concept of Premium/Bonus, rebate, extra premium, rider premium, surrender value and paid up value. Financial Planning and Insurance, Claim Settlement.

Unit 4: General Insurance (Scope, coverage, exclusions and conditions of these insurance to be discussed)

Marine and Motor Insurance, Health Insurance, Personal Accident Insurance, Reinsurance, Meaning and Significance, Current Scenario in India.

Unit 5: Risk Management

Introduction to Risk. Meaning of Risk. Degrees of Risk. Types of Risk: Static and Dynamic Risks, Financial and Non-financial risks, Pure and Speculative Risks. Risk Management: Characteristics of Risk Management, Significance of Risk Management, Principles of Risk Management, Objectives of Risk Management, the Process of Risk Management, Methods of Risk Management. Risk, Uncertainty, Peril, Hazard, Internal and External Techniques of Risk Management-Internal and External Techniques viz Netting, Matching, Leading, and lagging.

Prescribed Books:

1. Madhumati, R. and Ranganathan, M. (2012). Derivatives and Risk Management. Pearson Education, 1st Impression.

Suggested Readings:

- 1. Options and Futures- Hull.
- 2. International Finance- A.V. Rajwade
- 3. Derivatives and Risk Management-RajivSrivatava.
- 4. Commodity Futures and Options- George Kleiman.
- 5. Indian Financial System Machiraju, Vikas Publishing House, 2002, 2ndEdition.

COURSE CODE	MB406C
COURSE TITLE	STRATEGIC FINANCIAL MANAGEMENT
COURSE CREDITS	3

This strategic financial management course will enhance students understanding of how financial decisions create value for a firm. Students are introduced to the areas of business valuations, mergers and acquisitions, leverage buyouts, and corporate financing and capital structure. The course will enable students to build an understanding of how strategic financial decisions are taken and how the outcomes are quantified. Additionally the course aims at enabling students to assess and manage corporate risks.

Course Objectives:

- 1. To make students aware about conceptual knowledge & framework of SFM.
- 2. To understand the financial aspects of compensation management, negotiation and voluntary retirement scheme.
- 3. To be able to do financial analysis with regard to corporate valuation and financial restructuring.
- 4. To be able to know the benchmarking practices and innovative ideas which is expected in financial engineering.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406C.1	Understanding	The students will be able to DEVELOP conceptual
400C.1	Understanding	knowledge of SFM and its significance.
		The students will be able to DEMONSTRATE the
406C.2	A polying	financial aspects of compensation management, negotiation
400C.2	Applying	and voluntary retirement scheme & supply chain
		management.
		The students will be able to ELABORATE the financial
406C.3	Analyzing	analysis techniques for corporate valuation and financial
		restructuring.
406C.4	CA Paradaria	The students will be able to DEFINE the importance of
400C.4	Remembering	innovative ideas and various benchmarking practices.
406C.5	Demonstration	The students will be able to EXPLAIN the various direct
400C.3	Remembering	and indirect taxes applied in India.

Course Contents:

Unit 1: Conceptual Framework

Meaning of SFM, Evaluation of costs and benefits, Reasons for managing business financially, Strategy and strategist, 9-s model for SFM.

Unit 2: Investment decisions

Investments Decisions under Risk and Uncertainty – Techniques of Investment Decision Sensitivity Analysis and Simulation Method – Corporate Strategy and High Technology Investments.

Unit 3: Corporate valuation

Reasons for valuation of business enterprise, Different.

Approaches to enterprise valuation: Market Related Valuation-At replacement cost and realizable value, Future cash flows, Market Capitalization, Economic value added approach.

Unit 4: Corporate Restructuring

Introduction, Concepts and framework, Types of restructuring – Enhancing shareholder and corporate value through corporate restructuring.

Debt and Equity restructuring, Spin offs, Mergers and acquisitions, Capital Restructuring, Buy back of shares.

Unit 5: Overview of financial engineering

Meaning, Benchmarking practices, Off balance sheet financing, Funding strategies, monitoring & assessment, Programs & policies to reward various stakeholders, Innovative sources of Finance.

- 1. Prasanna, Chhandra, Financial Management, Tata McGraw Hill, Delhi, 2007.
- 2. R. Sofat and P. Hiro, Strategic Financial Management, PHI, New Delhí, 2011.
- 3. Strategic Financial Management, G. P. Jakhotiya, Vikas Publishing House, 2nd edition, 2012.



COURSE CODE	MB407C	
COURSE TITLE	BEHAVIOURAL FINANCE	
COURSE CREDITS	3	

This course is designed to provide an overview of fast growing area in finance. Its premise is that investment decision-making and investor behaviour are not necessarily driven by 'rational' considerations but by aspects of personal and market psychology. Behavioural finance recognises that one's abilities to make complex financial decisions are limited due to the biases and errors of judgement to which all are prone. This course introduces cognitive biases, discusses the impact of such biases on the financial decision-making, and explores the behaviour of individual investors.

Course Objectives:

- 1. To help students gain understanding of the differences between the neoclassical model of behavior and behavioral finance models.
- 2. To introduce students to an alternate framework for understanding price discovery in the markets.
- 3. To enable students analyse the impact of uncertainty on decision making and market movements.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407C.1	Knowledge	UNDERSTAND the psychological concepts governing behavioural finance
407C.2	Understanding	RELATE to the models of decision making
407C.3	Applying	ILLUSTRATE market theories in building up of behavioural finance
407C.4	Analysing	CATEGORIZE the contribution of neurofinance in behavioural finance
407C.5	Evaluating	DEMONSTRATE use of Behavioural Portfolio Theory in investment

Course Outline:

Unit 1: Foundations and Psychological Concepts

Meaning of Behavioural Finance. Importance of Behavioural Finance to practitioners, Prospect Theory, Implication on choice behavior, Disposition Effect and its role in investor behavior.

Unit 2:Behaviour and its formation

Models – Cognition, Cognitive dissonance, Cognitive bias, Emotions, Perception, Errors of perception, Decision making, Herbert Simon and bounded rationality, Heuristics and its relevance – Theories of Decision Making, Personality traits and risk attitudes.

Unit 3: Foundations of Behavioural Finance

Efficient Market Hypothesis – theoretical foundations and challenges to EMH; Adaptive Market Hypothesis; Noise-trader; Professional arbitrage; Heard behavior.

Unit 4: Neurofinance

Neural process and decision making, Contribution of Neurofinance in Behavioural finance, Frauds and Psychology behind it, Theories of fraud, Prevention of Fraud, Financial Institution Fraud.

Unit 5: Behavioural Aspects of Investing

Behavioural Portfolio Theory – basic ingredients; market outcomes – size effect, seasonality, momentum and reversal; post-earnings announcement drift, equity premium puzzle, Behavioural Asset Pricing Model; Value Investing – central tenets, evidence, and prospects.

Prescribed Books:

- 1. Prasanna Chandra, Behavioural Finance, TMH, New Delhi.
- 2. Suchitra Singh and Shilpa Bahl, Behavioural Finance, Vikas Publications, New Delhi.

Suggested Reading:

- 1. Ackert L and R Daves, Behavioural finance: Psychology decision making and Markets, South western, Centage learning, Mason, Ohio.
- 2. Bisen, Pandey: Learning Behavioural Finance, Excel Books
- 3. Montier, James: Behavioural Finance, John Wiley & Sons, New York.
- 4. Sheiter A, Inefficient Markets: An Introduction to behavioural finance, Oxford University press, Oxford.
- 5. Sulphey, M. M.: Introduction to Behavioural Finance, PHI Learning P. Ltd., New Delhi.



ELECTIVE II: HUMAN RESOURCE MANAGEMENT

COURSE CODE	MB401D	
COURSE TITLE	CASES IN MANAGEMENT (HR)	
COURSE CREDITS	3	

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401D.1	Understanding	SUMMARIZE the case study given in their own words.
401D.2	Applying	MAKE USE OF the Theories, Models, Principles and Frameworks learned in HRM in analysing the cases of HRM
401D.3	Analysing	ANALYSE the HRM Case with reference to Theories, Models, frameworks of HRM keeping in mind the current Business Environment
401D.4	Evaluating	TEST the given Case of HRM with reference to the Current Trends, Best Practices in HRM
401D.5	Creating	DRAW alternative solutions to the problem discussed in the case and PREDICT best future scenarios

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (HR)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Employee welfare and security
 - 2. Compensation and benefits
 - 3. Talent acquisition
 - 4. Work-life balance
 - 5. Employee motivation and engagement
 - 6. Wage and salary administration
 - 7. Performance management
 - 8. Job analysis and evaluation
 - 9. Workforce diversity
 - 10. Strategic human resource management

COURSE CODE	MB402D
COURSE TITLE	KNOWLEDGE MANAGEMENT
COURSE CREDITS	3

Knowledge Management course addresses contemporary issues in managing knowledge, intellectual capital and other intangible assets by discussing the fundamental concepts of knowledge and its creation, acquisition, representation, dissemination, use and re-use, the role and use of knowledge in organizations and institutions, KM systems and its application in knowledge generation and transfer, and in the representation, organization, and exchange of knowledge, knowledge codification and system development, its testing, KM tools and portals, and finally ethical, managerial and legal issues in knowledge management.

Course Objectives:

- 1. The objective of this course is to prepare students to understand the current theories, practices, tools and techniques in knowledge management (KM) to deal with the challenges with the organization and management of knowledge.
- 2. To make the students realize the importance of capturing knowledge elements and its structures application as a competitive advantage to business.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402D.1	402D.1 Remembering	DEFINE Knowledge Management and aligning
402D.1	Kemembering	Knowledge Management to business strategy
		SUMMARIZE various concepts, theories, models,
	7	framework of Knowledge Management, Knowledge
402D.2	Understanding	codification and system development: codification, system
		testing and deployment, Knowledge transfer and
		knowledge sharing- the role of culture and structure.
402D.3	Applying	INTERPRET type of knowledge and its implications for
402D.3	Applying	Knowledge Management
402D.4	2704	Analysis design and development: Knowledge
402D.4	Analysing	infrastructure, Knowledge audit, and knowledge team
402D.5	2D5	EVALUATE the effectiveness of Knowledge Management
402D.3	Evaluating	practices
402D.6	Craatina	CREATE innovations in Knowledge Management so the
4020.6	Creating	organisations become Learning Organisations

Course Outline:

Unit 1:Introducing the concept of KM

Why KM, KM system life cycle, and aligning KM and business strategy. KM Cycle: Knowledge creation, capturing tacit knowledge.

Unit 2:Types of knowledge and its implications for KM

Knowledge codification and system development: codification, system testing and deployment, Knowledge transfer and knowledge sharing- the role of culture and structure.

Unit 3: KM system

Analysis design and development: Knowledge infrastructure, Knowledge audit, and knowledge team.KM system: Analysis design and development: Analysis, design and development of KM system.

Unit 4: KM tools and Portals

Inferences from data, data mining and knowledge portals.

Unit 5: Evaluation of KM effectiveness

Tools and metricsEthical, legal and managerial issues.KM experiences form Indian companies, KM innovation and Learning organization, The future of KM.

Prescribed Books:

- 1. Knowledge Management. Awad, E.M (2007). Pearson India, Delhi.
- 2. Knowledge Management: System and Resources. Fernandez I. B. and Sabherwal, R. (2010). PHI Delhi.
- 3. Knowledge Management for the Information Professional, Srikantaiah.T. K., Koenig, M., Information Today, Inc., 2000.

Suggested Readings:

- 1. Knowledge Management in Theory and Practice. Kimiz Dalkir (2005). Elsevier.
- 2. The Knowledge Management Toolkit, Tiwana Amrit (1999). Prentice Hall PTR.



COURSE CODE	MB403D
COURSE TITLE	HR PERSPECTIVES IN MERGERS AND ACQUISITIONS
COURSE CREDITS	3

The course has described the role of HR in mergers and acquisitions. Mainly the course deals with the HR leadership that can lead the organization's efforts to identify potential business and human capital risks, and shape the strategy and integration plan. Though there are no magical formula to avoid these side effects, yet with HR playing a leadership role from the beginning of the M&A process, it is more likely that the organization optimize a deal's financial and operational synergies.

Course Objectives:

- 1. To familiarize the students with the Conceptual framework relating to M&A and Organization integration.
- 2. To enable students to understand Human and cultural related issues arising out of M&A.
- 3. To understand various roles of HR functionaries in dealing with M&A.
- 4. To build competencies in the participants to manage people and culture related issues during an M&A process.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403D.1	Remembering	DEFINE the meaning, concepts, terms, issues, frameworks and policies related to HR in the field of Merger & Acquisition.
403D.2	Understanding	DESCRIBE the implications of M & A from the perspectives of HR framework including ployees, managers, organizations, global market, govt. policies etc.
403D.3	Applying	DEMONSTRATE the Models, Principles and Frameworks of M & A with respect to strategic HR dynamics in any organizational settings.
403D.4	Analysing	DECONSTRUCT the role of HR and functionaries in dealing with M&A
403D.5	Evaluating & Creating	Checking the challenges for HR Competencies in Managing M&A to integrate the changes and future needs.

Course outline:

Unit 1: Concept of Mergers and Acquisitions

Meaning, Organizational Growth through M&A, Strategic Drivers of M&A, phases of merger, The Indian Scenario of M&A.

Unit 2: Issues in M&A

Organizational Vision and Mission, HR policies, Managing Ambiguity, Attracting and retaining

top performers, Utilizing and managing excess manpower, Managing insecurity and stress.

Unit 3: Strategic Dynamics of M&A

M&A in historical perspective, Developing integration models, Human Due diligence, Implementing the integration plan, Downsizing and Restructuring.

Unit 4: HR role in managing M&A

Role of HR in Managing change through M&A, HR Competencies in Managing M&A, Preliminary stage (establishing people and culture fit), HR intervention in M&A phase, Post M&A roles.

Unit 5: Organization Change

Sources of Change, Rethinking Organization Change, History of Change, Nature of Change Level of Change, Models of Change, Leading Organization Change, Integration and Future Needs.

Prescribed Books:

- 1. Mergers and Acquisitions from A to Z, Andrew J Sherman, Milledge A Hart
- 2. The Complete Guide to Mergers and Acquisitions: Process Tools to Support M & A Integration at Every Level by Timothy J Galpin and Mark Herndon John Wiley and Sons.
- 3. Organization Change: Theory and Practice, 3rd Sage South Asia Edition, W Warner Burke

Suggested readings:

- 1. Rajesh Kumar, B (2011). Mergers and Acquisitions Text and Cases, 1/e; New Delhi: Tata McGraw Hill
- 2. Aurora, Shetty, Kale; Mergers and Acquisitions, Oxford University Press, Latest Edition



COURSE CODE	MB404D
COURSE TITLE	ORGANIZATIONAL CHANGE AND DEVELOPMENT
COURSE CREDITS	3

Organization development (OD) is a field of research, theory and practice dedicated to expanding the knowledge and effectiveness of people to accomplish more successful organizational change and performance. This course extends on OD to focus on aligning organizations with their rapidly changing and complex environments through organizational learning, knowledge management and transformation of organizational norms and values.

Course Objectives:

- 1. To understand the nature of the developmental process in organizations.
- 2. To comprehend the main derives and approaches of the change.
- 3. To Provide students with knowledge of resistance to change and techniques ofhanding it.
- 4. To equip students with knowledge of ongoing activities within an organization and design and plan the implementation of selected OD interventions.
- 5. To realize and apply the stages of the organizational development process.
- 6. To equip students with knowledge and amp; skills required for effective change and organizational development.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404D.1	Understanding	Students will be able to OUTLINE organizational development process.
404D.2	Applaying	Students will be able to DEMONSTRATE how to change and develop organizations.
404D.3	Remembering	Students will be able to EXPLAIN the change management model.
404D.4	Applying	Students will be able to DETERMINE skills needed to develop an action plan for the development process.
404D.5	Remembering	Students will be able to IDENTIFY and apply change resistance tactics in professional arena.

Course Contents:

Unit 1: Definition, Values and Assumptions, Importance, Evolution

Kurt Lewin, Robert Tanenbaum, McGregor, Herbert Shepard, Robert Blake.

Unit 2: Foundations of OD

Action Research, Survey Feedback, Systems Theory, Teams and Teamwork, Participation and Empowerment, Applied Behavioural Science, Parallel Learning Structures.

Unit 3: Process Of OD – Model Of Change, Six Box Model.

Unit 4:OD Intervention

Meaning, Importance, Team Intervention: Role Analysis, Interdependency, Appreciation and Concern Inter group: Walton, Principled Negotiation Structural: Sts, Work Redesign, Self-Managed Teams. Individual: T-Group, Behaviour Modeling.

Unit 5: Human Resource Metrics and Analytics

Client and Consultant Relationship, HR scorecard, Implementation of HR Metrics.

- 1. Organisational Development By S Ramnarayan, T VRao.
- 2. Organisational Development And Change By Cummings And Worley (7thEdition)
- 3. Organisational Development By French And Bell (6thEdition)



COURSE CODE	MB405D
COURSE TITLE	INTERNATIONAL HRM
COURSE CREDITS	3

This course is designed to acquaint the students with the International Human resource Management. The students will get knowledge of various problems faced by International HR managers. The most noticeable aspect of international boundaries is crossing the national boundaries. Organizations need International HRM because of the international market opportunities more today Knowledge about international HRM, therefore assumes great relevance for the upcoming Global managers.

Course Objectives:

- 1. To familiarize the students with the diversity of HRM in aninternational context and the key HR challenges facing organizations working internationally.
- 2. To emphasize on developing a theoretical grasp of issues and problems and an understanding of practical implications of various theories of human behavior at work.
- 3. To acquaint students with the Emerging Trends in Employee Relations and Employee Involvement, International Labour Standards in modern global organizations.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405D 1	405D.1 Remembering	Students will be able to EXPLAIN issues, opportunities
103D.1	Kememoering	and challenges pertaining to international HRM.
405D.2	Understanding	Students will be able to DEVELOP competency in dealing
.002.2	ond is turning	with cross cultural situations.
		The students will be able to DETERMINE the strategic and
	,	functional roles of HRM in various international contexts,
405D.3	Applying	especially in areas such as recruitment and selection,
4030.3	Applying	performance management, training, learning and
	.00	development, career management, compensation,
		motivation and repatriation.
		The students will be able to DISCOVER external forces
405D.4	Applying	(e.g. globalization, sociocultural changes, political and
403D,4		economic changes) that have the potential to shape
		international HRM.
		The students will be able to CREATE generic and
		transferable skills-especially in diagnosing international
		HRM issues critically and analytically, conducting research
405D.5	Creating	for the purpose of discussing specific cases relating to
		international HRM, evaluating alternative approaches and
		defending the recommendations with evidence, and
		developing confidence in conducting training workshops.

Course Contents:

Unit 1: Human Resources in a Comparative Perspective, Context of IHRM, Organizational Context of IHRM, Understanding Self: Indian Perspective, Cross Cultural Management Role of IHRM in Sustaining the International Business Operations.

Unit 2: International Recruitment and Selection: Recruiting and Selecting International Staff, Training and Development of International Staff, Developing International Staff and Multinational Teams.

Unit 3: International Compensation Approaches to International Compensation, Cultural Factors/Issues in Performance Management, Performance Management for International Staff.

Unit 4: Repatriation, Managing Global, Diverse Workforce, Industrial Relations in a Comparative Perspective, Global Unions, Regional Integration and Framework Agreements.

Unit 5: Emerging Trends in Employee Relations and Employee Involvement, International Labour Standards, HR/IR issues in MNCs and Corporate Social Responsibility, IHRM Trends and Future Challenges.

- 1. International Business –By K Ashwathappa, TATA McGraw-Hill publication, Third edition.
- 2. International Business-Competing in the Global Marketplace by Charles W Hill and Arun K Jain, TATA McGraw-Hill publication, Sixth edition.
- 3. International Business –Strategy, Management And The New Realities By S.TamerCavusgil, Gary Knight and John R. Reisenberger, Pearson Publications, First Edition.



COURSE CODE	MB406D
COURSE TITLE	TALENT RETENTION AND EMPLOYEE ENGAGEMENT
COURSE CREDITS	3

The scope of the course on Talent Retention and Employee Engagement covers entire spectrum of Human Resource Management - starting from talent planning, talent acquisition, talent management and performance management talent development, talent retention, talent performance, careering planning, coaching and talent engagement.

Course Objectives:

- 1. To understand the scope and challenges retaining and engaging talent at every level at the work place thereby talent performs and gets aligned to the mission, vision, values and objectives of theorganization.
- 2. To expose to the students to the latest trends in talent management and talent engagement by exposing through case studies, issues, exercise, researching on various organizations at different levels and industries.
- 3. To prepare the students to meet industry needs with regards to knowledge, aptitude, attitude in understands the workforce diversity and culture in managing and engaging thetalent.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to INFER the value and
406D.1	Applying	importance of talent management within any size of
		organization.
		The students will be able to APPRAISE the diversified role
406D.2	Evaluating	and responsibilities of human resources and its impact on
		meeting organizational goals and objectives.
		The students will be able to INTERPRET the responsibility
406D.3	Understanding	of human resources and its responsibility to develop and
4000.3		manage strategic programs that aide in the retention of top
		talent.
406D 4	406D.4 Analysing	The students will be able to ANALYSE and critique the
4000.4		concept of employee engagement.
	AY	The students will be able to IDENTIFY the issues and
406D.5	Remembering	challenges associated with employee engagement in the
	y	organization.

Course Contents:

Unit 1: Introduction to Talent Management

Introduction, nature and significance of Talent management.

Unit 2: Competency Assessment and Performance Management

Definition, concept Definition and different methods of performance appraisal.

Unit 3: Succession and Career Planning

Characteristic, Types of Succession Planning, Elements of Succession Panning, Definition and

Concepts of Career planning, Advantages and Disadvantages of Career Planning.

Unit 4: Coaching, Training, and Development

Introduction to Training concept, Meaning, Need for Training, Importance of Training, objectives of training, Education, training and development. Driving Cultures of Success.

Unit 5: Employee Engagement

Definition, Importance, employee engagement linkage to business outcomes, Approaches to employee engagement, employee engagement strategy, and employee engagement survey.

- 1. Human Resource Management by K Ashwathappa, TATA McGraw-Hill publication, Thirdedition.
- 2. Human Resource Management by John M Ivancevich, TATA McGraw-Hill publication, Thirdedition.

COURSE CODE	MB407D
COURSE TITLE	COMPETENCY MAPPING & CAREER DEVELOPMENT
COURSE CREDITS	3

Managerial competence and career development course will help students on how to develop and map competencies, and design competency models. It is designed to help the management students understand the complexities and dynamics of competency models and related decision making. It will help students to design and implement the appropriate competency framework. It will also help management students understand the application and know-how of competency mapping, which is primarily to develop the capacity to act, implement, and bring performance improvement in the workplace.

Course Objectives:

- 1. To appreciate environment the importance of career strategies in a rapidly changing.
- 2. To develop an awareness of various career orientations and strategies of individual career planning.
- 3. To develop an understanding in designing appropriate systems of competency mapping & organizational career development.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407D.1	Remembering	DESCRIBE the history, origin of Competency, Models and
		techniques, definitions of competencies, relationship
		between KSA & competency mapping.
		EXPLAIN the implications of competency mapping and
407D.2	Understanding	career development from the prospective of students for
		their career development.
		MAKE USE OF various competency Models, Principles
407D.3	Applying	and Frameworks of competency mapping with respect to
		career transition and career development.
		DECONSTRUCT the role of a leader, an individual in
407D.4	Analysing	spreading awareness of various career orientations and
		strategies of individual career planning.
407D.5	A	FORMULATE competency approaches to understand in
	Evaluating & Creating	designing appropriate systems of competency mapping &
		organizational career development. ELABORATE UPON
		THE challenges for develop and map competencies
		techniques in career planning and development.

Course Contents:

Unit 1: History & Origin of Competency

KSA v/s Competency Reasons for Popularity of Competency, - Competency & EVA, Views Against Competency - Definitions Confusion about Competency.

Unit 2: Components Of Competency

Skill, Knowledge & Motive - Trait & Self-Concept, Iceberg Model of Competency - Operant & Respondent Traits of Competency, Competency Models - Leadership and managerial competency models - Causes for Resistance and Recommended Actions to Address - Delphi Technique Competencies & Generic Indicators - 360 Degree Feedback - HR Generic Competency Model - Supervisory, Generic Competency Model.

Unit 3: Competency Categories

Threshold Competencies - Differentiating Competencies - Generic or Key Competencies - Functional or Technical Competencies - Leadership or Managerial Competencies, Steps in Developing Competency Model - Determining the objective & Scope - Clarifying Implementation Goals & Standards - Create an Action Plan - Define Performance. Effectiveness Criteria - Identify a Criterion Sample - Data Gathering & Interim Competency Model - Finalize & Validate, Competency Model.

Unit 4: Career Development

Theoretical Foundations, Objectives, Definition of Career Development, Process of Career Planning, Reasonability for Career Planning & Career Development Methods of Career Development (Management), Competency Approach to Development, Career Paths, Career Transition, Competency Approach to Development.

Unit 5: Innovative Employer Career Initiatives

Different methods used by employer's to enhance employee career, Special Issues in Career Development, Mentoring for Employee Development.

Prescribed Books:

- 1. Competency Based HRM, Ganesh Shermon, TMH, 1st Edition, 2002. A handbook of Competency mapping Seema Sangvi, Response Books, 2004.
- 2. Human Resource Management, Pravin Durai, Pearson 2010.
- 3. Human Resource Management, Gary Dessler & biju Varkkey, Pearson, Twelfth Edition, 2011.

Suggested Reading:

- 1. Calvin S, Theories of Personality, Hall Et Al, Wiley Publication John.W.Newstrom and Keith Davis Tata, Organizational Behaviour Human Behavior at work, McGraw Hill, 11/e, 2003.
- 2. Robert N. Lussier, Human Relations in organizations, 6th edition, Mc- Graw Hill Education.
- 3. Stephen Robbins, Training in Interpersonal Skills tips for managing People at work, Et al, Pearson, PHI.
- 4. Udai Parek, Understanding OB, Oxford University Press.
- 5. Whetten & Cameron, Development Management Skills, 7th Ed. Pearson, PHI.

PHARMACEUTICAL MANAGEMENT SPECIALIZATION

COURSE CODE	MB401E	
COURSE TITLE	CASES IN MANAGEMENT (PHARMA)	
COURSE CREDITS	3	

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401E.1	Remembering	DESCRIBE various environmental factors affecting on Pharma and Healthcare industry.
401E.2	Understanding	EXPLAIN various laws applicable to Pharma and Healthcare industry.
401E.3	Applying	INTERPRET Understand the situation and identity right legal way to solve the problem.
401E.4	Analysing	CONSTRUCT Elaborate the different laws developed by constitutions to support and protect Pharma sector.
401E.5	Evaluating	FORMULATE architecture for routine business activities in pharma.

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (FINANCE)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Pharma Logistics Management.
 - 2. Relationship selling
 - 3. Pharma Sales strategy
 - 4. Pharm Distribution Strategy
 - 5. New product launch strategy
 - 6. Manufacturing and regulatory affairs
 - 7. Pharma product strategy
 - 8. Pharma Brand strategy
 - 9. Missionary selling
 - 10. Environmental scanning

COURSE CODE	MB402E
COURSE TITLE	ADVERTISING & SERVICE MANAGEMENT IN PHARMACEUTICAL INDUSTRY
COURSE CREDITS	3

This course is designed to impart basic knowledge on managerial process designed to oversee and control the various advertising activities involved in a program to communicate with a firm's target market and which is ultimately designed to influence the consumer's purchase decisions.

Course Objectives:

- 1. To analyse the unique challenges of services marketing, including the elements of product, price, place, promotion, processes, physical evidence, and people.
- 2. To design service quality measurements to build customer loyalty and evaluate the effectiveness and efficiency of customer service offerings.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402E.1	Remembering	DESCRIBE Meaning, Classification, Market research and
402E.1	Remembering	data analysis.
402E.2	Understanding	EXPLAIN product life cycle; product portfolio analysis.
		INTERPRET Role of a Pharmaceutical Brand Manager;
402E.3	Applying	the 'Little CEO' concept, 'Science meets Commerce'
		concept.
402E.4	Analysing	CONSTRUCT Fundamentals of Pharmaceutical Marketing
402E.5	Evaluating	FORMULATE Portfolio Analysis by factoring key
402E.3	Evaluating	determinants.

Course Contents:

Unit 1: Overview of Advertising Management

Introduction, Meaning and Framework of Advertising; Defining Advertising; Advertising to Persuade the Buyer; Importance of Advertising in Marketing; Role of Advertising in Marketing Mix and Positioning; Advertisers and Advertising Agencies; Choosing an Advertising Agency, Online advertising – effective use of advertising campaign for maximizing value to the patients.

Unit 2 : Services Marketing

Meaning - nature of services - Types and importance - Relationship marketing - Mission, strategy, elements of design, marketing plan market segmentation, Defining Pharma Brand's Goals, objectives for the Advertising Campaign, various analytics platforms used for Pharma online advertising.

Unit 3: Marketing Mix Decisions

Review the basics of advertising pharmaceutical products, unique features of developing,

pricing, promoting and distributing services - Positioning and differentiations strategies, quality of service industries - Achievement and maintenance, customer support service, list of countries allowing pharmaceutical advertising, types of pharmaceutical advertisements which are allowed.

Unit 4: Nature and Scope of Digital Advertising Strategy

Copy design and development digital advertising strategy, Advertising control and Public Relationship, measure campaign performance and identify opportunities to improve pharma brand positioning, Develop an Analytics Plan (Measurement Model) for your Pharma Ad Campaign.

Unit 5: Marketing of Pharmaceutical and Hospital Services

Understanding the services provided in hospitals and clinics. Understanding the after sale services for any medical and pharmaceutical instruments. Marketing of Non-Profit Organisations: - Services offered by charities - Educational service - miscellaneous services - Power and Telecommunication.

Prescribed Books:

- 1. Services Marketing Indian experiences Ravishankar South Asia Publication 1998, Delhi.
- 2. Services Marketing: Integrating Customer Focus across the Firm Valarie A Zeitnamd and Mary Jo Bitmer, 3 rd Edition, TMH, 2003.
- 3. Services Marketing Text & Readings P.K. Sinha & S.C.Sahoo Himalaya, Mumbai.
- 4. Essence of Services Marketing Adrian Pyne Prentice Hall of India, New Delhi.
- 5. Services Marketing Lovelock Prentice Hall.

- 1. Services Marketing Jeithaml I.S.E.
- 2. Services Marketing Gousalves Prentice Hall.
- 3. Services Marketing Principles & Practice Palmer, Prentice Hall.
- 4. Services Marketing Woodruffe McMillan. 10. Ravi Shankar, Services Marketing, Excel, 2
- 5. Services Marketing S.M.Jha Himalaya Publishing Company 1998, Mumbai.

COURSE CODE	MB403E
COURSE TITLE	PHARMA AND HEALTHCARE MANAGEMENT
COURSE CREDITS	3

Healthcare in India is still in its initial stages and there is a huge requirement for professionals who understand the dynamics of the healthcare industry. By combining this with Pharmaceutical Management syllabus helps the students in becoming efficient and creative managers pertaining to media, Pharma as well as Healthcare Industry as Pharmaceutical & Healthcare companies face similar challenges. The course is developed to provide students with in-depth knowledge about healthcare and pharma world and its dynamics. This course in Pharma and Healthcare Management teaches various concepts relevant to healthcare professionals and application and relevance of the same with Pharma management.

Course Objectives:

- 1. To apply the concepts and principles of healthcare and Pharma management in the real world.
- 2. To develop interpersonal skills, team spirit, leadership qualities and implement them in the Pharmaceutical Management as well as healthcare sector.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403E.1	Remembering	DESCRIBE Modern health issues, Health care
1002.1	rememeering	organization's structure.
403E.2	Understanding	EXPLAIN Health statistics and Ethics in pharma and
403E.2	Onderstanding	health care.
403E.3	Applying	INTERPRET Health care policy.
402E 4	Assolution of	CONSTRUCT the laws related to Hospitals and pharma
403E.4	Analysing	industry in India.
402E 5	Evoluation	FORMULATE Software Applications in Health Care;
403E.5	Evaluating	Practical of Software Applications.

Course Outline:

Unit 1: Introduction

Global and Indian scenario of Healthcare Industry, components of healthcare industry, role and contribution of various components of healthcare industry for providing value to healthcare services, Industries within the Healthcare Sector, Pharmaceutical healthcare companies and their contribution in healthcare services, Global demand for various healthcare services, opportunities and challenges for providing the healthcare services by Pharma and Healthcare Industry.

Unit 2: Proactive Approach to Individual's Health and Well-Being

Changing pattern of medical industry and behavior of patients towards their health and well-

being, various approaches towards healthcare and change of spending pattern of the patients, expectations from the medical industry and the gap analysis.

Unit 3: New Technologies Leading in Innovation

Telemedicine to improve medical equality, private sectors and India's Medical Device Performance, government rules and regulations towards new technologies in pharma and healthcare sectors, Digital health strategies offering growing commercial opportunities for pharmaceutical firms.

Unit 4:Digital Health and Pharmaceutical Market

Concept, meaning, various digital platforms of medical industry, improvements in healthcare due to digital platforms, customer expectations from Pharmaceutical market and gap analysis, drug developments useful for various systems of human body.

Unit 5: Emerging Trends in Pharma and Healthcare Sectors

Digital Approaches to address Healthcare Challenges, emerging trends in pharmaceutical sector, emerging trends in healthcare sector. Scinificance and management of health during pandemic scenario, Vision 2030: opportunities due to digital innovation in pharma and healthcare sectors.

Prescribed Books:

- 1. Sawant, D. A. Pharmaceutical sciences pharma pathway: pure & applied pharmacy 15th edition.
- 2. Pharmaceutical Management by Sachin Itkar, 3rd Edition.

- 1. The Creative Destruction of Medicine: How the Digital Revolution Will Create Better Health Care- by Dr. Mike Topol.
- 2. First, Break All the Rules: What the World's Greatest Managers Do Differently by Marcus Buckingham and Curt Coffman.



COURSE CODE	MB404E
COURSE TITLE	INTELLECTUAL PROPERTY RIGHTS AND LEGAL ASPECTS IN PHARMACEUTICALINDUSTRY
COURSE CREDITS	3

It is well established that there is tension in the application of the new regime of Intellectual Property Rights in the Pharmaceutical Industry, especially in developing countries like India. The main purpose behind this study debate on the amendment of the Indian Patent Act, 1970 and the implementation of the TRIPS Agreement, critically analyzing the hypothesis that Intellectual Property Rights are necessary and need to be protected and also on the sufficient evidence to question this premise. Speculation and analysis of the Post-TRIPS, technological, economical and sociological behavior of the Indian Pharmaceutical Industry and the challenges faced by it, also formed the reason behind the presentstudy.

Course Objectives:

- 1. To demonstrate and complete academic projects and get awareness of acquiring the patentand copyright for their innovative works.
- 2. To demonstrate the plagiarism in the students innovations which can be questioned legally.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404E.1	404E.1 Remembering	The students will be able to IDENTIFY the rights for the
404E.1	Kemembering	protection of invention done in their project work.
		The students will be able to ASCERTAIN registration
404E.2	Alayzing	process in our country and foreign countries for invention
		& designs.
		The students will be able to ANALYZE Indian
404E.3	Analyzing	(Amendment) Patents Act, 2005 and the TRIPS
		Agreement.
		The students will be able to DEMONSTRATE Post-
404E.4	Applying	TRIPS, technological, sociological and economical
		changes in the Indian Pharmaceutical Industry.
		The students will be able to COMPARE the exponential
	ベ ト マ	growth and development brought in by the introduction of
404E.5	Alayzing	the new Intellectual Property Rights regime with the
	Y	hazardous relentless march of the Intellectual Property
		Rights bringing in contradiction to the public interest.
404E.6	Anavzina	The students will be able to ANALYZE the accessibility of
4041.0	Anayzing	flexibilities guaranteed by the TRIPS Agreement.

Course Contents:

Unit 1: The Contract Act, 1872 (Sections 1 to 75) – Nature and classification of contracts-Essential elements of valid contract-Offer and acceptance, Consideration, Valid consideration, Capacities of parties-Provisions related to free consent, valid agreement- Provisions related

performance and discharge of contract- Breach of contract, meaning and remedies for breach of contract- Contingent contracts, quasi contracts, wagering agreements.

Unit 2: Provisions relating to Agency (Sections 182 to 238) – Agent and principal, Creation of agency, Ratification, classification of agents- Relationship amongst principals, agents and subagents – Agent's authority, revocation, renunciation etc.- Rights, duties and liabilities of agents and principals- Termination of agency – Contracts of indemnity and guarantee.

Unit 3: The Sale of Goods Act,1930.- Contract of sale of goods- meaning of sale of goods and agreement to sell- essentials and formalities of contract of sale, sale and hire agreement. – Provisions relating to conditions and warranties - Provisions relating to transfer of property or ownership - Provisions relating to performance of contract of sale, rights of unpaid seller, remedial measures - Provisions relating to auction sale.

Unit 4: The Negotiable Instruments Act, 1881 – Meaning of negotiable instrument, its characteristics, types – holder and holder in due course – negotiations and types of endorsements, Dishonour of negotiable instrument – noting and protest.

Drug Control Order and role of Food And Drug Administrator.

Unit 5: Introduction to The Consumer Protection Act, 1986. – Definitions of consumer, a person, goods, service, trader, manufacturer – Meaning of consumer dispute, complaint, unfair trade practice and restricted trade practice – Consumer protection councils – Consumer dispute redressal agencies.

Companies act, 1956 – Definition and meaning of Company – Main features of a Company – Types of Companies – Incorporation of Companies – Provisions related to capital structure - Provisions related to Directors.

WTO and TRIPS

Prescribed Books:

- 1. N.D. Kapoor Mercantile Law.
- 2. M.C. Kunchal MercantileLaw.
- 3. K.K. Gujrat Indian Law of Patents.

COURSE CODE	MB405E
COURSE TITLE	PHARMACEUTICAL EXPORT MANAGEMENT
COURSE CREDITS	3

Our pharmaceutical companies are trying their best to achieve remarkable export sale in the international markets. This also provides quality management with special focus on pharmaceutical management for developing business leaders by nurturing knowledge, skills, communication, attitudes and behavior. Pharmaceutical export is contributing to the GDP of the country and every year this contribution is positively growing. The content of the course is designed to address the challenges facing the pharmaceutical industry. The Indian pharmaceutical company has been built from an industry that copies patent drugs and manufactures them inexpensively. Now it is counted amongst the industries that are fuelling Indias economic growth and holds enormous potential. Indian-based pharmaceutical companies are also predicted to gain considerable market share in the world. It holds rank worldwide, in terms of technology, quality and range of medicines manufactured. Thus the course concentrates on the Pharmaceutical Export: Facts and Challenges that should not beignored.

Course Objectives:

- 1. To understand International environment for Pharmaceutical Exports and Competitiveness of IndianPharma-products.
- 2. To understand Global market potential for Pharma-Products as well as supply chain organization for Pharma export from producer toport.
- 3. To understand Country Risk analysis, Export financing and WTO regulations w.r.t. Pharma products.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405E.1	Applying	The students will be able to MAXIMIZE export sale in the
	Applying	international markets.
		The students will be able to DESIGN quality management
405E.2	Creating b	with special focus on pharmaceutical management for
403E.2	Cleating b	developing business leaders by nurturing knowledge, skills,
		communication, attitudes and behavior.
405E.3	Understanding	The students will be able to ELABORATE the challenges
403E.3	Understanding	facing the pharmaceutical industry.
405E.4	4 Remembering	The students will be able to EXPLAIN Pharmaceutical
403E.4		Export: Facts and Challenges that should not be ignored.
		The students will be able to ANALYSE holding the rank
405E.5	Analyszing	worldwide, in terms of technology, quality and range of
		medicines manufactured.

Course Contents:

Unit 1: International environment for Pharmaceutical Exports, Competitiveness of Indian Pharma-products.

Unit 2: Global market potential for Pharma-products, Organization of supply chain for Pharmaceutical export – from producer to port.

Unit 3: Pharmaceutical export zones and special facilities for Pharmaceutical exporter, Country risk analysis.

Unit 4: Export promotion schemes for pharma-exports by state and central governments, Export financing.

Unit 5: WTO regulations with special reference to pharma products.

Prescribed Textbook:

- 1. Case Study- A. V. Vedpuriswar –ICFAIPublications.
- 2. Case study- Vol.I, II and III By KrishnaphaniKesiraju.

- 1. Ravi Kiran, Sunita Mishra, 2011.Research and Development, Exports and Patenting in the Indian pharmaceutical company: a Post TRIPS Analysis. Eurasian Journal of Business and Economics, 4 (7) ,53-67.
- 2. Nilesh Zacharias and Sandeep Farias, 2002. Business Briefing: Pharmatech 2002. IP Rights/Patents, Patents and the Indian pharmaceuticalcompany.
- 3. Neetu Dubey, R.K. Sharma, Himanshu Gupta, Nitin Dubey and Nidhi Dubey, March-June, 2011.
- 4. Performance of the Indian pharmaceutical company Pre and Post TRIPS Era: A Study, Asian Journal of Pharmacy and Life Science, Vol. 1 (2), ISSN 2231 –4423.



COURSE CODE	MB406E
COURSE TITLE	MARKETING STRATEGY AND PRODUCT LAUNCH DYNAMICS
COURSE CREDITS	3

The product concept holds that consumers will favour those products that offer quality or performance. Managers in these product-oriented organisations focus their energy on making good products and improving them over time. Pharmaceutical marketing is a delicate task, product launching is even more. It is such a complex task that, for every marketer in the pharmaceutical sector it's a challenging experience. The Inter-departmental nature of the jobs makes it extremely interactive. The product manager has to manage so many stakeholders that he has to be very careful about maintaining the balance. Beginning from the initial market analysis and profit-loss analysis, thorough subjective and objective decision making capabilities are required. Meeting the deadline is always important but it becomes more so in case of product launching. The task of launching a pharmaceutical product launching is critical in the sense that, for the company, it is a step forward to capitalize growth opportunities. Launching is also a critical experience for a product manager, it requires interaction with almost every department of a pharmaceutical company. Now it is counted amongst the industries that are fuelling Indias economic growth and holds enormouspotential.

Course Objectives:

- 1. To understand how to manage so many stakeholders that he has to be very careful about maintaining the inter-departmental balance.
- 2. To understand the beginning from the initial market analysis and profit-loss analysis, thorough subjective and objective decision making capabilities required during product launch.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to DESIGN strategies to manage
406E.1	Creating	huge number of stakeholders & the same time maintaining
		the inter-departmental balance.
		The students will be able to INTERPRET the beginning
406E.2	Understanding	from the initial market analysis and profit-loss analysis,
400E.2	Understanding	thorough subjective and objective decision making
		capabilities required during product launch.
		The students will be able to DEVELOP a mature and
406E.3	Understanding	critical understanding of concepts, theories, and evidence
400E.3	Onderstanding	for effective strategic management of new product and new
		service development from a marketing perspective.
		The students will be able to DESCRIBE and present the
406E.4	Remembering	market opportunity for a new product or service in terms of
		its potential users, as well as its competing and
		complementary products and services.

406E.5	Analyszing	The students will be able to ANALYSE and present the market opportunity for a new product or new service in terms of the dynamics of entry timing and the likely trajectory for market development and potential for product-market disruption and/or entrepreneurial transformation.
406E.6	Creating	The students will be able to DEVELOP a basic awareness of how public policy, infrastructure, and social and organizational contexts might operate to either facilitate or inhibit product or service innovation.

Course Contents:

Unit 1: Pharma Industry components: OTC, Research, APIs, Biotech, Generics, Supply Chain, Packging and CRO, Understanding Patients and Nature of Pharma Industry.

Unit 2: Management of Lab to Launch Process: Drug design and development.

Unit 3: Marketing Objectives of Pharmaceutical Product Launch: New Product Development stages, Market Uncertaintyand Developing Dynamic New ProductLaunchStrategies in PharmaceuticalMarketing.

Unit 4: Positioning, Targeting and Profiling the offerings, Marketing strategies at different Product Life Cycle stages of Pharma Product and Portfolio Management.

Unit 5: Forecasting a Pharma product and sales force management.

Prescribed Textbooks:

- 1. Product-Pharmaceutical Product development by Chilukuri Sunkara Young;Informa Healthcare.
- 2. Introduction to Pharmaceutical Practices by Hanan; EngageLearning.
- 3. Pharmaceutical emerging trends by Anshul Kaushesh;ICFAI.
- 4. Case studies in Marketing Strategy Vol-II;ICFAI.
- 5. Case studies in Management by Jham and Gupta; Biztantra.

- 1. Modern Pharmaceutical Industry by Jacobsen Wertheimer; APrimer.
- 2. Pharmaceutical Product Branding Strategy- IInd edition by Mark Paich, Corey, Jason; InformaHealthcare.
- 3. Case Studies in Marketing Research and Product management;ICFAI
- 4. Case studies in Management Vol-VI; ICFAI

COURSE CODE	MB407E
COURSE TITLE	PHARMACEUTICAL ADVANCE HUMAN RESOURCE MANAGEMENT
COURSE CREDITS	3

An array of components comprise Pharmaceutical human resource management, such as recruiting, onboarding, benefits enrollment, payroll, talent or workforce management, reporting, time and attendance, and succession and performance management. Pharma human resource management is the connection between a Pharma company's human resources and its strategies, objectives, and goals. The aim of this course is to teach Advance flexibility, innovation, and competitive advantage to develop a fit for the purpose organizational culture.

Course Objectives:

- 1. To understand the changes in HRM practices (Role and Structure of HR department, Recruitment, Retraining and Redeployment, Performance Appraisal, Compensation, Career Planning and Performance Management System) in Pharmaceutical companies.
- 2. To understand the importance of the availability of a skilled, committed, & highly motivated workforce in the organization to achieve sustained competitive advantage.
- 3. To enable to provide direction to the organization so that both the business needs of the organization & the individual & collective needs of its workforce are met.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407E.1	Remembering	DESCRIBE Management Process and Organization Theory; Individual Behaviour in Organization
407E.2	Understanding	EXPLAIN Human Resource Management in pharma industry.
407E.3	Applying	INTERPRET Managerial Communication and Skill Development
407E.4	Analysing	CONSTRUCT Quantitative Techniques in Human Resource Management
407E.5	Evaluating	FORMULATE Cross Culture and International Human Resource Management.

Course Outline:

Unit 1: Role of HR Department in Pharmaceutical Company's performance

Role, Functions of HR in Pharma industry, Trends and Overview of HR managers, Changing role of HR managers.

Unit 2: Changing face of PHRM

Evolving PHR operations, Role and Significance of Skills and technology in Changing face of PHRM, Sustainable training programs for PharmaHR operations.

Unit 3: Competitive strategies and PHRM Practices

HRM Best practices, Role and Significance of linking Competitive strategies with PHRM Practices, Achieving competitive advantage through HR practices in Pharma Business.

Unit 4: Aligning PHRM and Business Strategy

Concept of aligning Pharma business, brand and behavior of the Physicians, formulate and assess Pharma Business Strategies, Align efforts to Pharma business strategy for survival.

Unit 5: Pharmaceutical HR Competencies

Concept and types of HR Competencies, Competencies in PHRM, Role of PHRM in strategy formulation, HR content areas and the SHRM competencies for Pharma Business.

Prescribed Book:

- 1. Michael W. Noel, J. Lyle Bootman Aspen Systems Corporation, 1986 Business & Economics.
- 2. A Textbook Of Pharmaceutical Industrial Management, Shah Elsevier India, 2010.

- 1. Pharmaceutical Production and Management- C.V.S. Subrahmanyam.
- 2. Human Resource Management, 9th Ed, Pearson Education, Inc. Senyucel, Z. (2012).
- 3. Human Resource Management, 36(3), 357–365; Pfeffer, J. 1994.

BIOTECH AND BIOINFORMATICS MANAGEMENT SPECIALIZATION

COURSE CODE	MB401F
COURSE TITLE	CASES IN MANAGEMENT (BIOTECH & BIOINFORMATICS)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401F.1	Remembering	Describe the major concepts in biotechnology
401F.2	Understanding	Summarize the impact of current developments in biotechnology
401F.3	Applying	Make use of different techniques in biotechnology to answer the pressing needs
401F.4	Analysing	Attributing the cases with reference to technological developments
401F.5	Evaluating	Test the cases with reference to latest therapies and technologies
401F.6	Creating	Construct a case on any one biotech topics

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (BIOTECH & BIOINFORMATICS)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Plant biotechnology
 - 2. Recent advances in biotechnology
 - 3. Stem cell technology
 - 4. Recombinant DNA techniques
 - 5. Cancer treatment using nanotechnology
 - 6. Signalling pathways
 - 7. Disease detection using robotics
 - 8. Gene therapy
 - 9. Environmental biotechnology
 - 10. Industrial biotechnology

COURSE CODE	MB402F
COURSE TITLE	BIOTECHNOLOGY SOCIAL, LEGAL & ETHICAL ISSUES
COURSE CREDITS	3

This course examines biotechnology and genetic engineering in social, legal, and ethical contexts.

Course Objectives:

- 1. To gain familiarity with bioethical approaches and learn to apply them to the issues raised by biotech.
- 2. To make students learn about the social, Legal & ethical issues raised due to the rapid progress in Biotechnology and development of new products.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402F.1	Remembering	Describe types of current trends in the treatment areas of various conditions
402F.2	Understanding	Explain social and cultural issues associated with different molecular technologies
402F.3	Applying	Demonstrate legal frameworks of various countries for the use of molecular technologies
402F.4	Analysing	Examine ethical issues associated with molecular technology treatments
402F.5	Evaluating	Defend the need of bioethics and National and international regulations for bioethics

Course Outline:

Unit 1: Molecular technologies – an overview of Genetic screening for any predisposition symptoms, Cancer screening, Cloning, Gene therapy, DNA fingerprinting,(Paternity and Forensics) in vitro fertilization, surrogate motherhood, PGD, transgenic organisms, xenotransplantation, GMOs.

Unit 2: Social issues - public opinions against the molecular technologies.

Unit 3: Legal issues – legal actions taken by countries for use of the molecular technologies.

Unit 4: Ethical issues – ethical issues against the molecular technologies.

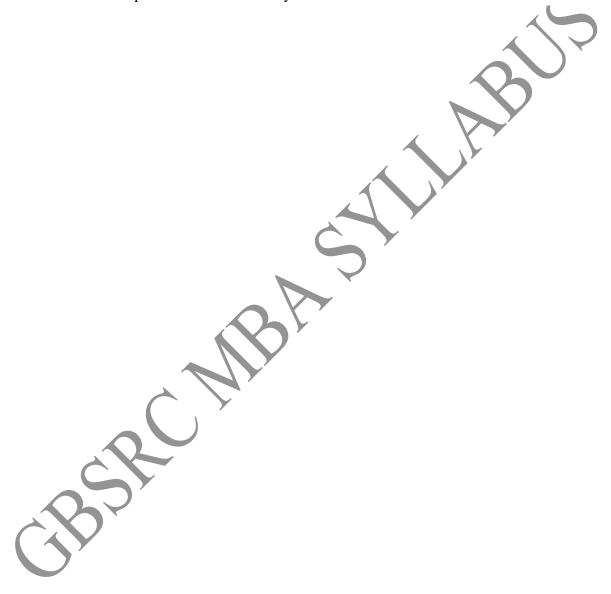
Unit 5: Bioethics – Necessity of Bioethics, different paradigms of Bioethics – National & International.

Prescribed Books:

1. Bioethics & Biosafety R Rallapalli & Geetha Bali APH Publication 2007.

- 2. Biotechnology and Safety Assessment Thomas J.A., Fuch R.L Academic Press 3rd Edition 2002.
- 3. IPR, Biosafety and Bioethics by Deepa Goel and Shomini Parashar, Pearson publisher.

- 1. Biological safety Principles and practices Fleming D.A., Hunt D. ASM Press 3rd.ed. 2000.
- 2. Bioethics Ben Mepham Oxford University Press 2008.



COURSE CODE	MB403F
COURSE TITLE	BIOTECH INDUSTRY & POST- PANDEMIC RESILIENCE MANAGEMENT
COURSE CREDITS	3

Disasters at work place and surroundings is common. This course enable students to understand how we can manage a disaster whether it is natural or man-made effectively. This course creates the awareness of institutional process in the country and develop basic ability to respond to their surroundings with potential disaster response in areas where they live, with due sensitivity.

Course Objectives:

- 1. To provide student an exposure to disasters, their significance and types.
- 2. To ensure that students begin to understand the relationship between vulnerability, disasters, disaster prevention and risk reduction.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403F.1	Remembering	Describe the definition and key concepts in disaster
40311.1	Kemembering	management
403F.2	Understanding	Discuss types of biological disaster management and its
40311.2	Understanding	impact
403F.3	Applying	Demonstrate steps in disaster management and roles and
40311.3	Applying	responsibilities of community
403F.4	Analysing	Examine the impact of different factors on disaster
40311.4	Allarysing	management
403F.5	Evaluating	Evaluate the components of disaster relief and
4031.3	Evaluating	preparedness for potential disasters

Course Outline:

Unit 1: Introduction to Disasters

Concepts and definitions Key components of disaster management (Disaster, Hazard, Vulnerability, Resilience, Risks).

Unit 2: Types of Disaster in Biotech Industry

Biological disaster management – disease epidemics, Impacts of disasters including social, Global trends in disasters urban disasters, pandemics, economic, political, complex emergencies, Climate Change environmental, health, psychosocial, etc.

Unit 3: Steps in Disaster Management

Culture of safety, prevention, mitigation and Risk reduction preparedness, community based DRR, Structural – nonstructural measures, roles and responsibilities of community, Resilience on the front lines & Healthcare sector, Healthcare providers, Life sciences & Biotech- Pharma

industry.

Unit 4: Inter-Relationship Factor Affecting

Vulnerabilities: differential impacts, between Disasters and impact of Development projects, Development embankments, changes in Land-use etc. Climate Change Adaptation. Relevance of indigenous knowledge, appropriate technology and local resources.

Unit 5: Disaster Risk in India Hazard and Vulnerability Profile of India

Components of Disaster Relief: Water, Food, Sanitation, Shelter, Health, Waste Management, Institutional Arrangements, Preparing for potential disasters. Role of biomedical engineering in disaster management, Long term impact of COVID 19.

Prescribed Books:

- 1. Alexander David, Introduction in "Confronting Catastrophe", Oxford University Press, 2000.
- 2. Andharia J. Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Science working Paper no. 8, 2008.
- 3. Blaikie, P, Cannon T, Davis I, Wisner B 1997, At Risk Natural Hazards, Peoples, Vulnerability and Disasters, Rutledge.
- 4. Disaster Management: B. Narayan.
- 5. Disaster Management: Ram Kumar and S. L. Goel.

- 1. Coppola P Damon, 2007, Introduction to International Disaster Management.
- 2. Carter, Nick 1991, Disaster Management: A Disaster Manager"s Handbook, Asian Development Bank, Manila Philippines.
- 3. Cuny, F.1983, Development and Disasters, Oxford University Press.
- 4. Document on World Summit on Sustainable Development 2012.
- 5. Govt. of India: Disasters Management Act 2005. Government of India, New Delhi.
- 6. Government of India, 2009, National Disasters Management Policy.
- 7. Gupta Anil K, Sreeja S. Nair, 2011, Environmental Knowledge for Disasters Risk Management NIDM, New Delhi.
- 8. Indian Journal of Social Work 2002, Special Issue on Psychosocial Aspects of Disasters, Vol. 63, Issue 2, April

COURSE CODE	MB404F
COURSE TITLE	FERMENTATION TECHNOLOGY AND INDUSTRIAL BIOTECHNOLOGY
COURSE CREDITS	3

It seeks to provide education and training, empower students with technical skill-set, create capacities and build career opportunities in three key domains of biotechnology namely: Research and development, Science education and Policy, regulations andmanagement.

The course aims to provide fundamental insights to exploit enzymes and microbes for the manufacturing of products which have a huge industrial significance. Strategies to obtain higher yields, design of the reactors and production of biofuels from microbes are thoroughly explained.

Course Objectives:

- 1. To introduce with the fundamentals of industrial Biotechnology.
- 2. To study industrial production of fermented products.
- 3. To study unit operations in food industry.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to DEMONSTRATE advanced
404F.1	Applying	skills in performing literature searches in undertaking an
4041.1	Applying	in-depth case study of an environmental issue, and
		presenting a critical appraisal.
		The students will be able to DESCRIBE the applications of
		various fields including chemistry, biochemistry, molecular
404F.2	Remembering	biology and/or microbiology, in understanding and
		addressing the above issues, as well as exploring
	A \	environmental resources for new technologies.
	(, '	The students will be able to IDENTIFY the various global
404F.3	Remembering	and regional environmental concerns due to natural causes
40411.3	Kememoering	and/or human activities, and the impact of these on various
		forms of life including native biodiversity.

Course Contents:

Unit 1: Introduction to ermentation technology

Historical background, Important industrial biotechnologically derived products.

Unit 2:Fermentation Design

Design of Fermenter and its components (construction, impellers, valves, spargers, other attachments of the system) -Layout of Fermenter unit and laboratory -Operation details of fermentation and troubleshooting -Bioreactor types for products of microbial, plant and animal origin -Role of computers in fermentation processes.

Unit 3: Sterilization

Sterilization of Fermenter (batch and continuous processes) -feed sterilization -sterilization of liquid wastes -Filter sterilization.

Unit 4:Isolation of microbes and Strain improvement

Isolation and preservation of industrially important microbes -Strain improvement by recombinant DNA techniques, isolation of mutants, etc.

Unit 5:Design of media and inoculums development

Nutritional media for microorganisms, their formulation, sterilization, screening and economy for proper growth of industrial microbes - identification of variables important for fermentation - Medium optimization using conventional and statistical designs - Inoculums development for bacterial, fungal and yeast strains -Aseptic inoculation in Fermenter.

Prescribed Books:

- 1. Fundamentals of Microbiology by Forbisher.
- 2. Food Biotechnology: Dietrich Knorr, Inc.New York and Basel.
- 3. Food Science: Potter N.N. CBS publication.
- 4. Food Science and Technology: B.S.Khattar, Daya PublishingHouse, Delhi.
- 5. Textbook of Biotechnology-H.K.Das.
- 6. Textbook of Biotechnology-Purohit.

COURSE CODE	MB405F
COURSE TITLE	ADVANCES IN BIOTECHNOLOGY AND BIOINFORMATICS
COURSE CREDITS	3

It seeks to provide education and training, empower students with technical skill-set, create capacities and build career opportunities in three key domains of biotechnology namely: Research and development, Science education and Policy, regulations and management.

Course Objectives:

- 1. To introduce students with various databases.
- 2. To study Pairwise and Multiple sequence alignments.
- 3. To study Phylogenetic analysis.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405F.1	Remembering	The students will be able to IDENTIFY various databases
4031.1	Remembering	and bioinformatics tools available.
405F.2	Creating	The students will be able to CONSTRUCT Pairwise and
4036.2		Multiple sequence alignments and Phylogenetic analysis.
		The students will be able to OUTLINE the important
405F.3	Understanding	applications of the growing biotechnology fields of
		veterinary biotech, dental biotech, nanotechnology,
		bioterrorism, and biodefense.

Course Contents:

Unit 1: Introduction to Nanobiotechnology and Biosensors

History of Nanobiotechnology, Growth of Nanotechnology and development of Nanobiotechnology, Introduction to biosensors -History of discovery of biosensors -Components of a typical biosensor.

Unit 2: Genomics, Transcriptomics and Proteomics

Introduction to genomics, Transcriptomics and proteomics. Application of genomics, Transcriptomics and proteomics in agriculture, medicine and industry.

Introduction and current status of Biopharmaceuticals in the pharmaceutical industry Nucleic acid therapeutics, Hormones of therapeutical interest, Antibodies, vaccines and adjutants.

Unit 3: Nucleic acid sequence databases

GenBank, EMBL, DDBJ • Protein sequence databases, SWISS-PROT, TrEMBL, PIR, PDB • Genome Databases at NCBI, EBI, TIGR, SANGER • Other Databases of Patterns/Motifs/System Biology (Gene and protein network database and resources) Sequence analysis: • Various file formats for bio-molecular sequences: genbank, fasta, gcg, msf, nbrf-pir etc. • Basic concepts of sequence similarity, identity and homology, definitions of homologues, orthologues, paralogues Unit 4: Scoring matrices: basic concept of a scoring matrix, PAM and BLOSUM series, Sequence-based Database Searches: what are sequence-based database searches, BLAST and FASTA algorithms, various versions of basic BLAST and FASTA, Pairwise and Multiple

sequence alignments: basic concepts of sequence alignment, Needleman andWuncsh, Smith and Waterman algorithms for pairwise alignments, Progressive and hierarchical algorithms for MSA. Use of pairwise alignments and Multiple sequence alignment for analysis of Nucleic acid and protein sequences and interpretation of results.

Unit 5: Phylogeny

Phylogenetic analysis, Definition and description of phylogenetic trees and various types of trees, Method of construction of Phylogenetic trees [distance based method (UPGMA, NJ), Maximum Parsimony and Maximum Likelihood method] Current Advancements in Bioinformatics: Introduction to System Biology, Structural Biology, Structural bioinformatics, Chemo informatics, Immunoinformatics etc.

Prescribed Books:

- 1. Introduction to Bioinformatics by Aurther Mlesk.
- 2. Developing Bioinformatics Computer Skills By: Cynthia Gibas, PerJambeck

COURSE CODE	MB406F
COURSE TITLE	AGRICULTURAL BIOTECHNOLOGY
COURSE CREDITS	3

A course designed to incorporate basic elements of science with a variety of technology applications that are used to modify living organisms. Areas of emphasis include basic science laboratory procedures, implementation of the scientific method of discovery, plant science, animal science, environmental science and food science.

Course Objectives:

- 1. To introduce students with Agricultural Biotechnology.
- 2. To study the plant and animal Biotechnology advancements.
- 3. To advance education and research in Biotechnology and explore sustainable solutions foragriculture, environment and energy sectors.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406F.1	Analyzing	The students will be able to ANALYZE different methods
4001.1	7 Mary Zing	of Crop Improvement.
406F.2	Understanding	The students will be able to INTERPRET the advantages
4001.2		of genetically modified plants and animals.
406F.3	Applying	The students will be able to DEMONSTRATE Gene
4001.3	Applying	transformation techniques in Plant Biotechnology.
		The students will be able to EXAMINE the application of
406F.4	Evaluating	plant and microbial biotechnologies for sustainable
		agriculture.
		The students will be able to ASSESS how modern
406F.5	Understanding	agricultural biotechnology and genetic resources can be
		harnessed to achieve environmental sustainability.
		The students will be able to ADAPT knowledge about the
406F.6	Applying	range of approaches to manipulate and improve plants,
		animals and microorganisms.

Course Contents:

Unit 1: Introduction to Agricultural biotechnology, Scope of agro biotechnology, TransgenicPlants-resistance to viral diseases, Biotechnology for commercial crops, Maize, Rice, Cotton, Potato, Tomato, Sugarcane. Techniques used in Plant biotechnology.

Unit 2: Plant Biotechnology- Methods of Crop Improvement, Gene transformation techniquesin Plant Biotechnology: Agro-bacterium mediated gene transformation and Gene gun method, Bt genes and its applications.

Unit 3: Disease resistant plants, Resistance to biotic stress, Herbicide resistance in plants TheIndian force of Agricultural biotechnology.

Unit 4: Introduction to marine Biotechnology, Biotechnology in Aquaculture, Improvement ingrain and tuber quality, Agriculture and genetic engineering, Agricultural diagnosis.

Application of Plant diagnostics.

Unit 5: Transgenic plants as bioreactors, Production of antibodies and primary metabolites byplants, Biotechnology for the production of secondary metabolites.

Animal livestock breeding, Importance of livestock in agriculture, relationshipbetween plant and animal husbandry, animal breeding, breeds of indigenous and exotic cattle, buffaloes, goats, sheep, pigs and poultries and their potential for milk, egg, meat and woolproduction, classification of feed and fodder, major contagious diseases affecting cattle anddrought animals, poultries and pigs, Sericulture and its applications Biotechnology in Agriculture, Ethical Aspects and Public Acceptance.

Prescribed Books:

- 1. Biotechnology by B. D. Singh, KalyaniPublication.
- 2. Biotechnology Fundamentals and applications by S. S. Purohit.
- 3. Student Edition Agricultural Biotechnology-Arie Altman, CRCPress.
- 4. Biotechnology- An Introduction by Susan R. Barnum, Vikas PublishingHouse.
- 5. Aqua Culture An Introduction, Lee and Newman, Interstate Publishers.

COURSE CODE	MB407F
COURSE TITLE	BIOTECHNOLOGY AND PHARMA PLANT MANAGEMENT
COURSE CREDITS	3

This course is designed to impart knowledge and skills necessary to train the students to be on scale up, biopharma manufacturing process, operational structure of biopharma industry. To update them about Bio suppliers & services market and industrial safety issues. Which increases the knowledge regarding the regulatory aspects in the bio pharmaceutical industries. The topics which are present in the course are very much useful to the students in personality development become perfect biopharma professional.

Course Objectives:

- 1. ToManage the scale up process in biopharmaceutical industry.
- 2. To Assist in entire management of biopharma plants (industry).
- 3. To establish safety guidelines, which prevent industrial hazards.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407F.1	Remembering	Describe various concepts in biotechnology manufacturing
407F.2	Understanding	Describe various concepts in pharma manufacturing and role of different entities
407F.3	Applying	Explain different biopharma facilities, CRO facilities etc
407F.4	Analysing	Evaluating different government initiatives and consultancies to set up the facilities
407F.5	Evaluating	Analyse different types of hazards associated with Pharma and biotech industry

Course Outline:

Unit 1:Biotechnology Manufacturing

Automation, process control and information solutions for biotech industry, Modern DCS for Visibility and up time, CM (Continuous Manufacturing), fully integrated control systems. Bio suppliers in biotech & pharma industry, quality measures.

Unit 2:Pharmaceutical Manufacturing

Production and Process- Information and tools need to design, implement, operate and troubleshoot pharma manufacturing. Role of Scientists, Managers and engineers in pharmaceutical/ biotech Plant management.

Unit 3: Study of Biopharma Facilities, CGMP- Concept & definition, Production, R& D requirements in biopharma industry, Pharmaceutical biocontainment labs, levels of BSL, Bio services involved in Contract Research and clinical trials, processes and guidelines followed by CROs.

Unit 4: Current Status of Biotech Pharma Industry, Plant management in India and abroad, List of companies or organizations provide a ready-made facility for biotech & pharma industries, Role of companies and consultancy about facility/ plant management, Packaging and Labelling

facilities, government initiatives to support biotech industry to set up Innovation Parks/Biotech Centres.

Unit 5: Industrial safety

Hazards – fire, mechanical, electrical, chemical and biopharmaceutical, Monitoring & prevention systems, industrial effluent testing & treatment. Control of environmental pollution. Government rules and norms for the maintains and disposal (waste) from the biopharma labs. Emerging trends in the biotech & pharma sector.

Prescribed Books:

- 1. Managing Biotechnology, from Science to Market in Digital Age, Simon Françoise, Wiley.
- 2. Subrahmanyam, CVS, Pharmaceutical Production and Management, 2007, Vallabh Prakashan, Delhi.
- 3. A Biotech Manager's Handbook, Woodhead Publishing Ltd, eBook by O'Neill, M, Hopkins, M M.

- 1. The theory & Practice of Industrial Pharmacy, L. Lachman, H.A. Lieberman, Varghese Publ. Bombay.
- 2. Pharmaceutical Production facilities, design and applications, by GC Cole, Taylor and Francis.
- 3. Pharmaceutical Project management, T. Kennedy, Vol 86, Marcel Dekker, NY.
- 4. Handbook of Pharmaceutical manufacturing formulations: Sterile product by Sarfaraz K Niazi.
- 5. Pharma manufacturing handbook production and processes by Shayne Cox Gad, Wiley interscience.

COURSE CODE	MB401G
COURSE TITLE	CASES IN MANAGEMENT (IT & SYSTEMS MANAGEMENT)
COURSE CREDITS	3

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401G.1	Remembering	DESCRIBE the major areas in IT & system management
401G.2	Understanding	SUMMARIZE the impact of new technology in IT management
401G.3	Applying	MAKE USE OF the Theories, Models, Principles and Frameworks of Information technology in analysing the cases of IT.
401G.4	Evaluate	TEST a given Case of IT with reference to the Current Trends, Best Practices in IT
401G.5	Creating	CONSTRUCT a Case on any one of the given IT Concepts or Problem or Scenario

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (IT & SYSTEMES MANAGEMENT)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. IOT enabled management
 - 2. Information Communication Technology
 - 3. Cloud Computing
 - 4. Artificial Intelligence
 - 5. Remote Sensing
 - 6. Cellular Gateways
 - 7. Big Data
 - 8. Global Networking
 - 9. Online content measurement
 - 10. Backup and disaster recovery

COURSE CODE	MB402G
COURSE TITLE	E-GOVERNANCE AND FRAMEWORK OF ICT
COURSE CREDITS	3

This course will introduce you to the ways in which internet technologies are affecting how people interact with government, and how governments, in turn, are using and managing these technologies to better provide information and services to the public. Course content is divided into three main themes, and begins with an overview of development techniques and assessment methods for public web sites and on-line applications.

Course Objectives:

- 1. Gain a familiarity with the basic concepts, terminology and technology of e-commerce/e-government.
- 2. Develop skills to critically evaluate government web sites and eservices against current "best practice" principles and standards.
- 3. Understand the major federal and state laws and regulations impacting the evolution of e-government.
- 4. Be able to articulate the policy and social issues facing agencies in implementing e-government initiatives.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402G.1	Remembering	DEFINE the basic terms of E-Government and E-Governance
402G.2	Understanding	SUMMARIZE the various models of E governance Models & its use in various sector
402G.3	Applying	IDENTIFY the challenges of E-governance
402G.4	Analysing	ANALYZE the usage of issues in Internet and E-commerce
402G.5	Evaluating	EVALUATE the Government efforts to encourage citizen participation

Course Outline:

Unit 1: Overview of E-Government and E-Governance

Stages of E-Governance, National EGovernance Plan(NeGP), Mission Mode Projects and their implementation status, E-Governance Introduction to E-governance, Role of ICT in e-governance, Need, importance of E-governance, Categories of E-governance, Key Issues of E-Governance, Technology, Policies, Infrastructure, Training, Copyrights, Consulting Funds, E-governance Models, Model of Digital Governance, Wider Dissemination Model.

Unit 2: E governance Models

Critical Flow Model, Interactive-service model/Government to-Citizento-Government Model

(G2C2G), Major areas of E-governance Services, Public Grievances: Telephone, Ration card, transportation, Rural services Land Records, Police: FIR registration, Lost and found, Social services: Death, domicile, school certificates, Public information: employment, hospitals, railway, Agricultural sector: Fertilizers, Seeds, Utility payments Electricity, water, telephone, Commercial: income tax, custom duty, excise duty-Governance Infrastructure.

Unit 3: Phases of e-government

"Brochure ware", Interactive, and Transaction, Five Stages of Electronic Government Development, Statutes affecting e-government development, Human Infrastructural preparedness, Challenges for E-governance.

Unit 4: Policies

National Telecom Reforms, National Telecom Policies NTPs, Regulations: Digital Divide and Digital Dividends, Development and rationale of regulation and, deregulation, Role of Telecom Regulatory Agencies - Telecom Regulatory Authority of India (TRAI) & ITU, Information Technology Act (2000), Internet and E-commerce issues: privacy, security, domain names, etc, Wireless: frequency auctions, standards, competition.

Unit 5: Public Access & Government Transparency

e-Democracy and On-line Activism Government efforts to encourage citizen participation Blogging and internet campaigns.

Prescribed Books:

- 1. Heather E Hudson, (2006). Global Connections International Telecommunications Infrastructure and Policy, 1st Edition, Wiley Publication.
- 2. E. Bohlin and S.L. Levin, (2000). Telecommunications Transformation Technology, Strategy and Policy, 1st Edition, IOS Press.
- 3. McElroy, (2003).KMCI (Knowledge Management Consortium International) and Butterworth Hienemann, 1st Edition.
- 4. R. K. Mitra, (2006). E-government: Macro Issues, 1st Edition, GIFT Publishing.

- 1. Vikram Raghavan, (2007). Communication Law in India-Legal Aspects of Telecom, Broadcasting, and Cable Services, 1st Edition, Lexis Nexis Butterworths.
- 2. D N Gupta, (2008). E Governance A Comprehensive Framework, 1st Edition, Jain Publications.

COURSE CODE	MB403G
COURSE TITLE	E-LEARNING TOOLS & METHODS
COURSE CREDITS	3

To understand about eLearning is a learning process with the combination of content that is both delivered digitally and through face-to-face learning. ELearning contributes to the shifts from traditional face-to-face learning to the use of web technological tools which enhances collaborative learning and presents an entirely new learning platform for students

Course Objectives:

- 1. To understand e-learning as an emerging educational technology.
- 2. To learn use of tools/ technologies used for e-learning based pedagogy.
- 3. To develop capability to initiate e-learning project(s).

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403G.1	Remembering	DEFINE the basic terms of E-learning & its
403G.1		Implementation
403G.2	I In donaton din o	SUMMARIZE the various types of e-learning and
4030.2	Understanding	technologies required
403G.3	Applying	DISSCUSS the Hardware & software tools of e-learning
403G.4	Analysina	ANALYZE the usage of E-learning by using different
4030.4	Analysing	platforms of digital media
403G.5	Evaluating	EVALUATE every trend and Standard of E-learning for
		various users

Course Outline:

Unit 1: Introduction

e-learning- definition. Why e-learning? Elements of e- learning, eLearning content- dimensions, Risks in e-learning, ROI, e- learning cycles, Implementation.

Unit 2: Types of e-learning and technologies required

Students- led e-learning Facilitated e-learning, Instructor- led e-learning, Embedded e-learning Tele-mentoring and e-coaching, Categories of software tools.

Unit 3: Hardware and Networks for e-learning

Selection of e-learning Hardware, network for e- learning, types of networks, private networks, private networks, internet, TCP/IP, wireless internet connection.

Unit 4: Tools for accessing e-learning

Web browsers, media players and viewers Tools for offering e- learning:Web servers, LMS-Learning Management Systems, Learning Content Management Systems, Collaboration tools, Virtual- School systems, media servers Tools for creating e- learning content:Course authoring

tools, web site authoring tools, how they work?, an overview of popular web site authoring tools, alternatives to web authoring tools, blogging tools, testing and assessment tools.

Unit 5: Standards For e-learning

Standards for packaging, communication, Metadata, Quality standards, other standards and regulation Trends in e-Learning:Always Online, All information online, All Media digital, Emergence of HDTV video standard, Force or haptic feedback, Telepresence, immersive simulations, embedded system.

Prescribed Books:

- 1. Delivering E- learning: A complete strategy for design, application and assessment by Kenneth Fee, Kogan Page London and Philadelphia, 2009.
- 2. E- Learning Tools and Technologies consumer's guide for trainers, teachers, educators and instructional designers William Horton, Katherine Horton, Wiley.

Suggested Readings:

Journal of e-Learning and Knowledge Society.

COURSE CODE	MB404G
COURSE TITLE	INNOVATION AND TECHNOLOGY MANAGEMENT
COURSE CREDITS	3

In this modern era of high competition and fast changes, -Innovation and Technology Management is assuming ever increasing importance in shaping the progress and future of the nations and business firms. The technological change is continuously occurring and affecting all aspects of life. It is bringing new opportunities and newthreats. This course is designed for management students which signify the importance for the entrepreneurs and managers, both present and future. This course largely meets the requirements of MBA program.

Course Objectives:

- 1. To study the management of Technology.
- 2. To understand the use of technology for survival and growth.
- 3. To study the innovation at all level.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to APPLY the knowledge to
404G.1	Applying	manage the R& D of an Organization & Intellectual
		Property Rights in context of technology management.
		The students will be able to ASCERTAIN the Technology
404G.2	Evolucting	Assessment and Environmental Impact Analysis
4040.2	Evaluating	Integration of People and Technology, Organizational and
		Psychological Factors, Organizational Structure.
		The students will be able to investigate, ANALYSE and
404G.3	Analyzing	propose solutions to innovation and technology business
		issues.
		The students will be able to EVALUATE ethical and
404G.4	Evaluating	environmental implications of technological innovation –
		and consider such implications in your proposed solutions.
404G.5	Creating	The students will be able to DESIGN written professional
4040.3		reports & deliver well-structured presentations.
404G.6	Remembering	The students will be able to EXPLAIN the nature and
4040.0		extent of technological change and innovation.

Course Contents:

Unit 1: Technology in Management

Technology for survival andgrowth, Science andtechnology, Types oftechnology, Technologyportfolio, Technology lifecycle, Management oftechnology, Technologyforecasting, Technologygeneration, Technologydevelopment.

Unit 2: Innovation

Goals andreasons, Difference between invention and innovation, Sources andadvantages, Associatedrisks, Characteristics andtypes, Process, Failures, Innovision, Management

ofInnovation.

Unit 3: Technology and its Concepts

TechnologyTransfer, Technologyacquisition, TechnologyAbsorption, TechnologyDiffusion, TechnologyMaturity, TechnologyObsolescence, TechnologyDiscontinuities, TechnologyAssessment, TechnologyAudit, Impact of TechnologicalChange/Progress.

Unit 4: Information Technology

IT and the World, IT and the Government, IT andIndustry, IT andIndia, IT and CareerManagement, Internet, Intranet andExtranet.

Unit 5: Organizational Change Management

Organizationalchange, Types andreasons, Change Management- Strategies, Process, Role of Leader in FacilitatingChange, TechnologicalChange, Change in Product and ProcessDesign, Time Frame ofChange, ManagingTransformation.

Prescribed Books:

- 1. Twiss, Brain and Good Ridge, Managing Technology for CompetitiveAdvantage.
- 2. Hawthorne, Edward, Management oftechnology.
- 3. Burgleman Robert A., Strategic Management of Technology and Innovation.
- 4. Jain Ashok ET. al. Indicators of Indian Science and Technology.

COURSE CODE	MB405G
COURSE TITLE	MARKETING OF INFORMATION TECHNOLOGY
COURSE CREDITS	3

The success of a product or service depends as much on its marketing strtegies. And successful marketing rests on a scientific approach to the entire technology cycle, innovation, and domain knowledge of the marketing personnel. Since information technology industry changes faster than any other industry, vendors and marketers need to stay abreast of the latest trends in technological development and newer means of delivering ITservices.

Course Objectives:

- 1. To understand the crucial role of IT on each of the components of the marketing mix.
- 2. To discover the need of new professional profile best adapted to the new IT/Mkt departments needs.
- 3. To gain strategic criteria and knowledge for comparing, evaluating, selecting, and contracting such technologies and services under different exploitation models.
- 4. To know real cases using ITM in innovative ways.
- 5. To be able to develop a practical strategic ITM plan.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405G.1	Applying	The students will be able to DEMONSTRATE
		understanding of the Concept of Cloud based advertisement.
405G.2	Remembering	The students will be able to EXPLAIN the concepts and
		role of promotion in Marketing of IT products and services.
405G.3	Understading	The students will be able to OUTLINE the promotion and
		advertising plan for IT products.
405G.4	Evaluating	The students will be able to DETERMINE the factors
		considered while setting pricing of software products.
405G.5	Creating	The students will be able to DESIGN by making use of
		knowledge in Online feedback and Maintenance systems.
405G.6	Analyzing	The students will be able to MEASURE the impact of
		social and digital networks and manage them effectively.

Course Contents:

Unit 1: Global and Indian Software Industry Environment

Historical Growth of the Industry, Market Size, Nature of Products, Projects and Services, Major Players, Industry Associations and their role in market development, Overview of India's Software Export Industry. Concept of Cloud based advertisement- Product delivery and Maintenance, Mobility and alliances for marketing of IT.

Unit 2: Services Marketing Mix

7 Ps of Services Marketing – Service Life Cycle Strategic Aspects of Software Marketing - Identification of potential markets, Industry/ Business analysis and creating/ sustaining

competitive advantage - Segmenting, Targeting and Positioning, IT Consulting.

Unit 3: Promotion

Role of Promotion in Software Marketing; Personnel Selling, Advertising and Sales Promotion; Trade Shows, Role of Relationship Marketing in promoting software. Web based advertisement. Google's content based advertisement.

Unit 4: Distribution

Place – Distribution Strategies for Software Products / Services; Challenges in distribution of Software Products and Services; Role of Internet in distribution of Software Products and Services. Smart phone application. Social media advertisement.

Unit 5: Pricing: Factors involved in pricing software Products, Price estimating for Software Projects.

Customer Satisfaction and Service Quality

Monitoring and measuring customer satisfaction. Applying technology to service settings, eservices. Role of People, Process and Physical Evidence in Software Products and Services. Online feedback and Maintenance. Use of Facebook, Twitter and Call centre for feedback, Managing Digital Platforms.

Suggested Readings:

- 1. Services Marketing Zeithaml, Bitner, Gremler and Pandit, TMGH, 4Edition.
- 2. Service Marketing: Concepts, Applications And Cases Rampal and Gupta, Galgotia, 2000
- 3. Saxena Rajan MM, (1997), Services Marketing, Tata McGraw Hill, New Delhi.
- 4. Edward Hasted; Software That Sells: A Practical Guide to Developing and Marketing your; John Wiley and Sons (2005); ISBN 10: 0764597833 ISBN 13:9780764597831.
- 5. Influence of Social Media on Social Services: A Study of Youngistan Piyush Kant Pyasi, Nitin Kr. Saxena, Pranay Karnik.



COURSE CODE	MB406G
COURSE TITLE	KNOWLEDGE MANAGEMENT SYSTEM
COURSE CREDITS	3

The goal of this course is to give a solid foundation covering the major problems, challenges, concepts, and techniques dealing with the organization and management of knowledge with the help of computers.

Course Objectives:

- 1. To understand the fundamental concepts in the study of knowledge and its creation, acquisition, representation, dissemination, use and re-use, andmanagement.
- 2. To appreciate the role and use of knowledge in organizations and institutions, and the typical obstacles that KM aims toovercome.
- 3. To understand how to apply and integrate appropriate components and functions of various knowledge management systems.
- 4. To be prepared for further study in knowledge generation, engineering, and transfer, and in the representation, organization, and exchange ofknowledge.
- 5. To critically evaluate current trends in knowledge management and their manifestation in business and industry.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406G.1	Remembering	The students will be able to DEFINE the nature and topology of knowledge and knowledge management within a business context.
406G.2	Analyzing	The students will be able to DISTINGUISH between data, information, knowledge and expertise.
406G.3	Evaluating	The students will be able to MEASURE impact of KM solutions on People, Processes, products & Organizational Performance.
406G.4	Applying	The students will be able to DEMONSTRATE the understanding of & design KM Solutions for capture, sharing & applications.
406G.5	Remembering	The students will be able to IDENTIFY technologies that are most useful for capturing/acquiring, organizing, distributing, and sharing knowledge within an enterprise.

Course Contents:

Unit 1: Knowledge Management Overview, Nature of Knowledge, Knowledge ManagementSolutions, Organizational Impacts of Knowledge Management, Strategic Management of IT.

Unit 2: Knowledge Education, Explicit and Implicit Knowledge, Discovering New Knowledge, Data Mining, Knowledge based Systems for utilizing human expertise.

Unit 3: Knowledge Discovery Systems that Create Knowledge.

Unit 4: Knowledge Capture Systems

Systems that Preserve and Formalize Knowledge; ConceptMaps, Process Modeling, RSS, Wikis, Delphi Method, etc.

Unit 5:Knowledge Sharing Systems

Systems that Organize and Distribute Knowledge; Ontology Development Systems, Categorization and Classification Tools, XML-BasedTools, etc.

Knowledge Application Systems: Systems that Utilize Knowledge.

Suggested Readings:

- 1. Irma Becerra-Fernandez, Avelino Gonzalez, Rajiv Sabherwal (2004). Knowledge Management Challenges, Solutions, and Technologies (edition with accompanying CD). PrenticeHall.
- 2. Elias M. Awad, Hassan M. Ghaziri (2004). Knowledge Management. Prentice HallIan Watson (2002). Applying Knowledge Management: Techniques for Building Corporate Memories. Morgan Kaufmann. Madanmohan Rao (2004). Knowledge Management Tools and Techniques: Practitioners and Experts Evaluate KM Solutions. Butterworth-Heinemann.
- 3. Amrit Tiwana (2002). The Knowledge Management Toolkit: Orchestrating IT, Strategy, and Knowledge Platforms (2nd Edition). Prentice Hall.

COURSE CODE	MB407G
COURSE TITLE	ENTERPRISE RESOURCE PLANNING
COURSE CREDITS	3

Automation and technology is changing the way business operates. Importance of Computer software's and IT support is increasing in every sector of the industry. Organizations like manufacturing, banks, insurance firms, government agencies extensively use computerized analysis in their decision-making. Companies are developing distributed systems that permit uncomplicated accessibility to data saved in several locations. Managers can make better decisions because they have access to more accurate information. The course brings in the essentials of the ERP environment, which is accepted as the crucial platform to recognize the business processes upon which the support systems are built.

Course Objectives:

- 1. To gain knowledge of the comprehensiveness of ERP Implementation as a strategic initiative of business.
- 2. To learn and recognize the significance of ERP in today's business context.
- 3. To know the use of ERP into core business processes and as an enabler for extending its scope to back and forth the supply chain for organizations.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407G.1	Remembering	DESCRIBE the Information System: Components of an information system; Different types of information systems; Management information system, Enterprise Resource Planning: Business modelling; integrated data model, importance of Information
407G.2	Understanding	EXPLAIN ERP Tools and Software, ERP Selection Methods and Criteria, ERP Selection Process, ERP Vendor Selection, ERP Implementation Lifecycle, Pros and cons of ERP implementation, Factors for the Success of an ERP Implementation
407G,3	Applying	INTERPRET Business Process Re-engineering, Management Information systems, Decision Support Systems, Executive Information Systems, Data Warehousing, Data Mining, On-Line Analytical Processing, Product Life Cycle Management, Supply Chain Management
407G.4	Analysing	CONSTRUCT Operation and Maintenance, Performance, Maximizing the ERP System, Business Modules, Finance, Manufacturing, Human Resources, Plant maintenance, Materials Management, Quality management, Marketing
407G.5	Evaluating	FORMULATE ERP market: Marketplace, Dynamics, SAP AG – Oracle – PeopleSoft – JD Edwards – QAD Inc – SSA

Global – Lawson Software. Enterprise Application
Integration – ERP and E-Business – ERP II – Total quality
management – Future Directions – Trends in ERP

Course Outline:

Unit 1: Introduction to ERP

Information System: Components of an information system; Different types of information systems; Management information system, Enterprise Resource Planning: Business modeling; integrated data model, importance of Information: Characteristics of information; Types of information, Defining ERP, Origin and Need for an ERP System, Benefits of an ERP System, Reasons for the Growth of ERP Market, Reasons for the Failure of ERP Implementation: Roadmap for successful ERP implementation.

Unit 2: ERP Implementation Life Cycle

ERP Tools and Software, ERP Selection Methods and Criteria, ERP Selection Process, ERP Vendor Selection, ERP Implementation Lifecycle, Pros and cons of ERP implementation, Factors for the Success of an ERP Implementation.

Unit 3: ERP and Related Technologies: Business Process Re-engineering, Management Information systems, Decision Support Systems, Executive Information Systems- Advantages of EIS; Disadvantages of EIS, Data Warehousing, Data Mining, On-Line Analytical Processing, Product Life Cycle Management, Supply Chain Management, ERP Security, Role of ERP in Manufacturing, Purchasing, Sales and Distribution, CRM, Inventory, HR, Finance.

Unit 4: ERP OPERTION AND MAINTENANCE: Operation and Maintenance, Performance, Maximizing the ERP System, Business Modules, Finance, Manufacturing, Human Resources, Plant maintenance, Materials Management, Quality management, Marketing – Sales, Distribution and service.

Unit 5: ERP IN ACTION: ERP MARKET: Marketplace, Dynamics, SAP AG – Oracle – PeopleSoft – JD Edwards – QAD Inc – SSA Global – Lawson Software. Enterprise Application Integration – ERP and E-Business – ERP II – Total quality management – Future Directions – Trends in ERP.

Prescribed Books:

- 1. Alexis Leon, "ERP DEMYSTIFIED", Tata McGraw Hill, Second Edition, 2008.
- 2. Mary Sumner, "Enterprise Resource Planning", Pearson Education, 2007.
- 3. Textbook of Enterprise Resource Planning by Mahadeo Jaiswal & Ganesh Vanapalli, Macmillan.

Suggested Readings:

- 1. Enterprise Resource Planning Concepts and Practices by Vinod Kumar Garg & N K Venkatakrishna, PHI.
- 2. Enterprise Resource Planning, Ellen F. Monk, Bret J. Wagner, Cengage Learning, First Indian Reprint 2009.
- 3. Enterprise Resource Planning, Mary Sumner, Pearson Education, Fourth Impression 2009.

INTERNATIONAL BUSINESS MANAGEMENT SPECIALIZATION

COURSE CODE	MB401H	
COURSE TITLE	CASES IN MANAGEMENT (INTERNATIONAL BUSINESS MANAGEMENT)	
COURSE CREDITS	3	

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401H.1	Remembering	IDENTIFY the cases related to International Business Management and its importance to understand the concept of IBM
401H.2	Understanding	CLASIFY the cases in different businesses with respect to International Business Management
401H.3	Applying	GENERALIZING the cases which can then be applied for the new business opportunities into International Market
401H.4	Analysing	MATCHING the cases which have actually applied different concepts of International Business Management
401H.5	Evaluating	Evaluate the cases with respect to International Business Management

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (INTERNATIONAL BUSINESS MANAGEMENT)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. WTO. A global trade regulator.
 - 2. Anti dumping measures as a tool of Protectionism..... International economic
 - 3. Pricing exim inco terms
 - 4. Port based SEZ
 - 5. Exporting challenge in a small firm
 - 6. International Marketing
 - 7. International Business Strategy
 - 8. Trade secret. IPR
 - 9. Trademark registration
 - 10. PESTLE Analysis

COURSE CODE	MB402H
COURSE TITLE	LEGAL FRAMEWORK FOR INTERNATIONAL BUSINESS
COURSE CREDITS	3

This course covers an introduction to International Law and comparison of different legal systems; State responsibility, including protection of the environment; International dispute resolution; The Multinational Enterprise, their structures and home State regulation, including regulation of anti-competitive conduct and sharp business practices such as bribery; Intellectual Property including trademarks, invention patents, product designs, copyright and confidential information/trade secrets. Other topics covered are Foreign Investment, International Trade in Goods, Contracts for International Sales of Goods, Transportation of Goods, Financing and Taxation.

Course Objectives:

- 1. To understand Global Legal Environment.
- 2. To know characteristics of international business scenario
- 3. To develop positive attitude towards international business Laws.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402H.1	Remembering	ASSIMILATE the basic concepts and legal terminologies used in International Business
402H.2	Understanding	ANALYSE how INCOTERMS are implemented in international business
402H.3	Applying	RELATE the IPR laws in the context of international business
402H.4	Analysing	ILLUSTRATE host country regulations in business decisions
402H.5	Evaluating	DEMONSTRATE the foreign exchange market transactions and execution

Course Outline:

Unit 1: Legal Framework of International Business

Nature and Complexities; Code and Common Law and their implications to business; International Business Contracts- Legal Provision, Payment terms; International Sales Agreement; Rights and Duties of Agents and Distributors; The Regulation of Imports and Exports; Comparative Law: Differences in National Laws and Legal Systems; Formation and Performance of Contact, Acceptance and Rejection of Goods. Company Law: Characteristics of Company, Kinds and tages in the formation of a Company; setting up offices and branches abroad.

Unit 2: International Commercial Terms (INCOTERMS)

Carriage Unimodel and Multimodel Transport; The Carriage of Goods and the Liability of International Air Carriers, The Warsaw Convention of 1929, The Montreal Convention of 1999, Applicability to International Carriage, Liability for Air Cargo Losses; Liability of the Goods by Sea, The Harter Act, The Hague Rules, the Carriage of Goods by Sea Act (COGSA), Limitations of Liability under COGSA, Nautical Liability of the Carrier; Shipper's Liability for Hazardous Cargo; Carrier's Liability for Cargo Shortages, The Per Package Limitation; Liability for Material Deviation; Liability of Ocean Transportation Intermediaries.

Unit 3: Licensing Agreements and the Protection of Intellectual Property Rights

Reasons for Intellectual Property Transfer Agreements; Intellectual Protection for Patents, Trademarks and Other Intellectual Property, Trade Related Aspects of Intellectual Property Rights (TRIPS), the DOHA Declaration on TRIPS and Public Health; Non Enforcement of IPR Laws; The Mechanics of IPR Transfer Regulations; The Gray Market: Franchising: Licensing outside the Technological Context.

Unit 4: Host Country Regulations

Corporate Law, Taxation and Currency Risk Host Country Corporate Law affecting Foreign Investment; Minority Ownership Investments; Controlling, Currency Risk: Currency Swaps, Arrangements with Soft Currency Country, Payment and Price Adjustment Approaches, Structuring of Hard Currency Obligations and Revenues, Countertrade, Informal Consortia or Parallel Exchanges, Inconvertibility Insurance.

Unit 5: Indian Laws and Regulations

Governing International Transactions: FEMA, Taxation of foreign income; foreign investments; Setting up offices and branches abroad; Restrictions on trade in endangered species and other commodities.

Prescribed Books:

- 1. Daniels, John, Emest W. Ogram and Lee H. Redebungh, international business, environments and operations.
- 2. Kapoor ND, COMMERCIAL LAW; Sultan Chand & Co., New Delhi.
- 3. Lew, Julton D.M and Clive Stand brook (eds), International Trade Law And Practice, Euromoney Publications, London.
- 4. Motiwal OP, Awasthi, International Trade The Law And Practice, Bhowmik and Company, New Delhi.
- 5. Schmothoff C.R: Export Trade, The Law And Practice Of International Trade.

Suggested Readings:

- 1. Schaffer, Agusti & Earle (2009): International Business Law: A Comprehensive Approach, Cengage Learning, New Delhi.
- 2. Lew, D. M., Julton, C live (2009): International Trade Law and Practice, Euromoney Publications, London.

COURSE CODE	MB403H	
COURSE TITLE	GLOBAL MARKET RESEARCH	
COURSE CREDITS	3	

This course is intended to broaden student appreciation of world markets by concentrating on topics such as global cultures and environments, political and economic institutions, regional characteristics, market assessment/selection and market entry strategies.

Course Objectives:

- 1. To highlight the significance of International Marketing Research and provide a compressive understanding the research process.
- 2. To develop an in-depth knowledge of the challenges associated in conducting market research internationally.
- 3. To understand the simple and advanced data analysis for International Marketing Research.
- 4. To make sound marketing decisions on the basis of collected and analyzed data.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403H.1	Remembering	Describe the nature, scope, complexities, issues, and organisational framework of international marketing research.
403H.2	Understanding	Understand the marketing research process and data analysis for International Marketing research.
403H.3	Applying	Implementing the steps of Marketing research process.
403H.4	Analysing	Analyse the collected information and interpreting the results thereof in right manner.
403H.5	Evaluating	Monitoring the data interpretation process and compare it with the current global situation.

Course Outline:

Unit 1: Foundation of International Marketing Research

Nature and scope of marketing research; marketing research in international context-importance, complexities and issues; Organizational framework for international marketing research; International Marketing Information System (IMIS).

Unit 2: Marketing Research Process

An overview; problem identification and definition; Preparing research proposal; Exploratory, descriptive and experimental research designs; international secondary data sources; Primary data collection methods and complexities of data collection in international marketing research; Online data sources and research.

Unit 3: Designing Questionnaire

Etic and emit dilemma; Sample design – sampling methods and sample size determination; Fieldwork and data collection; Sampling and non-sampling errors.

Unit 4: Multi – country Data Analysis and Interpretation

Data editing and coding preliminary data analysis, Univariate and multivariate data analysis techniques- Discriminate analysis, factor and conjoint analysis: (including application software). Issues in multi- country data analysis-Data comparability and validity problems; Report preparation and presentation.

Unit 5: Cross-cultural Consumer Research

Attitude measurement and scaling techniques; Product research; Advertising research; International market opportunity analysis; Ethical issues in international marketing research.

Prescribed Books:

- 1. International Marketing Research by V. Kumar, Pearson Education, 1st edition.
- 2. Aaker, David A, V. Kumar arki George S Day, Marketing Research, John Wiley and Son, New York, 2001.
- 3. Boyd, Harper w, et al Marketing Research: Text and Cases, Irwin, Homewood Illinois.
- 4. International Marketing Research by Craig & Douglas, Wiley, 3rd edition.
- 5. Green, P.E. et al, Research for marketing Decisions, Prentice Hall of India Ltd., New Delhi.
- 6. Malhotra, Naresh K., International Marketing Research An Applied Orientation, 3rd ed. Person Education Asia.

Suggested Reading:

- 1. Alex Rialp, Josep Rialp (2006), "International Marketing Research: Opportunities and Challenges in the 21st Century", International Marketing Research (Advances in International Marketing, Volume 17), Emerald Group Publishing Limited, pp.1-13
- 2. Douglas, S.P. and C.C. Samuel (2000) "Conducting International Marketing Research in the 21st Century", International Marketing Review
- 3. Douglas, Susan P; Craig, C. Samuel (2006) "On Improving the Conceptual Foundations of International Marketing Research" Journal of International Marketing. 2006, Vol. 14 Issue 1, p1-22. 22p
- 4. Sarstedt, Marko; Schwaiger, Manfred; Taylor, Charles R (2011) "Introduction: Measurement And Research Methods In International Marketing". Advances in International Marketing. 2011, Vol. 10 Issue 22, p3-7
- 5. Barnard, P. (1997), " Global developments and future directions in marketing research, " Globalization and the Millennium: Opportunities and Imperatives, Marketing Science Institute, June 16-17, Brussels, Belgium

COURSE CODE	MB404H	
COURSE TITLE	INTERNATIONAL MARKETING	
COURSE CREDITS	3	

International marketing is the export, franchising, joint venture or full direct entry of a marketing organization into another country. This can be achieved by exporting a company's product into another location, entry through a joint venture with another firm in the target country, or foreign direct investment into the target country.

Course Objectives:

- 1. To bring countries closer for trading purpose and to encourage large scale free trade among the countries of theworld.
- 2. To bring integration of economies of different countries and there by to facilitate the process of globalization oftrade.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404H.1	Applying	The students will be able to APPLY basic international marketing theories and concepts to understand the environment.
404H.2	Analyzing	The students will be able to ANALYZE the environmental variables that influence international marketing.
404H.3	Analyzing	The students will be able to UNDERTAKE strategic business analysis in order to develop appropriate international marketing objectives and strategies.
404H.4	Remembering	The students will be able to IDENTIFY, analyse, and evaluate data, information, and evidence related to international business opportunities and threats relevant in the current world.
404H.5	Creating	The students will be able to DEVELOP sustainable competitive advantage and international marketing strategies that are designed to increase the chances for the firm to be successful in a foreign market.

Course Contents:

Unit 1: Introduction to International Marketing

Basic terms likeexporting, export marketing, deemedexports, Definitions of international marketing, International marketingconcept, Objectives, challenges and opportunities in international marketing.

Unit 2: Multinational Market Regions and Market Groups

Strategic implications for marketing, market barriers, marketing miximplications, The commonwealth of independent states, Key provisions of NAFTA, Region wise trading groups and emerging markets, Global Market Segmentation-Advertising strategyGoals, Product Attribute Benefit segmentation, Regionalsegmentation.

Unit 3: Products and services for Consumers

Analyzing product components for adoption, product concept model, Packaging component, support servicecomponent, Marketing consumer services globally, barriers in entering global markets for consumer services Top 20brands.

Unit 4: Developing Global Marketing Strategy

Benefits of global marketing, planning for global markets, the planningprocess, Obtaining export creditinsurance, Golden rules for successfulExporting, ECGC – Insurance policesand Financial Guarantees, Rules for successfulexporting, EXIMBank.

Unit 5: Export Promotion

Need for export promotion, Institutional Infrastructure, Incentives, Facilities, assistances provided toexporters.

Prescribed Books:

International Marketing –By Philip R. Cateora; John L. Graham and Prashant Salwan, TATA McGraw-Hill publication, Thirteenth edition

COURSE CODE	MB405H
COURSE TITLE	INTERNATIONAL FINANCE AND FOREX MANAGEMENT
COURSE CREDITS	3

The goal of the course is to provide students with a deep understanding of financial management issues in a global setting. The course aims to help students develop analytical tools that incorporate key international considerations into fundamental financial decisions. The cases provide opportunities to build the skills needed to create and capture value across borders.

Course Objectives:

- 1. To introduce the environment of international finance and its implications on international business.
- 2. To analyze the nature and functioning of foreign exchange markets, determination of exchange rates and their forecasting.
- 3. To explore the international sources of long term financeIntegrate the global developments with the changing business environment in India.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405H.1	Remembering	The students will be able to EXPLAIN the organisation and institutional details of foreign exchange and international money markets.
405H.2	Applying	The students will be able to DEMONSTRATE the understanding of international financial theory and applications pertaining to, e.g., exchange rate determinants, foreign exchange exposure, foreign direct investment, interest rate parity, and the balance of payment.
405H.3	Analyzing	The students will be able to ANALYSE the causes of historical exchange rate movements, and some of the contributory factors to a variety of financial crises, with reference to the models covered.
405H.4	Understanding	The students will be able to administer the UNDERSTANDING of foreign exchange markets, international financial markets and their functions & needs.

Course Contents:

Unit 1:

Foreign ExchangeTransaction, Transfer ofFunds, Nostro and Vostroaccount.

Unit 2:

Balance of Trade, Balance of Payment, Current account transactions, Capital account transactions, Reserves, Convertibility.

Unit 3:

Rates of Exchange, Factors affecting movement of exchangerates, Management of risk due to

fluctuation of rate of exchange, Forwardcontract.

Unit 4:

Documents used in Internationaltrade, Methods ofpayment, Guarantees, Letter of Credit, ExportFinance

Unit 5:

Exchange Control Regulations, ForexMarkets, Trade Control Regulations, Agencies in InternationalTrade.

Prescribed Books:

International Financial Management, Text and Cases, V K Bhalla, Anmol Publications.

Suggested Readings:

- 1. International Financial Management by Thummulur; Siddiah
- 2. International Financial Management by Madhu Vij --- excelbooks
- 3. International Finance and Trade ICFAI publication –2volumes

COURSE CODE	MB406H
COURSE TITLE	INTERNATIONAL BUSINESS STRATEGY
COURSE CREDITS	3

The primary need and purpose is to become familiar with a number of strategy concepts as well as to see how business strategy fits with broader dynamics in the society. We will start the discussion about business sustainability and the potential limits to economic growth that will be contined through different parts of the course.

Course Objectives:

- 1. To understand the nature of strategic competitiveness and develop the ability to analyze the competitive environment facing a firm, assess the attractiveness of the industry and isolate potential sources of competitive advantage and disadvantage.
- 2 To develop business level strategies by defining the type of advantage sought, scope of operations and activities required to deliver the chosen strategy.
- 3. To consider the actions of competitors and how that impacts your ability to reach your strategic goals.
- 4. To develop courses of actions that incorporate the actions of multiple players in themarketplace.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		The students will be able to ability to CONDUCT an
406H.1	Analyzing	environmental scan to evaluate the impact of world issues
		on an organization's international business opportunities.
		The students will be able to ability to EVALUATE and
406H.2	Evaluating	present market research to support an organization's
		international business decision-making.
		The students will be able to DEVELOP and present an
406H.3	Creating	international marketing plan, and evaluate sales strategies
		that support an organization's integrative trade initiatives.
	C	The students will be able to EVALUATE the impact of
406H.4	Evaluating	statutory and regulatory compliance on an organization's
	A	integrative trade initiatives.

Course Contents:

Unit 1:Introduction to International Business Strategy

International Business Strategy – Scope and Importance of IBS, Purpose of Business, Difference between Goals and Objectives of Business, Conceptual Evolution of Strategy.

Unit 2: Business Policy and Strategic Management

Type of Business Policy and Strategic, Factors influencing Business Strategies, Objectives of Strategic Management, Causes for Failure of Strategic Management.

Unit 3: Business Strategy Formulation

Types of Strategies, Steps in Strategies Formulation, Factors to be Considered for Environmental

Scanning, Core Competencies and Their Importance in Strategy Formulation.

Unit 4: International Business Strategic Planning and implementation

Strategic Planning Process, Types of Strategies –Stability, Expansion or Growth, Mergers and Acquisitions, Issues in Strategy Implementation, Integrating the Functional Plan and Policies.

Strategic Analysis and Choice:

Process of Strategic Analysis, Tools and Techniques for Strategic Analysis, Strategist's Decision Style an Attitude to Risk, Experience Curve Analysis.

Unit 5: Business- Level Strategies

The Foundations of Business – Level Strategies, Business – level Strategies, Integrating Cost Leadership and Differentiation.

Functional and Operational Implementation:

Functional Strategies (Vertical and Horizontal), Financial Plans and Policies (Need and Nature), Marketing Plans and Policies (Product, Pricing, Place, Promotion, Integrative).

Prescribed Books:

- 1. Strategic Management and Business Policy by AzharKazmi.
- 2. International Business Strategy Rethinking the foundations of global corporateSuccess by AlainVerbeke.

Reference Books:

1. Strategic Marketing BY Douglas West.

COURSE CODE	MB407H
COURSE TITLE	EXPORT IMPORT PROCEDURES & DOCUMENTATION
COURSE CREDITS	3

There is not a single country in the world, which can claim itself self-sufficient and produce all the goods and services required by its residents. Globalization has affected all countries of the world and global trade is growing at pace that makes it importance for business to stay attuned to the changing world economy. The emerging economies along with the developed countries have identified the role of internationaltrade.

Course Objectives:

- 1. To understand Export & Import procedures.
- 2. To understand the procedures, regulations, stipulations, provisions and opportunities involved in export and import.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407H.1	Remembering	DESCRIBE the major theories, concepts & methods in the
40/H.1		field of International Trade
407H.2	Understanding	EXPLAIN the implications of regulatory framework
407H.3	Applying	MAKE USE OF the Theories, Methods of international
40/H.3		trade in export & import procedure
407H.4	Analysing	DECONSTRUCT the role & importance of documentation
		in international trade at large
		FORMULATE approaches to reorient regulatory
407H.5	Evaluating	framework and documentation to achieve international
		trade activity.

Course Contents:

Unit 1: International Trade

Theories: Theory of absolute cost advantage, Theory of comparative advantage, H-O theory, Methods of International Trade: Exporting, Licensing, Franchising, Joint Venture.

Unit 2: Export Import Regulatory Framework

Foreign Trade Act 1992, FEMA 1999, Customs Act 1962.

Unit 3: Import Documentation

Bill of Entry, Registrations for Import, Import License, L/C and types of L/C.

Unit 4: Export Documentation

IEC Certificate, Registration of Exporters, EPC Registration, Export Assistance in India, SEZ.

Unit 5: Invoice

Commercial Invoice, Proforma Invoice, Consular Invoice, Customs Invoice.

Prescribed Books

- 1. Export Import Management By Justin Paul and Rajiv Aserkar, Oxford Publishing.
- 2. Export Management, BY P. K. Khurana, Galgotia Publishing.

Suggested Readings

- 1. Export Import Managemetnt by Parul Gupta Mc Graw Hill edition.
- 2. http://niryatbandhu.iift.ac.in/exim/



HOSPITAL AND HEALTHCAREMANAGEMENT SPECIALIZATION

COURSE CODE	MB401I
COURSE TITLE	CASES IN MANAGEMENT (HOSPITAL & HEALTHCARE MANAGEMENT)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
401I.1	Remembering	DESCRIBE the cases related to patient satisfaction in hospitals.
401I.2	Understanding	INTERPRETE the SOPs related to Quality Improvement in Hospitals.
401I.3	Applying	EXECUTE the Digital Marketing in Healthcare and the opportunities and challenges associated with it.
401I.4	Analysing	DIFFERENTIATE among the different Supportive Services in Hospital.
401I.5	Evaluating	MONITOR the functioning of Community Health Management.

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (HOSPITAL & HEALTHCARE MANAGEMENT)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Patient Satisfaction
 - 2. Quality Improvement in Hospital
 - 3. Cashless Hospitalization
 - 4. Supportive Services in Hospital
 - 5. Hospital Information System
 - 6. Biomedical Waste Management
 - 7. Digital Marketing in Healthcare
 - 8. Drug Addiction & Drug Abuse
 - 9. Community Health Management
 - 10. Telemedicine

COURSE CODE	MB402I
COURSE TITLE	FINANCIAL MANAGEMENT OF HOSPITAL & HEALTHCARE ORGANISATIONS
COURSE CREDITS	3

This course is being introduced to provide better understanding of the organisation's financial performance and to manage the finances of the clinicians and healthcare experts that will help to enter the discussion with financial managers to manage different ways of funding health services. Also, to analyse the ways of regulating the private/public mix, both the finances & in provision of financial reforms of public health sector for hospital and healthcare organisations.

Course Objectives:

- 1. To understand the role of financial management in hospital and healthcare organisations.
- 2. To know how the primary role of financial management in healthcare organizations manages money and risk in a way that helps to achieve the financial goals of the organization.
- 3. To assess how the financial management in healthcare organizations include evaluation and planning, long-term investment decisions, financing decisions, working capital management, contract management, and financial risk management.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402I.1	I Indoneton din o	UNDERSTAND the role of financial management in
4021.1	Understanding	hospital and healthcare organisations.
4021.2	402I.2 Remembering	DESCRIBE the financial risk management in hospital and
4021.2		healthcare organisation
402I.3	Understanding	SUMMARIZE the Accounting and Income statements in
4021.3	Understanding	healthcare
402I.4	Analysina	ANALYSE Balance Sheets and Financial Assessment in
4021.4	I.4 Analysing	Healthcare
402I.5	Evaluating	EVALUATE the long-term investment decisions in
4021.3		hospital and healthcare organisation
4021.6	402L6 Understanding	ATTRIBUTING the Healthcare Planning and Budgeting
4021.0		with Project costs and Evaluation

Course Outline:

UNIT 1: Healthcare Financial Management & Revenue Cycle

Financial Management in Healthcare Organizations: Roles & Functions, Finance Department in Healthcare Organizations: Role & Structure, Comparing Financial & Managerial Accounting, What Are the Goals of Financial Management? What is Healthcare Revenue Cycle? - Definition & Steps, Cash Management in Healthcare Systems, Impact of Cash Management on Viability, liquidity, Cash management practices, Financial Supply Chain Management in Healthcare,

Measurement Tools & Methods Used in Healthcare Finance, Managing Costs & Revenues in Healthcare Organizations.

Unit 2: Accounting and Income statements in Healthcare

The Differences Between Accrual & Cash-Basis Accounting, What Is an Income Statement? - Purpose, Components & Format, What Is Revenue? - Definition & Concept, Operating Income within a Healthcare Organization, Non-Operating Income within a Healthcare Organization, What Is Net Income? - Definition & Formula.

Unit 3: Balance Sheets and Financial Assessment in Healthcare

The Balance Sheet: Purpose, Components & Format, What Are Assets? - Definition & Examples, Current & Long-Term Liabilities: Definition & Characteristics, The Statement of Cash Flows: Purpose, Format & Examples, Financial Statement Analysis: Definition, Purpose, Elements & Examples, Defining and Applying Financial Ratio Analysis, Profitability Ratio: Definition, Formula, Analysis & Example, Liquidity Ratio: Definition, Calculation & Analysis, Leverage Ratios: Types & Formula, Activity Ratios: Definition, Formula & Analysis.

Unit 4: Healthcare Planning and Budgeting with Project costs and Evaluation

What Are Strategic Plans in Business? - Definition & Examples, What Are Operational Plans for a Business? - Definition, Types & Examples, What Is an Operating Budget? - Definition & Examples, Variances in Budgets: Definition, Calculations & Analysis, What Is Capital Budgeting? - Techniques, Analysis & Examples, Capital Projects in Healthcare: Types & Examples, Financial Risk: Types, Examples & Management Methods.

Unit 5: Healthcare staffing needs and Forecasting

Business Forecasting: Methods & Analysis, Forecasting Staffing Needs in Healthcare Organizations, Finance & Staffing in Healthcare Organizations, What is a Prevailing Wage? - Definition & Calculation.

Assignment 1 - Healthcare Finance & Budgeting - 1: Accountable Care Organizations.

Assignment 2 - Healthcare Finance & Budgeting - 2: Operating Budget.

Prescribed Books:

- 1. Michael Nowicki, 2007, The Financial Management of Hospitals and Healthcare Organizations.
- 2. Gapenski 's, Understanding Healthcare Financial Management.

Suggested Readings:

1. Healthcare: financial management and changing face of, 16; future of, 380–84, Health Care and Education Reconciliation Act of 2010, 103, 121, 135, 375.

COURSE CODE	MB403I
COURSE TITLE	INTRODUCTION TO ARTIFICIAL INTELLIGENCE IN HEALTHCARE
COURSE CREDITS	3

This course is being introduced to know how the AI has contributed in delivering major advancements in quality and safety of patient care at reduced cost, with some observers even suggesting it to represent an imminent revolution in clinical practice in Hospital & Healthcare Industry. Clinicians can and must be part of the change that will accompany the development and use of AI. This will require changes in behavior and attitude including rethinking in many aspects of doctors' education and careers as currently there is too much uncertainty about accountability, responsibility and the wider legal implications of the use of this technology.

Course Objectives:

- 1. To understand the use of Artificial Intelligence in healthcare and the significant opportunities and benefits it offers to patients and clinicians, there are substantial implications for the way health and care systems across the world.
- 2. To know how the Artificial intelligence describes a range of techniques that allow computers to perform tasks typically thought to require human reasoning and problem-solving skills.
- 3. To know how the Artificial intelligence could improve access to healthcare, providing advice locally and in real time to patients or clinicians and identifying red flags for medical emergencies.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403I.1	Remembering	DESCRIBE the fundamental theories, concepts, terms, models, frameworks of AI. Also digital technology application in healthcare management
403I.2	Understanding	EXPLAIN the importance of data and its application for maintaining the healthcare record.
403I.3	Applying	APPLICATION of Artificial Intelligence in term of Robotics according to its types.
4031.4	Analysing	ANALYZE the usage of Artificial Intelligence tools & its impact
4031.5	Evaluating	EVALUATE the various aspects of a business problem in healthcare management & explore the opportunities in HHM.

Course Outline:

Unit 1: Introduction to Artificial Intelligence

What is AI and how could it improve health care? Advantages and Disadvantages, Benefits &

risks of AI, Scope of AI, Myths about AI, Advancements of AI with respect to technology in Healthcare.

Unit 2: The impact of AI on Patients, Clinicians, and Pharma

Patient-facing AI: Improving experiences, costs, and outcomes, AI for clinicians: Tools for more effective diagnoses and treatment, AI for Pharma: Reduced time and cost for drug discovery, Ai in preventive healthcare, AI for more informed and effective treatment plan design and delivery, From clinical to operational: How big data and analytics can improve outcomes and efficiency.

Unit 3: Clinical Contribution of AI in Healthcare

Introduction to Robotics, History of Robotics, Types of Robotic surgeries, Robotics in India, Da Vinci Robotic System, Challenges and Barriers, Limitations of Robotic Surgeries.

Unit 4: Public Acceptance and Trust

Accountability for decisions, Bias, inequality and unfairness, Bias, inequality and unfairness, Training and education, Medical research, Intellectual property and the financial impact on the healthcare system, reducing the errors in AI.

Unit 5: The Future of AI in Healthcare

A better patient journey, new ways to deliver care, AI in health Insurance, New risks to address, Leveraging lessons learned, Impact on the wider healthcare system, Role of start-up companies in AI in Healthcare.

Prescribed Books:

- 1. Dr. Parag Mahajan, Artificial Intelligence in Healthcare: AI, Machine Learning, and Deep and Intelligent Medicine.
- 2. Adam Bohr Kaveh Memarzadeh, Artificial Intelligence in Healthcare.
- 3. Arvind Agah, Medical Application of Artificial Intelligence.

Suggested Readings:

- 1. Max Tegmark, Future of Life Institute, "Benefits & Risks of Artificial Intelligence", https://futureoflife.org/background/benefits-risks-of-artificial-intelligence/, accessed June 24, 2019
- 2. Laura Craft, Emerging Applications of Ai for Health care Providers, GARTNER, June 30 2017, https://www.gartner.com/

COURSE CODE	MB404I
COURSE TITLE	MANAGEMENT OF CORPORATE HOSPITALS
COURSE CREDITS	3

This course is to introduce management concepts and process with a focus on leadership and human behaviour in organizations.

Course Objectives:

- 1. To introduce principles of hospital management and the functional organization of ahospital.
- 2. To understand the concept of Health Care Industry and its ever-changing character.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404I.1	Applying	DEMONSTRATE knowledge of the important functions
4041.1		and management of hospital.
		IMPLEMENT healthcare delivery systems along with the
404I.2	Applying	associated operational and financial aspects associated with
		each.
		The students will be able to IDENTIFY the legal and
404I.3	Remembering	regulatory environment in healthcare and implications for
		managers within the field.
		The students will be able to INSPECT the dynamic nature
404I.4	Evaluating	of healthcare administration and demonstrate the problem
		solving and leadership skills to manage resources as
		needed within this environment.

CourseContent:

Unit 1:Understanding functioning of Corporate multi-specialty hospital, Managerial activities for effective hospital functioning.

Unit 2:Duties and responsibilities of Hospital Managers, Qualities of effective Managers.

Unit 3: Effective inter and intra departmental co-ordination, Rules and regulations of international health policy.

Unit 4: Medico- Legal Problems in relation to health administration, Law of Contracts, Specific Performance.

Unit 5: Law applicable to Hospital employees, Medical jurisprudence and functioning of hospitals, Consumer Protection Act and Hospitals.

Suggested Readings

- 1. Hospital Administration, Tabish.
- 2. Hospital Administration, S. L.Goel.
- 3. Hospital Administration, Sakaharkar.

COURSE CODE	MB405I
COURSE TITLE	HOSPITAL WASTE AND HYGIENE MANAGEMENT
COURSE CREDITS	3

Due to the nature of their work, hospitals produce a variety of waste substances, including biological wastes, needles, and discarded drugs. Because these substances can be hazardous if not disposed of properly, hospitals must create a stringent waste management program to ensure the safe and efficient disposal of dangerouswastes.

Course Objectives:

1. To evaluate technical and sanitary aspects of hospital waste management situation in selected facilities, regarding to handling, storage, treatment, collection and final disposal.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405I.1	Remembering	The students will be able to IDENTIFY appropriate personal protective equipment to handle regulated medical
4031.1	Remembering	waste.
		The students will be able to ASCERTAIN regulated
405I.2	Evaluating	medical waste into non-infectious and infectious categories
		and Prepare infectious waste containers for proper disposal.
		The students will be able to DISCOVER waste
		management practices and technologies that are safe,
405I.3	Applying	efficient, sustainable, economic and culturally acceptable;
		to enable the participants to identify the systems suitable
		for their particular circumstances.

Course Content:

Unit 1: Introduction, Definition of General and Hazardous health care waste, Infectious waste, Genotoxic waste, Waste Sharps, Biomedical waste – categories Categorization and composition of Biomedical waste. Specification of materials. Colour coding. Sources of Health care wastes, Hospitals and health care establishments and other sources.

Unit 2: Health Impacts of Biochemical waste. Direct and Indirect hazards, Potential health hazards. Persons at risk. Basic information about- What infection? Infection agents on organizations spread of infection Basic information about Hospital acquiredinfection.

Unit 3: Legislation and policies on Health care waste management.Biomedical waste Management and handling Rules, 1998 and its amendment there after. CPCB guidelines. (Central pollution control board)Some idea on Safe disposal of Radioactive waste Rules, 1995 guideline of BARC.

Unit 4: International ScenarioWorld Health Organization guidelines on

- a) Management of wastes from Hospitalwaste
- b) Management of hospital wastesin
- c) Developing countries

Unit 5: Basic steps in Health Care Waste Management Segregation at the point of generation

sharp Decontaminating/ Disinfections unit container for autoclaving Sharp waste containers for storage and transportation autoclaving/shnedding /incrimination/ bio hazard symbols. Microwave, Hydropulbing, plasma tonch.

Hygiene Management: Importance of hygiene and safety, Applied areas of Hygiene Management: Operational hygiene, Kitchen Hygiene, (Drinking) water systems, Airconditioning systems and Hotel Hygiene.

Prescribed Books:

- 1. The Book of Hospital Waste Management Hardcover February 15, 2003 by B.D. Acharya, MeetaSingh.
- 2. Hygiene For Management 17th Edition- Bertrams-1909749265.

COURSE CODE	MB406I
COURSE TITLE	MARKETING OF HOSPITAL AND HEALTHCARE SERVICES
COURSE CREDITS	3

Clinics, hospitals and medical practices must develop marketing plans to attract patients to their facilities in an increasingly competitive field. As with most industries, the marketing of health-care services requires some astute planning and a clear focus on the objectives of the campaign.

Course Objectives:

- 1. To study how to educate patients about serious health conditions, such as heart disease and diabetes, and how to avoid gettingthem.
- 2. To study how hospitals promote their services through free or discounted health screenings for such Chronic Healthcareconditions.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406I.1	Creating	The students will be able to DEVELOP plan for marketing, promotion or advertising of healthcare services,
		including those involved in facilitating medical tourism.
		The students will be able to IDENTIFY the mechanism of
406I.2	Remembering	how and why prospective patients choose a healthcare
		provider.
		The students will be able to UNDERSTAND the tools and
406I.3	Understanding	techniques with which healthcare facilities can develop and
		implement marketing plans capable of transforming their
		reputation and success.

Course Content:

Unit 1: Marketing of Hospital

Telephone Courtesy, Guest Lectures, Organization of Camps, Seminars, Workshops, Continuous Medical Education, Public Participation.

Unit 2: Marketing in Health Care

Introduction, Meaning and Scope of Marketing in HealthCare, Distinctive Nature of Service Marketing, Service Marketing mix, Service Quality, Marketing Communication for Health Care Services.

Unit 3: Pricing of Health Services

Pricing Objectives, Revenue Oriented Pricing ObjectivesMarketing Skimming Objectives, Market Penetration Objectives, Operations Oriented PricingObjectives G. Patronage Oriented Pricing Objectives.

Unit 4: Bases Used in Pricing

Cost Based Pricing, Competition Based Pricing, DemandBased Pricing, Pricing when Value to the Customer in low Price, Price Discount, Old Pricing, Place Differentiates, Quality Differentials.

Unit 5: Pricing Strategies

Value Pricing, Complementary Pricing, Price Funding, MarketSegmentation Pricing.

Prescribed Books

1. Marketing – Rogera Kerin and Steven W. Hartcey – McGrawHill.



COURSE CODE	MB407I
COURSE TITLE	PLANNING & MANAGEMENT OF HOSPITAL CLINICAL & SUPPORTIVE SERVICES
COURSE CREDITS	3

Hospital planning and management, at both the facility and health system level. ... Hospitals should also link to and support primary health services and health ... governance, reduce the gap between clinical and managerial cultures, and bring the ... patient is assigned a medical unit summary that includes a primary and tertiary system.

Course Objectives:

- 1. To understand the structure and functions of clinical and supportive service departments of a hospital and health care organization.
- 2. To develop skills in planning, building and managing clinical and supportive service departments of a hospital and health care.
- 3. To make familiarize students with concepts and techniques of Modern Management in different health care units.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407I.1	Remembering	IDENTIFY Hospital planning and management at both the facility and health system level
407I.2	Understanding	INTERPRET the structure and functions of clinical and supportive service departments of hospital and health care organization.
407I.3	Applying	DEVELOP skills in planning, building and managing clinical and supportive service departments of a hospital and health care
4071.4	Analysing	DISTINGUISH clinical and managerial cultures of Hospital's Clinical and Supportive Service and reduce its gap.
407I.5	Evaluating	MONITOR students with concepts and techniques of Modern Management in different health care units
407I.6	Creating	DESIGN steps to Organize and Administer various Clinical and Supportive Service of Hospital

Course Content:

Unit 1: Introduction of Hospitals and it's departments

Concept of Hospitals - Planning and Design of Hospital (Building & Physical Layout) - space Required for Separate Functions - History of Hospital Development - Departmentation and organization structure of different types of hospitals. Organization - Structure - Vertical & Horizontal - Clinical & Non - clinical - supportive & Ancillary Service Departments.

Unit 2: Management & Organization of Clinical Services

Organization and Administration of various clinical services - Outpatient service - Inpatient

Services - Emergency Services - Operation Theater - ICUs - super Specialty Service including their utilization study - Nursing Care and Ward Management.

Unit 3: Planning & Organization of Support Services

Imaging - CSSD - Laboratory - Blood Bank - diet - Medical Records - Mortuary - Pharmacy - Admission and Discharge Procedure - Billing Procedure - Bio Medical Equipments Planning.

Unit 4: Organization & Management of Utility Services

Organizing and Managing Facility Support Services - Laundry - Housekeeping - Pest control managing the Estate (Hospital Security) - Recent trends in disaster Management - Hospital Engineering Services (Plumbing, electricity, Civil, A/c, Lifts)- Ambulance Service.

Unit 5: Clinical Information Systems

Management decision and Related Information Requirement – Clinical Information Systems – Administration Information systems: Support Service Technical Information Systems – Medical Transcription.

Prescribed Books:

- 1. Management Information System, James A.O'Brien, Tata Mc-graw Hill,
- 2. Health Management Information System, Jack Smith, Open University Publication, U.K.
- 3. Health Policy and Management The health care Agenda in a British political contact colum Paton, 1996, Chapman & Hall Publication (Madras).

Suggested Readings:

- 1. Health Sector Reform in Developing Countries Peter Berman, Harvard University Press, 1995.
- 2. Health Planning For Effective Management William A. Reinke, 1988, Oxford University Press.
- 3. Managing a Modern Hospital, A.V.Srinivasan, Response Books.



OPERATIONS AND SUPPLY CHAIN MANAGEMENT SPECIALIZATION

COURSE CODE	MB401J
COURSE TITLE	CASES IN MANAGEMENT (OPERATIONS AND SUPPLY CHAIN MANAGEMENT)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DESCRIBE the major theories, concepts, terms, models,
401J.1	Remembering	frameworks, and research findings in the field of
		Operations and Supply Chain Management.
401J.2	Understanding	SUMMARIZE the impact of Current OSCM trends on
4013.2	Onderstanding	OSCM Functions
401J.3	Annlying	MAKE USE OF the Theories, Models, Principles and
4013.3	Applying	Frameworks of OSCM in analysing the cases of OSCM
401J.4	Analyzina	ATTRIBUTING the OSCM Case with reference to
4013.4	401J.4 Analysing	Theories, Models, frameworks of OSCM
401J.5	Evaluating	TEST a given Case of OSCM with reference to the Current
4013.3		Trends, Best Practices in OSCM
401J.6	Tr. C	CONSTRUCT a Case on any one of the given OSCM
401J.0	Creating	Concepts or Problem or Scenario

Course Content:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for sessions, and to contribute source materials where appropriate to increase engagement in, and

relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (OPERATION AND SUPPLY CHAIN MANAGEMENT)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Inventory Control Technique-EoQ and Safety stock.
 - 2. Just in Time Technique
 - 3. Total Quality Management
 - 4. Six Sigma Implementation
 - 5. Lean Management Techniques
 - 6. KAIZEN
 - 7. Warehousing Management System
 - 8. Material Requirement Planning
 - 9. Service Enhancement using internet
 - 10. Project Management

COURSE CODE	MB402J
COURSE TITLE	WAREHOUSE MANAGEMENT
COURSE CREDITS	3

The warehouse management course offers a practical introduction to warehouse management principles and techniques. The course is tailored to help the reader implement lean manufacturing in business environment to improve productivity, business resilience, and to reduce waste. The course also deals with warehouse functions and strategies in the modern world.

Course Objectives:

- 1 To understand functions of warehouse.
- 2. To highlight different techniques of warehousing.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402J.1	Remembering	DESCRIBE the theories, concepts, terms & techniques of Warehouse Management.
402J.2	Understanding	SUMMERISE & EXEMPLIFY the role, challenges & features of an ideal warehouse.
402J.3	Applying	IMPLEMENT various plans related to Product Assortment Management
402J.4	Analysing	DECONSTRUCT the various strategic Aspects of Warehouse Management
402J.5	Evaluating	CRITICALLY EXAMINE the theories of Modern Warehouse Operations.

Course Outline:

Unit 1: Warehousing Introduction

Objectives, Stores and Warehousing, meaning of a Warehouse, Need for warehousing management, Evolution of warehousing, Role of a warehouse manager, Functions of Warehouses, Types of Warehouses, Warehousing Cost, Warehousing Strategies, Significance of Warehousing in Logistics, Warehousing Management Systems (WMS).

Unit 2: Role of Warehousing

Warehousing Function Model, Stock Valuation Retailing and Warehousing, Challenges in retail warehousing, setting up a warehouse, Role of government in warehousing, Characteristics of an ideal warehouse, Storing products in a warehouse.

Unit 3: Strategic Aspects of Warehousing

Different Types of Customers in Warehousing, Importance of Warehouse in a Value Chain, Warehouse Location, Warehouse Structure, Warehouse Operations, receiving inventory, picking

inventory, locating inventory, Organising inventory, Despatching inventory, Equipment Used for a Warehouse.

Unit 4: Strategic Retail Product and its Procurement

Product Assortment Management, Assortment management framework, Assortment objectives, Assortment selection, Assortment Plan, Product Selection, Retail Suppliers, Inventory Cost and Service, Lead Time, Demand Forecasting, Management of Stock Levels, Replenishment Methods.

Unit 5: Modern Warehouse Operations

Concept of Inventory Control, Impact of Stock Inaccuracy, Frequent Stock Checking, Security and Preventing Loss, World-class Warehousing, Warehousing — the way forward, Warehousing and Supply Chain.

Prescribed Books:

- 1. World-Class Warehousing and Material Handling by Edward Frazelle.
- 2. Fundamentals of Warehousing With Worked Examples by Banihan Gunay.

Suggested Readings:

1. Basics of Distribution Management: A Logistical Approach by Kapoor.



COURSE CODE	MB403J
COURSE TITLE	LEAN MANAGEMENT
COURSE CREDITS	3

The Lean management course offers a practical introduction to lean management principles and techniques. The course is tailored to help the reader implement lean manufacturing in business environment to improve productivity, business resilience, and to reduce waste.

Course Objectives:

- 1. To outline the need for Lean Management.
- 2. To highlight different techniques of Lean implementation.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403J.1	Remembering	DESCRIBE the theories, concepts, terms & techniques of
4033.1		lean management
4031.2	403J.2 Understanding	UNDERSTAND the various tools & techniques used in
4033.2		lean management process
4021.2	03J.3 Applying	APPLY the techniques of lean management for business
4033.3		solutions
403J.4	Analyse	ANALYZE the future value stream mapping
403J.5	Creating	IMPLEMENT the lean management process at workplace

Course Outline:

Unit 1: Elements of Lean Management

Lean Philosophy and Principles, Concept of Lean Thinking, Identifying Waste in the Production process, Lean Manufacturing, Value flow and Muda, Muri and Mura, Need for Lean Management.

Unit 2: Lean Tools and Techniques

Various tool of LM, Fundamental blocks of Lean, Impact of 5S, Need for TPM, Pillars of TPM, Implementation of TPM, Value Stream Mapping.

Unit 3: Lean System

Features manufacturing and services, Work flow, Small lot sizes, Pull Method, Kanban, KAIZEN, problem solving Techniques, Just in Time.

Unit 4: Project Selection for Lean

Resource and project selection, Selecting projects, Process mapping, Current and future value stream mapping, project suitable for lean initiatives.

Unit 5: Lean Management and Implementation

Standardized work, Continuous improvement. Push and Pull systems in Lean Manufacturing, Lean concept implementation, review. Productivity Improvement: Process, machinery Operator and equipment, Lean Leadership.

Prescribed Books:

- 1. The Machine That Changed the World, by Daniel Roos, Daniel T. Jones, and James P. Womack.
- 2. Production and Operations Management by Shailendra Kale.
- 3. Toyota Way by Jeffrey Liker.

Suggested Readings:

- 1. Lean Management: Concepts and Industry Perspectives by E Mrudula.
- 2. Lean Manufacturing and Tools by Shorya Sharma.



COURSE CODE	MB404J
COURSE TITLE	MANAGEMENT OF MANUFACTURING SYSTEM
COURSE CREDITS	3

This course introduces the viewer to the concepts of Manufacturing Systems Management.

The course primarily addresses Cellular Manufacturing, JIT systems, Synchronous manufacturing and Flexible manufacturing.

Topics such as cell formation, cell scheduling, JIT systems, TOC principles, Loading and scheduling in Flexible manufacturing are addressed.

Course Objectives:

- 1. To Understand the concepts of inventory control.
- 2. To understand the concept of variety reduction and standardization.
- 3. To understand the concept of JIT and kanban.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404J.1	Applying	The students will be able to APPLY concept of inventory
4043.1		management for physical inventory control.
404J.2	Evaluating	The students will be able to ORGANIZE the warehouse
4041.2	Evaluating	activities and warehouse management system.
404J.3	Craating	The students will be able to PREPARE implementation
4043.3	Creating	plans for MRP.
404J.4	Applying	The students will be able to USE concept of BPR for
		operation effectiveness.

Course Contents:

Unit 1: Determination of Stockholding Policy. Customer expectations – internal/external; supply market conditions; Categories of risks and their evaluation; Requirements of the business and the need for stock; Economics constraints; methods of avoiding carrying stock; General control methods e.g. ABC analysis. Control of Stock Range Coding, classification and categorization methods.

Unit 2: Variety reduction and standardization; Application and approval of new stock items; Control of slow moving; obsolete and redundant stock; Role of and function in determining stock range, Control of Stock Levels Forecasting techniques in relation to demand and lead times; Independent demand situations and the use of fixed order quantity and periodic review systems; Techniques for dealing with dependent demand.

Unit 3: The Kanban approach and Just in Time philosophy; Coping with uncertainty in achieving required service levels; Suppliers contribution to controlling stock. Management of Storage Facilities. Identifying types of commodities to be stored and their characteristics with regard to storage and handling needs; Materials requirements planning (MRP) and manufacturing resource planning (MRPII) and distribution requirements planning (DRP); Pull systems.

Unit 4: Physical Management of Stock Selection and operation of appropriate storage and

materials handling equipment – general Contents; Methods of stores layout to optimize the use of space and minimize picking costs; Outsourcing the activity and vendor managed inventory; Maintenance of security and prevention of theft; Storage and disposal of redundant, obsolete and scrap items; Environmental issues.

Unit 5: Management Aspects Health and Safety at work – operational issues: Health and Safety at work – management issues interdependence and teamwork; Relationships with other functions. Relevant Techniques Use of operational research techniques of queuing theory, network analysis, simple simulation techniques and decision trees; Identifying methods to distinguish between stores efficiency and effectiveness; Benchmarking and measurement of performance.

Basics of Business Process Reengineering: Concept of BPR, process of BPR, application of BPR in productivity improvement.

Book References

- 1. Jessop and Morrison, Storage And Supply Ofmaterials.
- 2. Duru C. Innocent, Purchasing And Stores Management, Ken Printing Press, Lagos.
- 3. Terry Lucey, Quantitative Techniques, Letts Educational, 5th Edition.

COURSE CODE	MB405J
COURSE TITLE	PROJECT MANAGEMENT
COURSE CREDITS	3

This course is designed to acquaint the students with the planning process in business and familiarize them with the projectmanagement. The students will get knowledge of various network techniques used in project management.

Course Objectives:

- 1. To familiarize students with the function and techniques of projectmanagement.
- 2. To acquaint students with Project co-ordination, Project audit and Project Termination.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405J.1	Remembering	The students will be able to EXPLAIN and understand the process of project planning.
405J.2	Applying	The students will be able to DEMONSTRATE the knowledge of various network techniques used in project management.
405J.3	Creating	The students will be able to DEVELOP a WBS for project.
405J.4	Remembering	The students will be able to IDENTIFY variance in project cost and Schedule.

Course Contents:

Unit 1:Project Planning

Introduction, Meaning, Definition, Characteristic and objective period, Nature of Planning, Importance of planning, Advantages of planning, Steps in planning process, Methods of planning.

Unit 2:The Project Life-Cycle

Project Management Maturity, Project Selection and Criteria of Choice, Types of Project Selection Models, Project Portfolio Process, Project Proposals. Project Management and the Project Manager, Problems of Cultural Differences, Impact of Institutional Environments, Project Organization, The Project Team.

Unit 3:Initial Project Coordination

The Nature of Negotiation, Partnering, Chartering and change, Conflict and the project life cycle. Estimating Project Budgets, Improving the Process of Cost Estimation.

Unit 4:Network Techniques

PERT and CPM, Risk Analysis Using Simulation with Crystal Ball 2000. Critical Path Method-Crashing a Project, The Resource Allocation Problem Resource Loading, Resource Leveling, Constrained Resource Allocation The Planning-Monitoring-Controlling Cycle, Information Needs and the Reporting Process, Earned Value Analysis The Fundamental Purposes of Control, Three Types of Control Processes, Comments on the Design of Control Systems, Control as a Function of Management.

Unit 5:Purposes of Evaluation

Goals of the System, The Project Audit, Construction and Use of the Audit Report, The Project Audit Life Cycle, some Essential of an Audit/Evolution, The Varieties of Project Termination, when to Terminate a Project, The Termination Process.

Prescribed Books:

- 1. Prasanna Chandra, Project Planning, Analysis, Selection, Implementation and review.
- 2. Gopalkrishanan P and Ramamoorthy V.E., Textbook of project management.
- 3. Kemer Harold, Project Management.
- 4. Dennis Hock, Project Management Handbook.
- 5. Choudhary S., Project Management.

COURSE CODE	MB406J
COURSE TITLE	INNOVATION AND R AND D MANAGEMENT
COURSE CREDITS	3

This course aims to equip students with an understanding of the main issues in the management of technological innovation and an appreciation of the relevant skills needed to manage innovation at both strategic and operational levels. It provides evidence of different approaches based on real-world examples and experiences of leading international firms.

Course Objectives:

- 1. To understand the managerial aspects of Innovation functions.
- 2. To appreciate the Research and Development inmanagement.
- 3. To evaluate the financial aspects of RandD projects.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406J.1	Creating	The students will be able to CREATE organization structure for R & D.
406J.2	Remembering	The students will be able to IDENTIFY key drivers of innovation.
406J.3	Applying	The students will be able to IMPLEMENT the project quality management system.

Course Contents:

Unit 1: Introduction and Managerial aspects of Innovation function Introduction, Components of Innovation, Types of Innovations, Models of Innovation Processes, Evolution and characteristics of Innovation Management, Key drivers of Innovation, Factors influence ing Innovation, Organizing for Innovation, Factors influencing organizational design, Developing Innovation Strategy, Characteristics of creative of creative organization.

Unit 2: Research and Development Management Introduction, Meaning, Objectives, Significance, Classification of RandD according to RandD type, process phase, measurement level, purpose of measurement and measurement perspective. Technology development approaches, Performance of RandD management in Indian scenario.

Unit 3: Financial Evaluation of RandD Projects Introduction, Cost effectiveness of RandD, RandD financial forecasts, Project selection, Evaluating RandD ventures, Conflicting views of managers. Allocation of resources, RandD programme planning and control. Project management, Project Planning and Control Techniques.

Unit 4: Organization RandD and innovation, HRM issues in innovation and RandD, Leadership and RandD management, Organization Design and structure of RandD, RandD Project Management, Measurement, Evaluation and assessment of RandD.

Unit 5: National RandD infrastructure and Institutional Framework, Fiscal and other incentives and Promotional /Support measures, Industry, Institutions and government cooperations. Other important issues in RandD management, Commercialization of RandD.

Project Quality Management: Concept of project quality, responsibility for quality in projects,

quality management at different stages of project, tools and techniques, Quality Management Systems, TQM in projects.

References

1. White, The Management of Technology and Innovation-A Strategic Approach, Cengage Publication S Moikal, Innovation Management, Sage Publication.

2. C.K Prahalad and M.S. Krishnan, The New Age of Innovation, Tata McGraw Hill Education Pvt. Ltd. New Delhi2008.

COURSE CODE	MB407J
COURSE TITLE	WORLD CLASS MANUFACTURING
COURSE CREDITS	3

World Class Manufacturing has focusing on standardization & global competitiveness. World Class Manufacturing is concerned with competitiveness of Indian manufacturing industry, manufacturing performance. The course focuses on the basic concepts related to Time based competition, managing knowledge Problems in manufacturing industry.

Course Objectives:

- 1. To understand the relevance of World Class Performance in competitive framework.
- 2. To understand global markets relationship to world class performance.
- 3. To build the framework for world class manufacturing.
- 4. To understand the status Indian manufacturing in relation to world class standards.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407J.1	Remembering	DEFINE the basic terms associated with Manufacturing
40/J.1	Remembering	Excellence and World Class Manufacturing
407J.2	Understanding	SUMMARIZE the features of various frameworks used for
4073.2	Understanding	World Class Manufacturing
407J.3	Applying	IDENTIFY the challenges to manufacturing industry in the
4073.3	Applying	information age
407J.4	Analysing	ANALYZE the usage of Information management tools,
4073.4	Allarysing	Material processing and handling tools.
407J.5	Evaluating	EVALUATE the country's preparedness for World Class
4073.3		Manufacturing
		ESTIMATE the performance of manufacturing firms with
407J.6	Creating	the measurement system to determine the readiness for
		World Class Manufacturing

Course Outline:

Unit 1: World Class Manufacturing Introduction

Evolution of World Class Manufacturing (WCM). WCM and information age. Completing in information age business challenges operating environment of information age Indian global completeness and manufacturing excellent Time-based competition, Attribute of world class status.

Unit 2: Aspects of World Class Manufacturing

Gaining competitive advantage through world class manufacturing. Varies concepts of world class manufacturing Total Productivity through such practices: Kaizen, T.P.M, S.M.E.D., 5-S Principles, Housekeeping, the relevance of World Class Performance in competitive framework.

Unit 3: Tools for World Class manufacturing

Systems & Tools for World Class manufacturing, Overview of systems & tools Information management, MRP I & MRP II, Flexible manufacturing systems rapid prototyping, Problem

solving tools such as: TQC Tools – problem solving.

Unit 4: Competitiveness

Competitiveness of Indian manufacturing. Business strategy & global competitiveness. World Class Strategic planning and Implementation, Need for performance measurement, Importance of Human diversions in world class- morale and team building. International Certifications for standardization, global markets relationship to world class performance.

Unit 5: Leading Towards World Class Manufacturing: The Indian Scenario

Leading India towards world class manufacturing. Strategy for world class status, and information technology. Case studies on Indian manufacturing.

Prescribed Book:

- 1. Chronicles of a Quality Detective by Shrinivas Gondhalekar and Payal Sheth.
- 2. World Class Manufacturing by K. Shridhara Bhat, Himalaya Publications.
- 3. World Class Manufacturing by Richard J. Schonberger, publisher-Simon and Schuster.

Suggested Readings:

- 1. Operations Management for competitive advantage, Chase, Jacobs, Aquilano and Agarwal, TMGH, 13th Edition.
- 2. Production & Operations Management, Shailendra Kale, McGraw Hill Publications.



BUSINESS ANALYTICS SPECIALIZATION

COURSE CODE	MB401K
COURSE TITLE	CASES IN MANAGEMENT (BUSINESS ANALYTICS)
COURSE CREDITS	3

Course Description:

The course aims to get the students thinking and discussing issues pertaining to management drawing on what they already know. To increase awareness and knowledge of contemporary management issues and to allow students the opportunity to discuss and critically analyse source materials, in order to both enhance their understanding of the topics and to practice their analytical and debating skills.

Course Objectives:

- 1. To give students the confidence and experience of debating issues on the managerial command.
- 2. To give exposure exposure of real life Business situation and decision making with the best possible use of resources.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
		DESCRIBE the major theories, concepts, terms, models,
401K.1	Remembering	frameworks and research findings in the field of Business
		Analytics.
401K.2	Understanding	SUMMARIZE the impact of Current Business Analytics
401K.2	Onderstanding	trends on Business Analytics Functions
		MAKE USE OF the Theories, Models, Principles and
401K.3	Applying	Frameworks of Business Analytics in analysing the cases
		of Business Analytics
		ATTRIBUTING the Business Analytics Case with
401K.4	Analysing	reference to Theories, Models, frameworks of Business
		Analytics
401K.5	Evoluating	TEST a given Case of Business Analytics with reference to
401K.3	Èvaluating	the Current Trends, Best Practices in Business Analytics
401 V 6	AD1W C	CONSTRUCT a Case on any one of the given Business
401K.6	Creating	Analytics Concepts or Problem or Scenario

Course Outline:

To facilitate student learning, a range of source materials will be used throughout the course to direct and stimulate discussion, course will be having five case studies from the contemporary topics of the specializations of management students which is to be discussed in the class room by respective subject faculty. Students are also encouraged to put forward their own ideas for

sessions, and to contribute source materials where appropriate to increase engagement in, and relevance of, the course for students. Case analysis and presentations will be an integrate part of learning case studies.

CASES IN MANAGEMENT (BUSINESS ANALYTICS)

- 1. Five cases to be discussed analyzed and presented from the following topics.
- 2. Following are the suggested topics however are not limited and open for contemporary topics.
 - 1. Personalized Marketing
 - 2. Customer Segmentation
 - 3. Life Value Prediction
 - 4. Customer sentiment Analysis
 - 5. Real Time Analytics
 - 6. Predictive Analysis
 - 7. Market Basket Analysis
 - 8. Transactional Analytics
 - 9. Price Optimization
 - 10. Detecting insurance fraud

COURSE CODE	MB402K
COURSE TITLE	ARTIFICIAL INTELLIGENCE IN BUSINESS APPLICATIONS
COURSE CREDITS	3

Artificial intelligence is already widely used in business applications, including automation, data analytics, and natural language processing. Across industries, these three fields of AI are streamlining operations and improving efficiencies. Automation alleviates repetitive or even dangerous tasks. Data analytics provides businesses with insights never possible. Natural language processing allows for intelligent search engines, helpful chatbots, and better accessibility for people who are visually impaired.

Course Objectives:

- 1. To Identify Knowledge associated and represent it by logical sequence and plan a strategy to solve given problem.
- 2. To understand AI's fundamental concepts and methods.
- 3. To apply various machine learning algorithms on structured data to develop machine learning models.
- 4. To acquire advanced Data Analysis Skills through algorithm and search processes.
- 5. To select logical and functional process to develop the model.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
402K.1 Remen	Remembering	IDENTIFY KNOWLEDGE associated and represent it by
402K.1	Remembering	logical sequence and plan a strategy to solve given problem
402K.2	Understanding	UNDERSTAND AI's fundamental concepts and methods.
402K.3	Annlying	APPLY various machine learning algorithms on structured
402K.3	Applying	data to develop machine learning models.
402K.4	Analysing	ACQUIRE advanced Data ANALYSIS SKILLS through
402 K. 4		algorithm and search processes.
402K.5	Evaluating	SELECT logical and functional process to develop the
402 N. 3	Evaluating	model
402K.6	Creating	CREATE SOLUTIONS for various business problems
402 K .0	Creating	using AI techniques.

Course Outline:

Unit 1: Introduction to AI and Programming Tools

Analytics Landscape, Complexity of Analytics, What Is Artificial Intelligence? Embedding AI into Business Processes, Basic Concepts of Artificial Intelligence Brain Science and Problem Solving, The History of AI, Benefits of AI Data Pyramid Property of Autonomy, The AI Revolution, Business Innovation with Big Data and Artificial Intelligence. AI and Predictive

Analytics, Overlapping of Artificial Intelligence with Other Fields Ethics and Privacy Issues, Application Areas, AI and Society. Knowledge-Based Systems Knowledge Based Reasoning: Agents, Facets of Knowledge.

Unit 2: Logic and Inferences

Formal Logic, Propositional and First Order Logic, Resolution in Propositional and First Order Logic, Deductive Retrieval, Backward Chaining, Second order Logic. Knowledge Representation: Conceptual Dependency, Frames, Semantic nets. Reasoning Systems for Categories, Reasoning with Default Information. Propositional Logic & Predicate logic - Syntax., Semantics, Computability and Complexity Applications and Limitations, Logic for Problem solving, Logic Programming with PROLOG, PROLOG Systems and Implementations, Execution Control and Procedural Elements, Constraint Logic Programming, Simple Examples.

Unit 3: Problem Solving, Search and Game Techniques

Problem solving with AI, Study and analysis of various searching algorithms, Local Search in Continuous Spaces, Searching with Non-deterministic Actions General Problem Solver, Gelernter's Geometry Theorem, STRIPS, ABSTRIPS, Search - Overview, Problem representation State-space representation. Games with Opponents- Minimax Search, Alpha-Beta-Pruning Non-deterministic Games. Heuristic Evaluation Functions Game trees, optimal search for an optimal solution. Conditions for optimality: Admissibility and consistency, Optimality.

Unit 4: Machine Learning and Data Mining

Introduction - What is machine learning? Supervised vs. Unsupervised learning, Reinforcement Learning. Machine Learning Workflow, Learning Algorithms, Linear Regression k-Nearest Neighbour, Decision Trees, Feature Construction and Data Reduction, Random Forest, k-Means Algorithm, Gradient Boosting, Auto encoders, Data Analysis, The Perceptron, a Linear Classifier, The Learning Rule, Optimization and Outlook, The Nearest Neighbour Method, Two Classes, Many Classes, Approximation, Case-Based Reasoning, Decision Tree Learning, Entropy as a Metric for Information Content, Cross-Validation and Over fitting, Learning of Bayesian Networks, Learning the Network Structure, The Naive Bayes Classifier, Clustering, Hierarchical Clustering, Data Mining in Practice.

Unit 5: Introduction to Natural language processing

Introduction to Natural Language Processing, Stages in NLP, NLP Models, Morphological Processing - Syntax and Semantics, Text Analytics, Sentiment Analysis, Syntactic Analysis (Parsing), Semantic interpretation, Discourse and pragmatic Processing, Text Classification, Implementation aspects of Syntactic Analysis (Parsing), Application of NLP in Machine Translation, Information Retrieval and Big Data Information Retrieval. Learning: Supervised, Unsupervised and Reinforcement learning. Use Cases of NLP, Applications of NLP in Business Customer Service, Reputation Monitoring. Market Intelligence, Sentiment Technology in Business.

Prescribed Books:

1. Introduction to Artificial Intelligence by Wolfgang Ertel, Springer, Translated by Nathanael

Black.

- 2. Artificial Intelligence by Elaine Rich, Kevin Knight and Nair, TMH.
- 3. A First Course in Artificial Intelligence by Deepak Khemani, McGraw Hill Education (India).

Suggested Reading:

- 1. Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig, Pearson
- 2. Artificial Intelligence by Saroj Kausik, Cengage Learning

COURSE CODE	MB403K	
COURSE TITLE	SUPPLY CHAIN ANALYTICS	
COURSE CREDITS	3	

Analytics of the supply chain refers to the methods used by companies to obtain knowledge and derive value from the vast quantities of information related to the procurement, manufacturing, and delivery of products. Analysis of the supply chain is an integral part of supply chain management (SCM).

Course Objectives:

- 1. To describe the importance of the basics of Supply Chain Analytics and Optimization.
- 2. To explain the role and applications of Descriptive, Predictive & Prescriptive Analytics in a Supply Chain.
- 3. To illustrate the basics of Modeling through R Language.
- 4. To examine the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and its fit with competitive strategy.
- 5. To determine and Design the right tools for addressing various issues in Supply Chain Analytics.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
403K.1	Remembering	DESCRIBE the importance of the basics of Supply Chain Analytics and Optimization.
403K.2	Understanding	EXPLAIN the role and applications of Descriptive, Predictive & Prescriptive Analytics in a Supply Chain
403K.3	Applying	ILLUSTARTE the basics of Modelling through R Language
403K.4	Analysing	EXAMINE the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and it's fit with competitive strategy.
403K.5	Evaluating	DETERMINE the right tools for addressing various issues in Supply Chain Analytics
403K.6	Creating	COMBINE the various approaches to Supply Chain Analytics for improvements in the supply chain system

Course Outline:

Unit 1: Context of Supply Chain Analytics

Context of today's supply chains (SC) analytics Understanding and defining supply chain analytics (SCA). Review of Basics of Supply Chain Management, Significance of Analytics in

a supply chain, Relating Operations Management with Supply Chain concepts and SC Analytics. The importance of supply chain analytics in the flows involving material, money, information, and ownership. Key issues in Supply chain analytics, Case studies of Supply Chains Analytics in India.

Uniot 2: Supplier Selection Analytics

Linear Programming, Rating method, Ranking method, Borda Count, Clustering, Goal Programming and related multi-criterion decision making (MCDM) techniques.

Unit 3:Transportation Modelling and Analytics

Transportation models, Route planning, Transhipment, Shipment schedule, Flow path optimization.

Unit 4: Warehousing Modeling and Analytics

Warehouse location problem, MILP formulation, Location with foreign exchange risks, space calculation for warehouse, Non-linear optimization for warehouse space allocation.

Unit 5: Strategic Performance Improvement

Data Envelopment Analysis for competitive comparisons among multiple warehouses and service units and formulation of strategic action plans for improving the efficiencies of non-performing DMUs, Stochastic Frontier Analysis.

Prescribed Books:

- 1. Unleashing the Potential of Supply Chain Analytics by Melissa R. Bowers, Adam Petrie and Mary C. Holcomb, Oreilly.
- 2. Modeling the Supply Chain, Jeremy F. Shapiro, Duxbury Thomson Learning.
- 3. Supply Chain Management, Sunil Chopra, and Peter Meindl, Pearson.
- 4. Business Analytics, Rahul Saxena and Anand Srinivasan.

Suggested Reading:

- 1. Designing and Managing the Supply Chain concepts, Strategies and Case studies, D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi, and Ravi Shankar, Tata McGraw Hill, New.
- 2. Global Business Analytics Models: Concepts and Applications in Predictive, Healthcare, Supply Chain, and Finance Analytics by Hoey Min.
- 3. Supply Chain Planning and Analytics by Gerald Feigin.

COURSE CODE	MB404K	
COURSE TITLE	DATA VISUALISATION FOR MANAGERS	
COURSE CREDITS	3	

As big data gets bigger, managing it in the cloud is an increasingly popular IT strategy. The power and flexibility of cloud services allow organizations to harness and analyze their data more efficiently. System administrators, IT managers and other data professionals who understand cloud storage and analytics technologies are becoming valuable assets for businesses of allsizes.

Course Objectives:

- 1. To study key aspects of data security, synchronization and protection.
- 2. To compare storage, database and big data solutions provided by the major cloudvendors.
- 3. To study technical concepts that include data models, cloud architecture, scalable analytics administration, data visualization and relational queryprocessing.
- 4. To know strategies for working with and analyzing unstructureddata.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
404K.1	Applying	The students will be able to APPLY Hive to query Hadoop files.
404K.2	Evaluating	The students will be able to ASCERTAIN Hadoop, SQL Querying.
404K.3	Applying	The students will be able to DEMONSTRATE understanding by working on various Machine learning tools.

Course Contents:

Unit 1: Introduction to Cloud Computing

The Evolution of the Cloud, Definition, various Cloud Services, Attributes, User- System Interface, Characteristics of Cloud Computing, Five Levels of Redundancy, Cloud Categories, Cloud Delivery Models, Emerging Technology, vendor Choices, Infrastructure Limitations, Negligence, Cloud Scenarios and Considerations.

Unit 2: Security in the Cloud

Data Security and Control, Cloud Threats, Threat Mitigation, Cloud Security, Data Confidentiality and Privacy Service Availability, Cloud Risk Summary, Real World Issues with Cloud Computing, Cloud Security Alliance, National Institute of Standards and Technology, Cloud Computing and Business Commerce, Cloud Management Audit/Assurance Program, Cloud Business Continuity Planning, Determining the Cloud Category.

Unit 3: Big Data introduction

Big data: definition and taxonomy - Big data value for the enterprise - Setting up the demo environment - First steps with the Hadoop -ecosystem.

Unit 4: Querying big data with Hive

Introduction to the SQL Language - From SQL to HiveQL, Introduction to HIVE e HIVEQL -

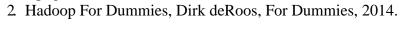
Using Hive to query Hadoop files.

Unit 5: Big data and Machine learning

Quick into to Machine learning - Big Data and Machine Learning - Machine learning tools 1) Spark and SparkML 2) H2O 3) Azure ML, Next steps in the big data world.

Prescribed Books:

1. Big data. Architettura, tecnologie e metodi per l'utilizzo di grandi basi di dati, A. Rezzani, Apogeo Education, 2013.



COURSE CODE	MB405K
COURSE TITLE	SECURITY AND MASTER DATA MANAGEMENT
COURSE CREDITS	3

High-quality, low-redundancy reference data is essential in business today. Customer relationship management (CRM) without customer data integration is difficult. Effective supply chain management is equally difficult without integrated product, supplier and partnerdata.

Course Objectives:

- 1. To understand the concepts and terminology of MDM.
- 2. To understand the architectural options for MDM-implementation.
- 3. To understand the elements and activities of building an MDM- businesscase.
- 4. To understand the important role of related disciplines such as data governance and dataquality.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
405K.1	Creating	The students will be able to DESIGN & implementation of
		Data Matching tools and Techniques.
405K.2	AOSW 2 Damanharina	The students will be able to DETERMINE Data Profiling
403 K .2	Remembering	and related techniques.
405K.3	Evaluating	The students will be able to FORMULATE & handle
		Master Data Management.

Course Contents:

Unit 1: Security Management Practices

Overview of Security Management, Information Classification Process, Security Policy, Risk Management, security Procedures and Guidelines, Business Continuity and Disaster Recovery, Ethics and Best Practices.

Unit 2: Introduction

What is Master Data Management? What Is Master Data? Sources of Master Data, Poor Master Data Consequences, Why is Master Data Management So Difficult? Types of Master Data Managed.

Unit 3: Introduction to Data Profiling

What is Data Profiling? Myth and Reality of Data Profiling, Profiling Techniques, Profiling Challenges, Role of Profiling, People and Technology.

Unit 4: Implementation Fundamentals

Parsing and Standardization, Introduction to Data Matching, Data Matching Techniques, Data Matching Destinations, Evaluating Data Matching Tools.

Unit 5: MDM Architecture

Architecture Approaches, Conforming Dimensions for the Enterprise, Business Process Workflows, Data Quality, Data Quality Case Example, Syndicated Data o Architecting Syndicated Data.

Prescribed Books:

- 1. Information Security Management CISSP. HaroldF. Tipton.
- 2. Information Security: The Complete Reference MarkRhodes-Ousley.



COURSE CODE	MB406K	
COURSE TITLE	INTERNET OF THINGS	
COURSE CREDITS	3	

The concept of Internet of Things (IoT), has begun to make an impact in industries ranging from industrial systems to home automation to healthcare. Researchers continue to conduct ground-breaking research on topics ranging from RFID to cloud technologies, from sensors to the World Wide Web.

Course Objectives:

- 1. To learns vision and Introduction to IoT.
- 2. To understand IoT Marketperspective.
- 3. To learn data and Knowledge Management and use of Devices in IoTTechnology.
- 4. To understand State of the Art IoT Architecture.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
406K.1	Creating	The students will be able to DESIGN IoT solutions through
400K.1		gaining a deep appreciation of the IoT concepts.
406K.2	Analyzing	The students will be able to EXPLORE the opportunities
400K.2	Allaryzing	and challenges of Internet of Things development.
406K.3	Remembering	The students will be able to DEFINE the impact of the
400K.3	Remembering	Internet of Things on society and everyday life.
406V 4	Domomhoring	The students will be able to IDENTIFY important
406K.4 Rem	Remembering	characteristics of IoT platforms and user interfaces.
	A	The students will be able to ASCERTAIN and ANALYZE
406K.5	Analyzing	IoT security and privacy risks, and concept design secure
		hardware and software.

Course Contents:

Unit 1: M2M to IoT

The Vision-Introduction, From M2M to IoT, M2M towards IoT-the global context, A use case example, Differing Characteristics.

Unit 2: M2M to IoT – A Market Perspective

Introduction, Some Definitions, M2M Value Chains, IoT Value Chains, An emerging industrial structure for IoT, The international driven global value chain and global information monopolies. M2M to IoT-An Architectural Overview—Building an architecture, Main design principles and needed capabilities, An IoT architecture Contents, standards considerations.

Unit 3: M2M and IoT Technology Fundamentals

Devices and gateways, Local and wide area networking, Data management, Business processes in IoT, Everything as a Service(XaaS), M2M and IoT Analytics, Knowledge Management.

Unit 4: IoT Architecture-State of the Art

Introduction, State of the art, Architecture Reference Model- Introduction, Reference Model and architecture. IoT reference Model.

Unit 5: IoT Reference Architecture

Introduction, Functional View, Information View, Deployment and Operational View, Other Relevant architectural views. Real-World Design Constraints- Introduction, Technical Design constraints-hardware is popular again, Data representation and visualization, Interaction and remote control. Industrial Automation- Service- oriented architecture-based device integration, SOCRADES: realizing the enterprise integrated Web of Things, IMC-AESOP: from the Web of Things to the Cloud of Things, Commercial Building Automation- Introduction, Case study: phase one-commercial building automation today, Case study: phase two- commercial building automation in the future.

Prescribed Books:

- 1. Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stefan Avesand, Stamatis Karnouskos, David Boyle, "From Machine-to-Machine to the Internet of Things: Introduction to a New Age of Intelligence",1st Edition, Academic Press, 2014.
- 2. Vijay Madisetti and Arshdeep Bahga, –Internet of Things (A Hands-on-Approach), 1stEdition, VPT, 2014.
- 3. Francisda Costa, -Rethinking the Internet of Things: A Scalable Approach to Connecting Everything, 1st Edition, Apress Publications, 2013

COURSE CODE	MB407K
COURSE TITLE	SOCIAL MEDIA, WEB & TEXT ANALYTICS
COURSE CREDITS	3

Social media analytics helps to understand contents that drive more user acceptance. In this way, you get to know which post had more positive views and then improve on that line of content. Platforms like twitter and Facebook have built-in analytics that shows you how well your posts perform. Website analytics provide insights and data that can be used to create a better user experience for website visitors. With website analytics, you can also accurately track the effectiveness of your online marketing campaigns to help inform future efforts. Text analytics is the automated process of translating large volumes of unstructured text into quantitative data to uncover insights, trends, and patterns.

Course Objectives:

- 1. To define the key terms in Social Media Analytics, Web Analytics and Text Analytics.
- 2. To learn the applications of Social Media Analytics, Web Analytics and Text Analytics in multiple business domains and scenarios and to develop a thought process to harness the power of social media analytics to improve website or business.
- 3. To analyze & select the right metrics the Social Media Analytics and Web Analytics Tools.
- 4. To combine various tools and metrics in building high impact dashboard in multiple business domains and scenarios.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
407K.1	Remembering	DEFINE the key terms in Social Media Analytics, Web Analytics and Text Analytics
407K.2	Understanding	EXPLAIN the applications of Social Media Analytics, Web Analytics and Text Analytics in multiple business domains and scenarios
407K.3	Applying	DEVELOP a thought process to harness the power of social media analytics to improve website or business
407K.4	Analysing	ANALYSE Social Media Analytics and Web Analytics Tools
407K.5	Evaluating	SELECT the right metrics for Social Media Analytics and Web Analytics
407K.6	Creating	COMBINE various tools and metrics in building high impact dashboard in multiple business domains and scenarios

Course Outline:

Unit 1: Social Media Overview: Social Media Introduction, definition, evolution, need of social media, Importance of Social Media, Social Media Data Sources, Use of Social Media in Business, Objective and KPIs, Measure, Content flow on Social Network, Challenges, Tools to analyse and measure social data (Facebook, Twitter, Instagram, LinkedIn, YouTube), Social

Analytics and competitors, Strategy planning in Social Media Analytics.

Unit 2: Social Analytics- Measuring Success: Metric categories: Divide and Conquer, Selecting the best metrics for the job, Default and Custom Metrics, Elements of effective metrics, Metrics and Strategy. Estimated Metrics: Use and Common applications, Dashboards: Definition, Purpose, Objectives, default and custom dashboards, Reports: elements of reporting, good quality of reporting, 360 overview report, Data gathering in social Media Analytics, Types of Analytics in Social Media, Charts, Machine learning in Social Media.

Unit 3: Web Analytics Overview: Introduction to Web Analytics, Web Analytics 2.0, Elements of Web Analytics 2.0: Clickstream, Multiple Outcomes, Experimentation and Testing, Voice of Customer, Competitive Intelligence, Choosing the right web analytic tool, Critical Web Metrics-Visits and Visitors, Time on Page and Time on Site, Bounce Rates, Exit Rates, Conversion Rates, and Engagement, Attributes of Great Metrics, Web Metrics Lifecycle Process. Unit 4: Web Analytics - Measuring Success: Actionable Outcome KPIs-Task completion Rate, Share of Search, Visitor Loyalty and Recency, RSS/Feed Subscribers, % of Valuable Exits, Cart and Checkout Abandonment, Days and Visits to Purchase, Average Order Value, Identify the Convertible, Measuring Macro and Micro Conversions, Building the action Dashboard, Consolidated Dashboard, Rules for High-Impact Dashboard.

Unit 5: Text Analytics: Introduction to text Analytics, Processing and Understanding Text - Tokenization, Tagging Chunking, Stemming, Lemmatization and Applications of Text Analytics.

Prescribed Books:

- 1. Social Media Marketing Step by Step: The Guides to Instagram and Facebook Marketing-Bryan Bren.
- 2. Social Media Analytics Strategy: Using data to optimize Business Performance Alex Goncalves.
- 3. Effective Advertising and Social Media: Strategy and Analytics Gerard Tellis.
- 4. Social Media Metrics: How to Measure and Optimize Your Marketing Investment by Jim Sterne, John Wiley & Sons.

Suggested Reading:

- 1. Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity by Avinash Kuashik.
- 2. Web Analytics Action Hero: Using Analysis to Gain Insight and Optimize Your Business by Brent Dykes.

COURSE CODE	MB408
COURSE TITLE	BUSINESS ETHICS
COURSE CREDITS	1

The core of a successful management lies in its Clarity of Vision, Plan of Action and more importantly Execution of the Plan of Action – the real gamut of operations as it were, and it is here that the importance of Corporate Governance and Ethics comes into being. The purpose of this course is to strengthen the ability to anticipate, critically analyze, appropriately respond to, and provide leadership regarding, ethical issues students will confront as employees and eventually as managers of people, projects and enterprises.

Course Objectives:

- 1. To apply general ethical principles to particular cases and practices inbusiness.
- 2. To think independently and rationally about contemporary moralproblems.
- 3. To recognize the complexity of problems in practicalethics.
- 4. To demonstrate how general concepts of governance apply in a situation or given circumstance.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
408.1	Understanding	The students will be able to ACQUIRE a basic and clear
100.1		understanding of philosophical ethics.
408.2	Understanding	The students will be able to UNDERSTAND the principles
		of moral decision-making in global business.
408.3	Remembering	The students will be able to IDENTIFY the trade-offs that
		face an ethical Manager faces.
	,	The students will be able to ANALYSE the concept of
408.4	Analyzing	corporate social responsibility & how competitive
		advantage maps on to corporate social responsibility.
408.5	Remembering	The students will be able to IMPROVE presenting and
		evaluating arguments in both oral and written formats.
		The students will be able to EXAMINE and discuss
408.6	Evaluating	competing positions on a range of issues facing business
		and society.

Course Contents:

Unit1: Business Ethics: An Overview

What is BusinessEthics? Principles of Personal and ProfessionalEthics, Entrepreneur Vs ProfessionalManagers, Values and Ethics inBusiness, Changing Business Environment and EthicalChallenges.

Unit 2: EthicalDilemmas and EthicalDecision-making

What is Ethical Dilemma? How to resolve EthicalDilemmas?, The process of making good ethicaldecisions.

Unit 3: Gandhian Philosophy of Wealth Management-

Philosophy of Trusteeship, Gandhiji's Seven Greatest Social Sins.

Unit 4: Corporate Social Responsibility-

Social Responsibility of business with respect to different stakeholders, Argumentsfor and against Social responsibility of business, Social Audit.

Unit 5: Globalization and Business Ethics

International Business issues, Key Global issues forBusiness, Ethics and IndianBusiness, WhistleBlowing.

Prescribed Textbook:

1. Business Ethics in India -An Indian Perspective by A.C.Fernando, Pearson Publication 2ndEdition.

Reference Books:

- 1. Corporate Governance in India-An evaluation by S.C.Das, PHI Eastern EconomyEdition.
- 2. Business Ethics-An Indian Perspective by Ronald Francis and MuktiMishra, TMGH.



COURSE CODE	MB409
COURSE TITLE	DESIGN THINKING
COURSE CREDITS	3

Design thinking refers to the cognitive, strategic and practical processes by which design concepts (proposals for products, buildings, machines, communications, etc.) are developed. Design thinking is also associated with prescriptions for the innovation of products and services within business and social contexts. Design thinking encompasses processes such as context analysis, problem finding and framing, ideation and solution generating, creative-thinking, sketching & drawing, modelling and prototyping, testing and evaluating.

Course Objectives:

- 1. To understand the fundamentals of Design Thinking for innovation.
- 2. To learn how to be both analytical and creative in order to generate solutions for challenging problems.
- 3. To instil the innovative and creative methods to solve 'wicked problems'.

Course Outcomes: On successful completion of the course the students will be able to

CO No.	Cognitive Abilities	Course Outcomes
409.1	Remembering	DEFINE a Key term in Design Thinking
409.2	Understanding	EXPLAIN Design Thinking Approach
409.3	Applying	APPLY the Empathy to Action and Defining the problem
409.4	Analysing	ANALYSE Design Thinking Tools and Methods for solving various problems
409.5	Evaluating	EVALUATE the Solutions and implementation and Measurement of solution

Course Outline:

Unit 1: Introduction to Design Thinking

Definition and nature of Design Thinking Methodology, Objectives and Scope of Design Thinking, Phases of Design Thinking Process.

Unit 2: Design Thinking Approach

Fundamental Concepts, the concept of empathy in the context of design thinking, the concept of ethnography in the context of design thinking, the concept of divergent thinking within the context of design thinking, mind mapping as a means to facilitate design thinking projects, brainstorming as a means to facilitate design thinking projects, concept development as a means to facilitate design thinking projects.

Unit 3: Empathy to Action and Defining the problem

Key rules to empathise, identifying assumptions and bias, empathy and contextual interviews, stakeholder map, shadowing, mind maps, empathy maps, storyboarding customer experience.

Identifying user needs, creating personas, prioritisation grid, creating goals from pain points.

Unit 4: Design Thinking Tools and Methods

Need to use tools and methods, visualization as a means to facilitate design thinking, assumption testing as a means to facilitate design thinking, rapid prototyping as a means to facilitate design thinking, customer co-creation as a means to facilitate design thinking, Design Thinking Application.

Unit 5:Testing Solutions and implementation and Measurement of Solution

Need of Testing, Testing Methods, Cognitive Walkthrough, Getting Best Feedback from Testing, Implementation, System Thinking, Pitching- Storytelling for success, converting minimum viable product to a measurable solution.

Prescribed Books:

- Marc Stickdorn- This Is Service Design Methods: Expanded Service Design Thinking Methods for Real Projects.
- 2. The Design of Business: Why Design Thinking is the Next Competitive Advantage, by Roger L. Martin.
- 3. Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, by Tim Brown.
- 4. Creative Workshop: 80 Challenges to Sharpen Your Design Skills, by David Sherwin.

Suggested Readings:

- 1. Jeanne Liedtka, Tim Ogilvie, and Rachel Brozenske, The Designing for Growth Field Book: A Step-by Step Project Guide (New York: Columbia University Press, 2014).
- 2. Jeanne Liedtka and Tim Ogilvie, Designing for Growth: A Design Thinking Tool Kit for Managers (New York: Columbia University Press, 2011) (referred to below as Designing for Growth).
- 3. Pawan Soni- Design your Thinking.
