

## COURSE STRUCTURE/SCHEME OF EXAMINATION

**Note:**

The Master of Business Administration (MBA) is a Two-Year Full-Time Programme. The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions

### SEMESTER-I

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs.</b>	<b>Credits</b>
<b>MBA-101</b>	Management Process and Organizational Behaviour	100	70	30	5	4
<b>MBA -102</b>	Managerial Economics	100	70	30	5	4
<b>MBA -103</b>	Business Communication	100	70	30	5	4
<b>MBA -104</b>	Business Environment	100	70	30	5	4
<b>MBA -105</b>	Financial Reporting, Statements and Analysis	100	70	30	5	4
<b>MBA -106</b>	Statistics and Analytics for Decision Making	100	70	30	5	4
<b>MBA -107</b>	Computer Applications for Business	100	70	30	5	4
<b>MBA -108</b>	Soft Skills/Seminar/Presentation	50	-	50	2.5	2
	<b>Total Marks/Credit</b>	<b>750</b>				<b>30</b>

### SEMESTER-II

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA -201</b>	Optimization Models for Business Decisions	100	70	30	5	4
<b>MBA -202</b>	Business Research Methodology	100	70	30	5	4
<b>MBA -203</b>	Production and Operations Management	100	70	30	5	4
<b>MBA -204</b>	Marketing Management	100	70	30	5	4
<b>MBA -205</b>	Corporate Finance	100	70	30	5	4
<b>MBA -206</b>	Human Resource Management	100	70	30	5	4
<b>MBA -207</b>	Legal Environment	100	70	30	5	4
<b>MBA -208</b>	Comprehensive Viva-Voce	50	50	-	-	2
	<b>Total Marks</b>	<b>750</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>
OE-I	Open Elective-I	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>800</b>				<b>32</b>

**Note:** Students after completion of second semester are required to undergo summer internship of 6-8 weeks in a reputed business organization, which shall be credited as MBA-303 in the third semester.

**Note:** During Second year, in addition to compulsory papers and research project, students shall have to choose six optional papers each in third and fourth semesters from the list of optional papers announced at the beginning of each semester. There are Nine Specialisations: Finance, Marketing, human Resource Management, International Business, Information Technology, Production and Operations Management, Entrepreneurship Development, Business Analytics and Agribusiness Management. A student is required to specialize in two areas (One Major and other Minor) by opting at least four papers (in major area) and two papers from (in minor area) in third and fourth semester.

### SEMESTER-III

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA - 301</b>	Corporate Strategy	100	70	30	5	4
<b>MBA - 302</b>	Indian Ethos and Business Ethics	100	70	30	5	4
<b>MBA - 303</b>	Summer Internship/Field Work	100	50	50	-	4
	Elective papers <b>four</b> From Major and <b>two</b> from Minor specialization area					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective -I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
<b>OE - II</b>	Open Elective-II	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>950</b>	<b>-</b>	<b>-</b>		<b>38</b>

### SEMESTER-IV

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA - 401</b>	Entrepreneurship	100	70	30	5	4
<b>MBA - 402</b>	Corporate Social Responsibility and Sustainability	100	70	30	5	4
<b>MBA - 403</b>	Research Report and Comprehensive Viva-Voce	100	50 Marks for Research Report and 50 Marks for Viva-Voce		5	4 (2+2)

	Elective papers <b>four</b> From Major and <b>two</b> from Minor specialization area					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective –I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
	<b>Grand Total</b>	<b>3400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>136</b>

<b>Specialisation-A: FINANCE</b>						
<b>Semester-III</b>						
FM-301	Quantitative Analysis for Financial Decision Making	100	70	30	5	4
FM-302	Foreign Exchange Management	100	70	30	5	4
FM-303	Derivatives Trading in India	100	70	30	5	4
FM-304	Banking and Financial Services	100	70	30	5	4
FM-305	Corporate Restructuring & Control	100	70	30	5	4
FM-306	Security Analysis	100	70	30	5	4
<b>Semester-IV</b>						
FM-401	Financial Engineering	100	70	30	5	4
FM-402	Project Planning and Management	100	70	30	5	4
FM-403	Behavioral Finance	100	70	30	5	4
FM-404	Portfolio Management	100	70	30	5	4
FM-405	Insurance and Risk Management	100	70	30	5	4
FM-406	Private Equity and Wealth Management	100	70	30	5	4
<b>Specialisation-B: MARKETING</b>						
<b>Semester-III</b>						
MM-301	Advertising Management	100	70	30	5	4
MM-302	Marketing Research and Analytics	100	70	30	5	4
MM-303	Sales and Logistics Management	100	70	30	5	4
MM-304	Consumer Behaviour	100	70	30	5	4
MM-305	Strategic Brand Management	100	70	30	5	4
MM-306	Digital and Social Media Marketing	100	70	30	5	4
<b>Semester-IV</b>						
MM-401	International Marketing	100	70	30	5	4
MM-402	Business Marketing	100	70	30	5	4
MM-403	Service Marketing	100	70	30	5	4
MM-404	Strategic Marketing	100	70	30	5	4
MM-405	Rural and Agribusiness Marketing	100	70	30	5	4
MM-406	Retail and Mall Management	100	70	30	5	4
<b>Specialisation- C: HRM</b>						
<b>Semester-III</b>						
HRM-301	HRD: Systems & Strategies	100	70	30	5	4
HRM-302	Indian Labour Legislation	100	70	30	5	4

HRM-303	Management of Industrial Relations	100	70	30	5	4
HRM-304	Human Resource Metrics and Analytics	100	70	30	5	4
HRM-305	Compensation and Reward Management	100	70	30	5	4
HRM-306	Talent Acquisition and Performance Management	100	70	30	5	4
<b>Semester-IV</b>						
HRM-401	Group Dynamics and Leadership Excellence	100	70	30	5	4
HRM-402	Strategic Human Resource Management	100	70	30	5	4
HRM-403	Cross Cultural and Global HRM	100	70	30	5	4
HRM-404	Counselling, Mentoring and Negotiation Skills	100	70	30	5	4
HRM-405	Change Management & Organisational Development	100	70	30	5	4
HRM-406	Competency Mapping & Assessment Centres	100	70	30	5	4
<b>Specialisation-D: INTERNATIONAL BUSINESS</b>						
<b>Semester-III</b>						
IB-301	International Accounting	100	70	30	5	4
IB-302	Foreign Exchange Management	100	70	30	5	4
IB-303	Export-Import Procedures and Documentation	100	70	30	5	4
IB-304	India's Foreign Trade and Policy	100	70	30	5	4
IB-305	International Business Environment	100	70	30	5	4
IB-306	International Logistics	100	70	30	5	4
<b>Semester-IV</b>						
IB-401	International Financial Markets	100	70	30	5	4
IB-402	International Marketing	100	70	30	5	4
IB-403	International Financial Management	100	70	30	5	4
IB-404	International Strategic Management	100	70	30	5	4
IB-405	Cross-cultural and Global Management	100	70	30	5	4
IB-406	Regional Economic Blocks	100	70	30	5	4
<b>Specialisation – E: INFORMATION TECHNOLOGY</b>						
<b>SEMESTER-III</b>						
IT-301	Business Intelligence and Analytics	100	70	30	5	4
IT-302	Enterprise Resource Planning	100	70	30	5	4
IT-303	Relational Database Management System	100	70	30	5	4
IT-304	E-Customer Relationship Management	100	70	30	5	4
IT-305	System Analysis and Design	100	70	30	5	4
IT-306	Knowledge Management Systems	100	70	30	5	4
<b>SEMESTER-IV</b>						
IT-401	Data Mining for Business Decisions	100	70	30	5	4
IT-402	Software Engineering	100	70	30	5	4
IT-403	E-Business Financial Modeling	100	70	30	5	4
IT-404	Internet and Web Designing	100	70	30	5	4
IT-405	E-Commerce	100	70	30	5	4
IT-406	Information Security and Cyber Laws	100	70	30	5	4

<b>Specialisation- F: PRODUCTION AND OPERATIONS MANAGEMENT</b>						
<b>SEMESTER-III</b>						
POM-301	Purchasing and Materials Management	100	70	30	5	4
POM-302	Total Quality Management	100	70	30	5	4
POM-303	Production Planning and Control	100	70	30	5	4
POM-304	Logistics Management	100	70	30	5	4
POM-305	Service Operations Management	100	70	30	5	4
POM-306	Technology Acquisition and Diffusion	100	70	30	5	4
<b>Semester-IV</b>						
POM-401	Applied Operations Research	100	70	30	5	4
POM-402	Goal Programming in Management	100	70	30	5	4
POM-403	Transportation Management	100	70	30	5	4
POM-404	Technology Forecasting	100	70	30	5	4
POM-405	R&D Management	100	70	30	5	4
POM-406	Programme Management	100	70	30	5	4
<b>Specialisation- G: ENTREPRENEURSHIP DEVELOPMENT</b>						
<b>SEMESTER-III</b>						
ED-301	Fundamentals of Entrepreneurship Development	100	70	30	5	4
ED-302	Creativity and New Venture Creation	100	70	30	5	4
ED-303	Institutional support to Entrepreneur & MSMEs	100	70	30	5	4
ED-304	Family Business Management	100	70	30	5	4
ED-305	Legal Framework for New Age Businesses	100	70	30	5	4
ED-306	Social Entrepreneurship	100	70	30	5	4
<b>SEMESTER-IV</b>						
ED-401	Enterprise Planning, Appraisal and Financing	100	70	30	5	4
ED-402	Financial Innovation and Entrepreneurship	100	70	30	5	4
ED-403	Marketing Management in New Age Businesses	100	70	30	5	4
ED-404	New Enterprises Human Resource Management	100	70	30	5	4
ED-405	MSMEs Policy Framework	100	70	30	5	4
ED-406	Contemporary Environment in MSMEs	100	70	30	5	4
<b>Specialisation- H: BUSINESS ANALYTICS</b>						
<b>Semester-III</b>						
BA-301	Business Analysis using Excel	100	70	30	5	4
BA-302	Econometrics for Business Forecasting	100	70	30	5	4
BA-303	Business Data Mining	100	70	30	5	4

BA-304	Decision Modeling and Data Analysis	100	70	30	5	4
BA-305	Data Analytics using R	100	70	30	5	4
BA-306	Social Media Analytics	100	70	30	5	4
<b>Semester-IV</b>						
BA-401	Time Series Data Analysis	100	70	30	5	4
BA-402	Applied Multi Variant Analysis	100	70	30	5	4
BA-403	Financial Modeling	100	70	30	5	4
BA-404	Predictive Analysis for Business Decision	100	70	30	5	4
BA-405	Data Analysis using Python	100	70	30	5	4
BA-406	IOT and Big Data	100	70	30	5	4
<b>Specialisation- I: AGRI-BUSINESS MANAGEMENT</b>						
<b>SEMESTER-III</b>						
ABM-301	Agri-Business Management	100	70	30	5	4
ABM-302	Agricultural Economics	100	70	30	5	4
ABM-303	Agricultural Marketing Management	100	70	30	5	4
ABM-304	Agri- Entrepreneurship	100	70	30	5	4
ABM-305	Agri-Business Finance	100	70	30	5	4
<b>SEMESTER-IV</b>						
ABM-401	Changing Paradigm of Agri-Business	100	70	30	5	4
ABM-402	Agri Supply Chain and Logistics Management	100	70	30	5	4
ABM-403	Food Processing Management	100	70	30	5	4
ABM-404	International Trade in Agri-Business	100	70	30	5	4
ABM-405	Marketing of Agri-Inputs	100	70	30	5	4

## MASTER OF BUSINESS ADMINISTRATION

(For University School of Management, Kurukshetra University)

(w.e.f. Session 2020-21)

### Guidelines for Program Outcomes, Program Specific Outcome, Course Outcomes and their Attainment levels

#### 1. Introduction:

As per NAAC Revised Accreditation Framework (RAF), Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes(Cos) for MBA Program offered by the University School of Management has been stated and displayed on the University website i.e. www.kuk.ac.in.

#### 2. Program Outcomes (POs):

**Program Outcomes for the Faculty of Commerce and Management:** On successful completion of a program under faculty of Commerce and Management student will be able to develop:

Program Outcomes	Description
PO1.	<i>Soft skills and working skills: To comprehend, communicate and execute effectively and efficiently in all of their dealings.</i>
PO2.	<i>Leadership: To develop abilities to both lead and respect the views positions and beliefs of others and to plan and manage effectively.</i>
PO3.	<i>Innovativeness and Entrepreneurship: To explore issues and problem that needs solutions with entrepreneurial orientation.</i>
PO4.	<i>Ethics and Values: To recognize, appreciate and follow ethical standards in all walks of life.</i>
PO5.	<i>Adaptability and Sociability: Ready to understand and adapt the changing environment.</i>
PO6.	<i>Research and Analytical abilities: To explore, analyses and provide solutions on emerging issues concerning various fields including public policy.</i>
PO7.	<i>Practical exposure and Employability: Exposure to actual working environment leading to employability.</i>
PO8.	<i>Environmental Consciousness: In every action, dealing, service and manifestation.</i>

### 3. Program Specific Outcomes (PSOs):

PSOs are what the students of BBA & MBA 2 Year Program are expected to learn and be able to do after the successful completion of the program. On successfully completing MBA 2 Year Programme, the students would be able to:

Program Specific Outcomes	Description
<b>PSO1:</b>	<i>Comprehension and communication</i>
<b>PSO2:</b>	<i>Creative Thinking</i>
<b>PSO3:</b>	<i>Critical Thinking</i>
<b>PSO4:</b>	<i>Design Thinking</i>

### 4. Course Outcomes (COs):

Course outcomes are the statements that describe what the students are expected to know and be able to do after the successful completion of the course.

## SEMESTER -I

Paper Code	Title of Course	Total Marks	Ext. Marks	Int. Marks	Hrs	Credits
<b>MBA-101</b>	Management Process and Organizational Behaviour	100	70	30	5	4
<b>MBA -102</b>	Managerial Economics	100	70	30	5	4
<b>MBA -103</b>	Business Communication	100	70	30	5	4
<b>MBA -104</b>	Business Environment	100	70	30	5	4
<b>MBA -105</b>	Financial Reporting, Statements and Analysis	100	70	30	5	4
<b>MBA -106</b>	Statistics and Analytics for Decision Making	100	70	30	5	4
<b>MBA -107</b>	Computer Applications for Business	100	70	30	5	4
<b>MBA -108</b>	Soft Skills/Seminar/Presentation	50	-	50	2.5	2
	<b>Total Marks/Credit</b>	<b>750</b>				<b>30</b>

### MBA – 101: Management Concepts and Organisational Behaviour

Cos	After completing this course, the students will be able to:
MBA - 101.1	Understand evolution and basic concepts of management.
MBA - 101.2	Understand the behavioral dynamics in an organizational setting.
MBA - 101.3	Understand individual behaviour like personality, attitude, emotions, perception and learning and apply this knowledge in people management at workplace.
MBA - 101.4	Apply the understanding of group dynamics and its importance in organisational development.

### MBA – 102: Managerial Economics

Cos	After completing this course, the students will be able to:
MBA - 102.1	Understand the nature of managerial decision making and objectives of a firm.

MBA - 102.2	Estimate demand.
MBA - 102.3	Understand the cost & price behavior of a firm.
MBA - 102.4	Understand macro-economic variables impacting business decisions.

**MBA – 103: Business Communication**

Cos	After completing this course, the students will be able to:
MBA - 103.1	Familiarize with the fundamentals of communication practices and strategies used in businesses.
MBA - 103.2	Understand the process of communication along with key barriers to communication
MBA - 103.3	Comprehend the contemporary challenges of business communication.
MBA - 103.4	Gain insights into communication delivery channels in virtual era.

**MBA – 104: Business Environment**

Cos	After completing this course, the students will be able to:
MBA - 104.1	Comprehend business ecosystem.
MBA - 104.2	Understand various micro and macro environmental forces influencing the business.
MBA - 104.3	Make themselves future ready concerning availing opportunities and overcoming threats present in business ecosystem.
MBA - 104.4	Understand the current dynamics and possible future outlook of Indian business ecosystem.

**MBA – 105: Financial Reporting, Statements and Analysis**

Cos	After completing this course, the students will be able to:
MBA - 105.1	Develop an insight of postulates, principles and techniques of accounting.
MBA - 105.2	Understand the steps involved in preparation and analysis of financial statements.
MBA - 105.3	Understand the concept of Marginal Costing and Responsibility Accounting.
MBA - 105.4	Know the preparation of Budgets and its applications.

**MBA – 106: Statistics and Analytics for Decision Making**

Cos	After completing this course, the students will be able to:
MBA - 106.1	Learn about the application of statistical and analytical tools.
MBA - 106.2	Gain an insight regarding probability distributions and their applications in business decision making.
MBA - 106.3	Understand sampling, sampling methods and their applications.
MBA - 106.4	Understand the use of statistical estimation and hypothesis testing in business decision making.

**MBA – 107: Computer Applications for Business**

Cos	After completing this course, the students will be able to:
MBA - 107.1	Understand the basics of computers (Hardware and Software), Computer Networks.
MBA - 107.2	Understand concepts of operating system, applications and programming languages.
MBA - 107.3	Work with of Microsoft PowerPoint, Excel and Word.
MBA - 107.4	Familiarize with business applications being used in the field of Management, finance, Human resources, production and operations.

**MBA – 108: Soft Skills/Seminar/Presentation**

Cos	After completing this course, the students will be able to:
MBA - 108.1	Enhance their communication and presentation skills.
MBA - 108.2	Make themselves industry ready concerning soft-skills requirements.
MBA - 108.3	Get insights on body language and mannerism.
MBA - 108.4	Get much needed inputs for professional development.

**SEMESTER-II**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA - 201</b>	Optimization Models for Business Decisions	100	70	30	5	4
<b>MBA - 202</b>	Business Research Methodology	100	70	30	5	4
<b>MBA - 203</b>	Production and Operations Management	100	70	30	5	4
<b>MBA - 204</b>	Marketing Management	100	70	30	5	4
<b>MBA - 205</b>	Corporate Finance	100	70	30	5	4
<b>MBA - 206</b>	Human Resource Management	100	70	30	5	4
<b>MBA - 207</b>	Legal Environment	100	70	30	5	4
<b>MBA - 208</b>	Comprehensive Viva-Voce	50	50	-	-	2
	<b>Total Marks</b>	<b>750</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>
<b>OE-I</b>	Open Elective-I	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>800</b>				<b>32</b>

**MBA – 201: Optimization Models for Business Decisions**

<b>Cos</b>	After completing this course, the students will be able to:
MBA - 201.1	Gain knowledge of concepts and tools of Operations Research.
MBA - 201.2	Understand mathematical models used in Operations Research.
MBA - 201.3	Apply these techniques constructively to make effective business decisions.
MBA - 201.4	Formulate and solve problems as networks and graphs. develop linear programming (LP) models for shortest path, maximum flow, minimal spanning tree, critical path, minimum cost flow, and transshipment problems.

**MBA – 202: Business Research Methodology**

<b>Cos</b>	After completing this course, the students will be able to:
MBA - 202.1	Understand the concepts and process of Business research.
MBA - 202.2	Formulate research problem and develop an understanding of various major research designs.
MBA - 202.3	Determine various data sources and to design data collection tools.
MBA - 202.4	Develop understanding of data collection field work and analyse data using various techniques. To apprehend various software used for data analysis and presentation of research results.

**MBA – 203: Production and Operations Management**

<b>COs</b>	After completing this course, the students will be able to:
MBA - 203.1	Understand the fundamentals of production and get an insight on prominent production systems.
MBA - 203.2	Comprehend factors governing plant location and layout and understand basics of inventory management.
MBA - 203.3	Get an awareness of concepts of production forecasting, planning and control.
MBA - 203.4	Gain an in-depth knowledge of the concepts of work and time study as well as to gain insights on the concept of quality management.

**MBA – 204: Marketing Management**

Cos	After completing this course, the students will be able to:
MBA - 204.1	Understand the dynamics of a prominent functional area of management viz. Marketing.
MBA - 204.2	Comprehend the issues and challenges involved in framing marketing policies.
MBA - 204.3	Derive how the companies get an edge over their competitors through innovative marketing practices.
MBA - 204.4	Get insights on the emerging trends in the field of marketing.

**MBA – 205: Corporate Finance**

Cos	After completing this course, the students will be able to:
MBA – 205.1	Familiarize with the principles and techniques of corporate finance.
MBA - 205.2	Develop and sharpen analytical abilities for financial decision making.
MBA - 205.3	Extrapolate how companies make financial decisions.
MBA - 205.4	Understand financial modelling framework.

**MBA – 206: Human Resource Management**

Cos	After completing this course, the students will be able to:
MBA - 206.1	Understand the evolution, fundamental concepts and functions of HRM in a dynamic business environment.
MBA - 206.2	Understand the interlinkages among the pivotal functions concerning procurement of human resources viz. human resource policy, human resource planning, recruitment, selection, induction and socialisation.
MBA - 206.3	Get the knowledge of different aspects concerning work motivation, training and development, performance management and compensation management in an organization.
MBA - 206.4	Gain knowledge of emerging HR issues concerning employee engagement, unions and their role in management of industrial relations and grievance management.

**MBA – 207: Legal Environment**

COs	After completing this course, the students will be able to:
MBA - 207.1	Get knowledge on basic legal concepts and the Indian legal environment in which business operates.
MBA - 207.2	Understand the various different Indian contracts, role of agency and various acts used while entering into any type of contract.
MBA - 207.3	Understand the functioning of numerous negotiable instruments.
MBA - 207.4	Understand the major provisions of the sale of goods act, consumer protection act and IPRs.

**MBA – 208: Comprehensive Viva-Voce**

COs	After completing this course, the students will be able to:
MBA – 208.1	Analyze their SWOT for further studies. Through guidance from / detailed discussion with the examiner during comprehensive viva voce, it becomes easier for the students to decide about their specialization area to be taken in further semesters.

**SEMESTER-III**

Paper Code	Title of Course	Total Marks	Ext. Marks	Int. Marks	Hrs	Credits
MBA -301	Corporate Strategy	100	70	30	5	4
MBA -302	Indian Ethos and Business Ethics	100	70	30	5	4
MBA -303	Summer Internship/Field Work	100	50	50	-	4
	<b>Elective papers four From Major and two from Minor specialization area</b>					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective -I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
OE-II	Open Elective-II	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>950</b>	<b>-</b>	<b>-</b>		<b>38</b>

**MBA – 301: Corporate Strategy**

COs	After completing this course, the students will be able to:
MBA – 301.1	Get awareness about the way strategic thinking shapes the organization.
MBA – 301.2	Get grooming to adopt strategic thinking from organization’s perspective.
MBA – 301.3	Understand various tools and techniques governing corporate strategy.
MBA – 301.4	Comprehend strategic outlook governing corporate sector.

**MBA – 302: Indian Ethos and Business Ethics**

COs	After completing this course, the students will be able to:
MBA – 302.1	Understand basic concepts of Indian Ethos and Business Ethics.
MBA – 302.2	Embrace value system in decision making.
MBA – 302.3	Know the role of Indian Wisdom for managers.
MBA – 302.4	Recognize organizational challenges to ethical behavior and ethical dilemma resolution process.

**MBA – 303: Summer Internship/Field Work**

COs	After completing this course, the students will be able to:
MBA – 303.1	Get the familiarity of the organization culture.
MBA – 303.2	Get the practical exposure of business environment and working of an organization.
MBA – 303.3	Learn how the theoretical concepts are implemented in real life business situations.
MBA – 303.4	Polish their soft skills and personality traits.

**SEMESTER-IV**

Paper Code	Title of Course	Total Marks	Ext. Marks	Int. Marks	Hrs	Credits
MBA -401	Entrepreneurship	100	70	30	5	4
MBA -402	Corporate Social Responsibility and Sustainability	100	70	30	5	4
MBA -403	Research Report and Comprehensive Viva-Voce	100	50 Marks for Research Report and 50 Marks for Viva-Voce		5	4 (2+2)
	<b>Elective papers four From Major and two from Minor specialization area</b>					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective –I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
	<b>Grand Total</b>	<b>3400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>136</b>

**MBA – 401: Entrepreneurship**

COs	After completing this course, the students will be able to:
MBA-401.1	Become aware and assess entrepreneurial opportunities available for an entrepreneur.
MBA-401.2	Develop and cultivate endurance, create value and mobilize people and resources.
MBA-401.3	Create and design business plan in order to setup their venture in future.
MBA-401.4	Get an overview regarding the schemes and support provided by government.

**MBA – 402: Corporate Social Responsibility and Sustainability**

COs	After completing this course, the students will be able to:
MBA-402.1	Appreciate and understand role of CSR in corporate settings.
MBA-402.2	Understand the scope and complexity of corporate social responsibility.
MBA-402.3	Develop knowledge about corporate governance, business failure and innovative practices for future governance.
MBA-402.4	Frame sustainable corporate strategies.

**MBA – 403: Research Report and Comprehensive Viva-Voce**

COs	After completing this course, the students will be able to:
MBA-403.1	Develop the understanding of various research designs.
MBA-403.2	Design the blueprint of the research methodology.
MBA-403.3	Apply the tools and techniques to extract the research findings.
MBA-403.4	Extract and present the managerial implications on the basis of research findings.

**Specialisation-A:  
FINANCE**

**Semester-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
FM-301	Quantitative Analysis for Financial Decision Making	100	70	30	5	4
FM-302	Foreign Exchange Management	100	70	30	5	4
FM-303	Derivatives Trading in India	100	70	30	5	4
FM-304	Banking and Financial Services	100	70	30	5	4
FM-305	Corporate Restructuring & Control	100	70	30	5	4
FM-306	Security Analysis	100	70	30	5	4
<b>Semester-IV</b>						
FM-401	Financial Engineering	100	70	30	5	4
FM-402	Project Planning and Management	100	70	30	5	4
FM-403	Behavioral Finance	100	70	30	5	4
FM-404	Portfolio Management	100	70	30	5	4
FM-405	Insurance and Risk Management	100	70	30	5	4
FM-406	Private Equity and Wealth Management	100	70	30	5	4

**FM – 301: Quantitative Analysis for Financial Decision Making**

COs	After completing this course, the students will be able to:
FM-301.1	Acquaint with the quantitative finance nudges to understand volatilities.
FM-301.2	Ascertain profit probabilities in volatile markets. Understand financial forecasting and develop financial plans.
FM-301.3	Understand financial forecasting and develop financial plans amidst volatilities.
FM-301.4	Develop inquisitive way of thinking in finance space.

**FM – 302: Foreign Exchange Management**

COs	After completing this course, the students will be able to:
FM-302.1	Understand the foreign exchange trade dealings and settlements including exchange rate determination and risk management.
FM-302.2	Gain understanding of the basic concepts and principles of international financial flows.
FM-302.3	Brace up with risk management techniques to hedge foreign exchange risk.
FM-302.4	Develop an understanding of foreign exchange management practices in India.

**FM – 303: Derivatives Trading in India**

COs	After completing this course, the students will be able to:
FM-303.1	Have a fair understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management.
FM-303.2	Understand the use of mathematical models on financial instruments and knowledge of innovative tools in terms of financial derivatives.
FM-303.3	Understand the pricing of the options, futures and swaps using theoretical models.
FM-303.4	Understand the mechanism of derivative trading to devise profit earning trading strategies.

**FM – 304: Banking and Financial Services**

COs	After completing this course, the students will be able to:
FM-304.1	Understand the theoretical and professional disciplines of banking, finance, and the Indian financial ecosystem.
FM-304.2	Understand the dynamic policy changes of the banking industry including the fintech.
FM-304.3	Have a practical understanding of the various distribution channels of financial and insurance products for effective marketing.
FM-304.4	Have a practical understanding of regulatory and compliance mechanisms in the financial services industry.

**FM – 305: Corporate Restructuring & Control**

COs	After completing this course, the students will be able to:
FM-305.1	Understand the reasons to acquire, choice of target and recognition of the anticipated challenges, risks and pitfalls of the approach of corporate organic/inorganic growth
FM-305.2	Have an understanding of value creation through corporate restructuring.
FM-305.3	Understand the strategic considerations and external pressures, risks and challenges in the corporate restructuring
FM-305.4	Practice case studies to analyze valuation strategies, pre and post merger issues and challenges.

**FM – 306: Security Analysis**

COs	After completing this course, the students will be able to:
FM-306.1	Get Acquaintance of the Indian securities market and its constituents and operations.
FM-306.2	Analyze and identify securities for investment and trading in Indian markets.
FM-306.3	Understand, Analyze and apply valuation models to securities price forecasting
FM-306.4	Evaluate the intrinsic value of financial asset and analyzing the factors that influence its price in the future.

**FM – 401: Financial Engineering**

COs	After completing this course, the students will be able to:
FM-401.1	Identify and apply the appropriate techniques (tools) to real financial engineering opportunities for value creation.
FM-401.2	Articulate innovative solutions to financial problems with particular emphasis on understanding new risks in volatile financial markets business firms.
FM-401.3	Focus on finding optimal and outbox solutions to financial problems in broader and challenging environments.
FM-401.4	Understand and analyze underlying risk and incidental value opportunities in traditional, hybrid and innovative financial instruments.

**FM – 402: Project Planning and Management**

COs	After completing this course, the students will be able to:
FM-402.1	Understand the concepts of project management for planning to execution of projects.
FM-402.2	Comprehend the fundamentals of contract acquisition, administration, costing and the budgeting.
FM-402.3	Understand the feasibility analysis of project management and network analysis tools for cost and time estimation.
FM-402.4	Make them capable to analyze, apply and appreciate contemporary project management tools and methodologies in Indian context.

**FM – 403: Behavioral Finance**

COs	After completing this course, the students will be able to:
FM-403.1	Have theoretical and practical understanding of behavioral finance.
FM-403.2	Understand how cognitive disposition affects the financial decision-making of investors, portfolio managers, and firms, and how this results in market anomalies.
FM-403.3	Develop prudent and productive disposition wisely and effectively for financial decision making.
FM-403.4	Understand behavioral biases and psychological characteristics of investors affecting investment decisions.

**FM – 404: Portfolio Management**

COs	After completing this course, the students will be able to:
FM-404.1	Have a theoretical and practical understanding of the portfolio approach to investments.
FM-404.2	Understand the valuing equity and debt instruments methodology.
FM-404.3	Measure and evaluate the portfolio performances.
FM-404.4	Design and manage bond as well as equity portfolios for value generation.

**FM – 405: Insurance and Risk Management**

COs	After completing this course, the students will be able to:
FM-405.1	Understand insurance risk metrics for risk hedging.
FM-405.2	Understand dynamics of insurance contracts and provisions as the features of property-liability insurance, life and health insurance.
FM-405.3	Develop analytical skills for assessing insurance product cost and pricing, marketing, and distribution.
FM-405.4	Understand risk management in volatile ecosystem and environment for risk hedging and value generation.

**FM – 406: Private Equity and Wealth Management**

COs	After completing this course, the students will be able to:
FM-406.1	Understand the mechanism and underpinning of wealth creation.
FM-406.2	Develop company valuation methodologies in the venture capital and private equity settings.
FM-406.3	Identify alternative sources of finance and their wealth generation potential.
FM-406.4	Understand the economics of private equity and wealth management.

**Specialisation-B:**

<b>MARKETING</b>						
<b>Semester-III</b>						
<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MM-301</b>	Advertising Management	100	70	30	5	4
<b>MM-302</b>	Marketing Research and Analytics	100	70	30	5	4
<b>MM-303</b>	Sales and Logistics Management	100	70	30	5	4
<b>MM-304</b>	Consumer Behaviour	100	70	30	5	4
<b>MM-305</b>	Strategic Brand Management	100	70	30	5	4
<b>MM-306</b>	Digital and Social Media Marketing	100	70	30	5	4
<b>Semester-IV</b>						
<b>MM-401</b>	International Marketing	100	70	30	5	4
<b>MM-402</b>	Business Marketing	100	70	30	5	4
<b>MM-403</b>	Service Marketing	100	70	30	5	4
<b>MM-404</b>	Strategic Marketing	100	70	30	5	4
<b>MM-405</b>	Rural and Agribusiness Marketing	100	70	30	5	4
<b>MM-406</b>	Retail and Mall Management	100	70	30	5	4

**MM – 301: Advertising Management**

COs	After completing this course, the students will be able to:
MM - 301.1	Comprehend the significance of advertising in acquiring and retaining customers.
MM - 301.2	Learn the techniques and processes involved in the dynamic area of advertising.
MM - 301.3	Devise an advertising plan that give a kickstart to the company in attaining its broad marketing objectives.
MM - 301.4	Learn newer and would be future activities reshaping the field of advertising.

**MM – 302: Marketing Research and Analytics**

COs	After completing this course, the students will be able to:
MM - 302.1	Get insights on research activities in the marketing ecosystem.
MM - 302.2	Devise a detailed marketing plan concerning any marketing situation faced by the company.
MM - 302.3	Get in-depth knowledge of tools and techniques involved in marketing research.
MM - 302.4	Get inputs on tremendous scope of Analytics in the field of marketing.

**MM – 303: Sales and Logistics Management**

COs	After completing this course, the students will be able to:
MM - 303.1	Get insights on Sales Function of an Organisation.
MM - 303.2	Learn managing salesforce to the advantage of the organisation.
MM - 303.3	Gain knowledge concerning logistics and supply chain ecosystem of an enterprise.
MM - 303.4	Comprehend present and forecast future of an extremely important area of sales and logistics management.

**MM – 304: Consumer Behaviour**

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COs	After completing this course, the students will be able to:
MM - 304.1	Get insight on behaviour of consumers so as to make organisations serve them better.
MM - 304.2	Understand the dynamics of consumer decision making.
MM - 304.3	Know various psychological, social, economic and other influences on consumer behaviour.
MM - 304.4	Understand various models that have tried to explain consumer behaviour dynamics.

**MM – 305: Strategic Brand Management**

COs	After completing this course, the students will be able to:
MM - 305.1	Get detailed insights on the field of branding.
MM - 305.2	Learn how to build a brand as a potent weapon in the armoury of the organisation.
MM - 305.3	Understand various terminologies in the gamut of branding.
MM - 305.4	Perceive how a successful brand differs from an unsuccessful one and how total it to success.

**MM – 306: Digital and Social Media Marketing**

COs	After completing this course, the students will be able to:
MM - 306.1	Get a bird’s eye view of newer technologies shaping modern day marketing.
MM - 306.2	Pin-point how the modern day marketers are empowering themselves with digitalization.
MM - 306.3	Throw light on various social media platform available for modern day marketers to showcase themselves.
MM - 306.4	Visualise future of marketing in light of emerging digital and social media platforms.

**MM – 401: International Marketing**

COs	After completing this course, the students will be able to:
MM - 401.1	Understand dynamics involved in marketing beyond the national boundaries.
MM - 401.2	Gain useful insights to indulge in global marketing.
MM - 401.3	Comprehend changed orientation of marketing in global arena viz-a-viz marketing within domestic boundaries.
MM - 401.4	Well understand the mantra of Think Global, Act Local.

**MM – 402: Business Marketing**

COs	After completing this course, the students will be able to:
MM - 402.1	Chalk out differences between consumer and business marketing.
MM - 402.2	Learn a different orientation desired for being a business marketer.
MM - 402.3	Learn dynamics of business to business marketing in competitive ecosystem.
MM - 402.4	Understand marketing mix as it is applicable to business marketing.

**MM – 403: Service Marketing**

COs	After completing this course, the students will be able to:
MM - 403.1	Get insights on service marketing ecosystem.
MM - 403.2	Pin-point different orientation required in marketing of services viz-a-viz marketing of goods.
MM - 403.3	Convey challenges involved in the marketing of services and ways to overcome these through dynamism.
MM - 403.4	Understand best ways to measure service quality.

**MM – 404: Strategic Marketing**

COs	After completing this course, the students will be able to:
MM - 404.1	Pin-point the relevance of keeping a strategic outlook for the functional area of marketing.
MM - 404.2	Understand how strategic marketing is oriented differently to basic marketing.
MM - 404.3	Grasp various terminologies, tools and techniques involved in strategic marketing.
MM - 404.4	Make it out as to how to gain sustainable competitive advantage through marketing strategically.

**MM – 405: Rural and Agribusiness Marketing**

COs	After completing this course, the students will be able to:
MM - 405.1	Understand rural marketing ecosystem.
MM - 405.2	Understand Agribusiness marketing ecosystem.
MM - 405.3	Grasp as to how to explore rural market potential of India through innovative marketing.
MM - 405.4	Grasp as to how to explore agribusiness potential of India through innovative marketing.

**MM – 406: Retail and Mall Management**

COs	After completing this course, the students will be able to:
MM - 406.1	Understand Retail marketing ecosystem of India.
MM - 406.2	Understand mall ecosystem and its management in India.
MM - 406.3	Foresee potential of retail and mall management in India.
MM - 406.4	Identify key success factors involved in retail and mall management.

**Specialisation- C:  
HRM**

**Semester-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>HRM-301</b>	HRD: Systems & Strategies	100	70	30	5	4
<b>HRM-302</b>	Indian Labour Legislation	100	70	30	5	4
<b>HRM-303</b>	Management of Industrial Relations	100	70	30	5	4
<b>HRM-304</b>	Human Resource Metrics and Analytics	100	70	30	5	4
<b>HRM-305</b>	Compensation and Reward Management	100	70	30	5	4
<b>HRM-306</b>	Talent Acquisition and Performance Management	100	70	30	5	4

**Semester-IV**

<b>HRM-401</b>	Group Dynamics and Leadership Excellence	100	70	30	5	4
<b>HRM-402</b>	Strategic Human Resource Management	100	70	30	5	4
<b>HRM-403</b>	Cross Cultural and Global HRM	100	70	30	5	4
<b>HRM-404</b>	Counselling, Mentoring and Negotiation Skills	100	70	30	5	4
<b>HRM-405</b>	Change Management & Organisational Development	100	70	30	5	4
<b>HRM-406</b>	Competency Mapping & Assessment Centres	100	70	30	5	4

**HRM – 301: HRD: Systems & Strategies**

COs	After completing this course, the students will be able to:
HRM - 301.1	Sensitizing towards developing employees for achieving personal and organizational goals.
HRM - 301.2	Understand the HRD Frameworks, HRD Subsystems and Designing of HRD systems.
HRM - 301.3	Explain the importance, typologies and process of developing HRD Strategies.
HRM - 301.4	Review HRD Practices in Indian Organisations .

**HRM – 302: Indian Labour Legislation**

COs	After completing this course, the students will be able to:
HRM - 302.1	Understand the need, importance and fundamental principles of labour legislation in India.
HRM - 302.2	Understand legal provisions of Regulative and Protective Labour Legislations.
HRM - 302.3	Develop an understanding of social security laws.
HRM - 302.4	Acquaint with Wage related legislations.

**HRM – 303: Management of Industrial Relations**

COs	After completing this course, the students will be able to:
HRM - 303.1	Understand the facets of the interactions between employers and employees. To be conversant with various emerging trends in industrial relations.
HRM - 303.2	Acquaint with various Employer organisation's origin, growth and structures.
HRM - 303.3	Understand the characteristics, roles and relevance of trade unions.
HRM - 303.4	Comprehend several forms and causes of industrial disputes and to understand the legal framework for dispute resolution.

**HRM – 304: Human Resource Metrics and Analytics**

COs	After completing this course, the students will be able to:
HRM - 304.1	Develop an understanding of the concept of HR Analytics, HR Metrics, HR Scorecard, and HR Benchmarking.
HRM - 304.2	Acquaint with various applications of HR Analytics in business decisions.
HRM - 304.3	Explain the various HR analytical frameworks, HR Models, HR Data and its governance.
HRM - 304.4	Describe the usage of predictive analytical techniques in HR decision optimisations.

**HRM – 305: Compensation and Reward Management**

COs	After completing this course, the students will be able to:
HRM - 305.1	Promote understanding of issues related to the compensation or rewarding human resources in the corporate sector both in India as well as across the globe.
HRM - 305.2	Impart skills in designing, analysing and restructuring reward management systems, policies and strategies.
HRM - 305.3	Understand the incentive schemes and plans, fringe benefits, pensions schemes and ESOPs.
HRM - 305.4	Understand the managerial implications of various compensation related labour laws.

**HRM – 306: Talent Acquisition and Performance Management**

COs	After completing this course, the students will be able to:
HRM - 306.1	Understand the talent management process, talent management systems, and challenges in developing and retaining talent.
HRM - 306.2	Provide a comprehensive conceptual and practical insight to the entire cycle of performance appraisal and management including the ethical issues.
HRM - 306.3	Describe the concept of potential appraisal, its determinants and steps in process.
HRM - 306.4	Explain the methods of performance appraisal, and comprehend the performance related problems.

**HRM – 401: Group Dynamics and Leadership Excellence**

COs	After completing this course, the students will be able to:
HRM - 401.1	Understand the dynamics of work groups in business entities.
HRM - 401.2	Understand the group dynamics such as Group Cohesiveness, Group Think, and Group conformity etc.
HRM - 401.3	Acquaint themselves with Team Dynamics, stages of team building and behavioural dynamics associated with teams at work.
HRM - 401.4	Understand various leadership styles, and determinants of effective leadership.

**HRM – 402: Strategic Human Resource Management**

COs	After completing this course, the students will be able to:
HRM - 402.1	Understand the conceptual frameworks, models, approaches associated with strategic HR.
HRM - 402.2	Explain the strategic role of HR in modern technology centric organisations.
HRM - 402.3	Describe the types, process of HR Strategy formulation and its implementation.
HRM - 402.4	Understand the dynamics of specific HR strategies, and contemporary issues in HR.

**HRM – 403: Cross Cultural and Global HRM**

COs	After completing this course, the students will be able to:
HRM - 403.1	Acquaint themselves with human and cultural variables in global organisations.
HRM - 403.2	Understand the phenomenon of cultural diversity, ways and mechanisms to manage cultural diversity.
HRM - 403.3	Recognise the HR challenges in global organisations.
HRM - 403.4	Explain the role of ILO in regulating International labour standards.

**HRM – 404: Counselling, Mentoring and Negotiation Skills**

COs	After completing this course, the students will be able to:
HRM - 404.1	Understand nuances of counselling, mentoring and negotiating skill in effective implementation and functioning of HR systems and strategies.
HRM - 404.2	Understand the concept and types of counselling, ethical issues and code of conducts in counselling.
HRM - 404.3	Understand key strategies, tactics and best practices of negotiation.
HRM - 404.4	Recognise the stages of mentoring relationships.

**HRM – 405: Change Management & Organisational Development**

COs	After completing this course, the students will be able to:
HRM - 405.1	Understand the concepts of Organisational Change, types, resistance to changes and overcoming resistance.
HRM - 405.2	Explain the various models of organisational change.
HRM - 405.3	Describe the concept of Organisational Development, its process, foundations, values assumptions and organisational ethos.
HRM - 405.4	Understand the various OD Interventions and their major types.

<b>HRM – 406: Competency Mapping &amp; Assessment Centres</b>	
COs	After completing this course, the students will be able to:
HRM - 406.1	Explain the major concepts associated with Competency, its types, categories and their relevance in modern organisations.
HRM - 406.2	Understand the frameworks of competency mapping, approaches and process.
HRM - 406.3	Understand the competency modelling and assessment process.
HRM - 406.4	Explain the various applications of Competency based HRM applications.

**Specialisation-D:  
INTERNATIONAL BUSINESS**

**Semester-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>IB-301</b>	International Accounting	100	70	30	5	4
<b>IB-302</b>	Foreign Exchange Management	100	70	30	5	4
<b>IB-303</b>	Export-Import Procedures and Documentation	100	70	30	5	4
<b>IB-304</b>	India's Foreign Trade and Policy	100	70	30	5	4
<b>IB-305</b>	International Business Environment	100	70	30	5	4
<b>IB-306</b>	International Logistics	100	70	30	5	4

**Semester-IV**

<b>IB-401</b>	International Financial Markets	100	70	30	5	4
<b>IB-402</b>	International Marketing	100	70	30	5	4
<b>IB-403</b>	International Financial Management	100	70	30	5	4
<b>IB-404</b>	International Strategic Management	100	70	30	5	4
<b>IB-405</b>	Cross-cultural and Global Management	100	70	30	5	4
<b>IB-406</b>	Regional Economic Blocks	100	70	30	5	4

**IB – 301: International Accounting**

COs	After completing this course, the students will be able to:
IB - 301.1	Understand the concept of international accounting and role of various accounting institutions involved in developing accounting standards at national and international level.
IB - 301.2	Learn the framework for presentation of accounting information including first time adoption of IFRS.
IB - 301.3	Harmonize domestic and international accounting information reporting.
IB - 301.4	Understand the concept and methods of transfer pricing.

**IB – 302: Foreign Exchange Management**

COs	After completing this course, the students will be able to:
IB - 302.1	Understand the fundamentals of foreign exchange management, parties involved in FOREX market.
IB - 302.2	Acquaint theories and practice of exchange rate determination and exchange rate management systems.
IB - 302.3	Understand the currency derivatives, types and functioning of these derivatives.
IB - 302.4	Develop the understanding of currency risk and exposure and parameters and constraints of exposure management.

**IB – 303: Export-Import Procedures and Documentation**

COs	After completing this course, the students will be able to:
IB - 303.1	Understand the trade procedure, documentation and ITC (HS) classification system. To learn the role of ICC, INCOTERMS.
IB - 303.2	Understand the usage of main types of documents in smooth conduct of international trade.
IB - 303.3	Learn different methods of making payment in international trade and pre-shipment and post-shipment finance options.

IB - 303.4	Understand the importance of export promotion, schemes, legal aspects and the institutions involved in the promotion.
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**IB – 304: India’s Foreign Trade and Policy**

COs	After completing this course, the students will be able to:
IB - 304.1	Understand the status, composition and trends of India’s foreign trade.
IB - 304.2	Know the foreign trade policies and institutional support for foreign trade.
IB - 304.3	Understand the role of EXIM bank of India and ECGC in foreign trade.
IB - 304.4	Understand the impact of WTO on India’s trade policy.

**IB – 305: International Business Environment**

COs	After completing this course, the students will be able to:
IB - 305.1	Understand the concept of various constituents of international business environment and their impact on business.
IB - 305.2	Know different theories related to international business environment and their impact on economic welfare.
IB - 305.3	Thoroughly understand the role of international economic institutions like UNCTAD, IMF and world bank in regulating business.
IB - 305.4	Know the evolution and working of regional economic corporations in expansion of international business.

**IB – 306: International Logistics**

COs	After completing this course, the students will be able to:
IB - 306.1	Develop an understanding of the key concepts applied in global logistics and supply chain management.
IB - 306.2	Elucidate the use of IT, inventory management systems, to improve the efficiency of supply chain management.
IB - 306.3	Learn about shipping, multimodal transportation and CONCOR and role of intermediaries in international logistics system.
IB - 306.4	Understand the inventory controls methods and logistics cost calculation methods.

**IB – 401: International Financial Markets**

COs	After completing this course, the students will be able to:
IB - 401.1	Understand the conceptual framework of international financial system.
IB - 401.2	Understand the main instruments of regulation of currency and credit relations.
IB - 401.3	Know the role, functions, issues and challenges of international financial institutions.
IB - 401.4	Understand the currency market for lending and investment and to understand the global market for hedging, arbitrage and speculations.

**IB – 402: International Marketing**

COs	After completing this course, the students will be able to:
IB - 402.1	Understand the benefits, reasons and motivations underlying International Marketing.
IB - 402.2	Understand international PESTLE environment and adapt the marketing strategies to suit them.
IB - 402.3	Thoroughly understand the international product policy and the various qualitative and quantitative factors used in the assessment of global opportunities.
IB - 402.4	Know the distribution network, methods and strategies of price setting and promotion in overseas markets.

**IB – 403: International Financial Management**

COs	After completing this course, the students will be able to:
IB - 403.1	Understand international capital and foreign exchange market.
IB - 403.2	Understand foreign direct investment and international acquisition opportunities.
IB - 403.3	Identify political risk and exchange rate fluctuations and develop strategies to deal with it.
IB - 403.4	Know the international taxation and financing foreign trade.

**IB – 404: International Strategic Management**

COs	After completing this course, the students will be able to:
IB - 404.1	Get the knowledge of international strategic management process and develop analytical ability to make environmental and organizational appraisal.
IB - 404.2	Understand various levels of strategy along-with alternatives available for entering into foreign market.
IB - 404.3	Learn the approaches to strategic formulation and strategic choice making process.
IB - 404.4	Understand the various issues and decisions involved in strategy implementation along-with the process and techniques of strategic evaluation and control.

**IB – 405: Cross-cultural and Global Management**

COs	After completing this course, the students will be able to:
IB - 405.1	Understand the major peculiarities of cross-cultural management process and development of skills based on cross-cultural differences.
IB - 405.2	Understand differences in cross cultural leadership styles and adaptability to cultural contexts.
IB - 405.3	Understand the effective managerial process of human resource in a global context.
IB - 405.4	Know the cultural intelligence, ethical issues in global business and Western and Eastern management thoughts.

**IB – 406: Regional Economic Blocks**

COs	After completing this course, the students will be able to:
IB - 406.1	Understand the levels of regional economic integration and endogenous growth.
IB - 406.2	Assess the working of selected regional blocks such as EU, NAFTA, ASEAN, SAARC.
IB - 406.3	Understand the reasons for formation and functioning of economic blocks and their role in promoting regional trade.
IB – 406.4	Explore new and ongoing issues and challenges related to regional economic integration.

**Specialisation – E:  
INFORMATION TECHNOLOGY  
SEMESTER-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>IT-301</b>	Business Intelligence and Analytics	100	70	30	5	4
<b>IT-302</b>	Enterprise Resource Planning	100	70	30	5	4
<b>IT-303</b>	Relational Database Management System	100	70	30	5	4
<b>IT-304</b>	E-Customer Relationship Management	100	70	30	5	4
<b>IT-305</b>	System Analysis and Design	100	70	30	5	4
<b>IT-306</b>	Knowledge Management Systems	100	70	30	5	4
<b>SEMESTER-IV</b>						
<b>IT-401</b>	Data Mining for Business Decisions	100	70	30	5	4
<b>IT-402</b>	Software Engineering	100	70	30	5	4
<b>IT-403</b>	E-Business Financial Modeling	100	70	30	5	4
<b>IT-404</b>	Internet and Web Designing	100	70	30	5	4
<b>IT-405</b>	E-Commerce	100	70	30	5	4
<b>IT-406</b>	Information Security and Cyber Laws	100	70	30	5	4

**IT – 301: Business Intelligence and Analytics**

COs	After completing this course, the students will be able to:
IT - 301.1	Identify, design models and solve decision problems in different work settings.
IT - 301.2	Enable all participants to recognize, understand and apply the language, theory and models of the field of business analytics.
IT - 301.3	Statistically analyze data and convert it into a presentable form.
IT - 301.4	Work with Business Intelligence tools.

**IT – 302: Enterprise Resource Planning**

COs	After completing this course, the students will be able to:
IT – 302.1	Describe basic concepts of ERP systems for manufacturing or service companies.
IT – 302.2	Make basic use of Enterprise software and its role in integrating business functions.
IT – 302.3	Understand and be able to articulate the life cycle stages of any ERP implementation.
IT – 302.4	Understand ERP modules in plant management, finance, quality and inventory management.

**IT – 303: Relational Database Management System**

COs	After completing this course, the students will be able to:
IT – 303.1	Understand database architecture and models.
IT – 303.2	Analyze and Select storage and recovery techniques of the database system.
IT – 303.3	Work with Sequential query languages.
IT – 303.4	Analyze and design a real database application.

**IT – 304: E-Customer Relationship Management**

COs	After completing this course, the students will be able to:
IT – 304.1	Apply the concept of CRM, the benefits delivered by CRM, the contexts in which it is used, the technologies that are deployed and how it can be implemented.
IT – 304.2	Disseminate knowledge regarding the concept of e-CRM and e-CRM technologies.
IT – 304.3	Learn basics of analytical Customer relationship management.
IT – 304.4	Understand basics of operational Customer relationship management.

**IT – 305: System Analysis and Design**

COs	After completing this course, the students will be able to:
IT – 305.1	Understand the business system concepts and methodologies.
IT – 305.2	Understand the system design concept.
IT – 305.3	Evaluate & Summarize the project and people performance while exploiting project management concepts.
IT – 305.4	Understand the software development planning process.

**IT – 306: Knowledge Management Systems**

COs	After completing this course, the students will be able to:
IT – 306.1	Describe how valuable individual, group and organizational knowledge is managed throughout the knowledge management cycle.
IT – 306.2	Understanding concepts and methods to create knowledge base.
IT – 306.3	Apply knowledge management models and technologies to business situations.
IT – 306.4	Managing the quality with the help of different tools and techniques.

**IT – 401: Data Mining for Business Decisions**

COs	After completing this course, the students will be able to:
IT – 401.1	Understand data mining concept and their application.
IT – 401.2	Design and deployment of Database.
IT – 401.3	Perform Data cleaning, data reduction operations.
IT – 401.4	Learn the decision-making constituencies in a business with the help of Data Mining.

**IT – 402: Software Engineering**

COs	After completing this course, the students will be able to:
IT – 402.1	Understand software development process and software model.
IT – 402.2	Estimating coding and non-coding tasks.
IT – 402.3	Identify the real problem for different categories of software.
IT – 402.4	Understanding Software testing procedures and identifying software quality.

**IT – 403: E-Business Financial Modeling**

COs	After completing this course, the students will be able to:
IT – 403.1	Understand the relevance of financial models for various corporate finance purposes.
IT – 403.2	Build financial models for various finance applications.
IT – 403.3	Solve basic corporate finance problems in Excel.
IT – 403.4	Understand valuation and its techniques.

**IT – 404: Internet and Web Designing**

COs	After completing this course, the students will be able to:
IT – 404.1	Understand Internet and websites working.
IT – 404.2	Use web publishing technologies with the help of various tools.
IT – 404.3	Make web pages in HTML.
IT – 404.4	Setup and work with PHP, PERL and JAVA.

**IT – 405: E-Commerce**

COs	After completing this course, the students will be able to:
IT – 405.1	Understand E-commerce and its technological aspects
IT – 405.2	Perform customer-oriented analysis.
IT – 405.3	Understand concepts of electronic payment systems and order fulfilment.
IT – 405.4	Regulator environment of E-Commerce.

**IT – 406: Information Security and Cyber Laws**

COs	After completing this course, the students will be able to:
IT – 406.1	Understand the concept of security in cyberspace.
IT – 406.2	Understand various security methods such as authentication cryptography, intrusion and malware detection etc.
IT – 406.3	Understand Government rules and regulations in cyberspace and the protection of the cyber consumer.
IT – 406.4	Understand cybersquatting, copyright protection and e-commerce taxation.

<b>Specialisation- F:</b>						
<b>PRODUCTION AND OPERATIONS MANAGEMENT</b>						
<b>SEMESTER-III</b>						
<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
POM-301	Purchasing and Materials Management	100	70	30	5	4
POM-302	Total Quality Management	100	70	30	5	4
POM-303	Production Planning and Control	100	70	30	5	4
POM-304	Logistics Management	100	70	30	5	4
POM-305	Service Operations Management	100	70	30	5	4
POM-306	Technology Acquisition and Diffusion	100	70	30	5	4
<b>Semester-IV</b>						
POM-401	Applied Operations Research	100	70	30	5	4
POM-402	Goal Programming in Management	100	70	30	5	4
POM-403	Transportation Management	100	70	30	5	4
POM-404	Technology Forecasting	100	70	30	5	4
POM-405	R&D Management	100	70	30	5	4
POM-406	Programme Management	100	70	30	5	4

<b>POM – 301: Purchasing and Materials Management</b>	
COs	After completing this course, the students will be able to:
POM – 301.1	Identify the scope for integrating materials management functions over the logistics and supply chain operations.
POM – 301.2	Integrate the organization wide materials requirement to develop an overall plan (MRP).
POM – 301.3	Apply various purchasing method and inventory controlling techniques into practice.
POM – 301.4	Analyze the materials in storage, handling, packaging, shipping distributing and standardizing.

<b>POM – 302: Total Quality Management</b>	
COs	After completing this course, the students will be able to:
POM – 302.1	Realize the importance of significance of quality.
POM – 302.2	Manage quality improvement teams.
POM – 302.3	Identify requirements of quality improvement programs.
POM – 302.4	Develop research skills that will allow them to keep abreast of changes in the field of Total Quality Management.

<b>POM – 303: Production Planning and Control</b>	
COs	After completing this course, the students will be able to:
POM – 303.1	Recognize the objectives, functions, applications of PPC and forecasting techniques.
POM – 303.2	Explain different Inventory control techniques.
POM – 303.3	Solve routing and scheduling problems.
POM – 303.4	Describe way of integrating different departments to execute PPC functions.

**POM – 304: Logistics Management**

COs	After completing this course, the students will be able to:
POM – 304.1	Analyze how logistical decisions (e.g., facilities, inventory, and transportation) impact the performance of the firm as well as the entire supply chain.
POM – 304.2	Develop the strategies that can be taken to find the best paths to route vehicles to deliver and collect goods at multiple stops.
POM – 304.3	Know basic characterises and costs of warehousing and materials handling activities.
POM – 304.4	Use computing software to solve various logistics decision-making problems, including inventory policies and vehicle routing.

**POM – 305: Service Operations Management**

COs	After completing this course, the students will be able to:
POM – 305.1	Develop an understanding of the terminology and responsibilities that relate to Service Operations Management.
POM – 305.2	Describe the function of the Service Operations Management discipline in various sectors of the economy through case study.
POM – 305.3	Interpret basic tools and skills used in solving problems traditionally associated with operating the service operations system.
POM – 305.4	Propose solutions with which a service organisation can improve its operations and achieve sustainable competitive advantage.

**POM – 306: Technology Acquisition and Diffusion**

COs	After completing this course, the students will be able to:
POM – 306.1	Understand Indian industrial and technological scenario and trends in industrial R&D, and technological dependence.
POM – 306.2	Understand management of technology absorption and Government initiatives.
POM – 306.3	Understand the need and importance of TA and TE at the enterprise level.
POM – 306.4	Understand the different perspectives on the innovation-diffusion process.

**POM – 401: Applied Operations Research**

COs	After completing this course, the students will be able to:
POM – 401.1	Provide a formal quantitative approach to problem-solving and intuition about situations where such an approach is appropriate.
POM – 401.2	Apply various models in decision-making situations.
POM – 401.3	Understand Nonlinear optimization techniques.
POM – 401.4	Develop replacement and reliability models.

**POM – 402: Goal Programming in Management**

COs	After completing this course, the students will be able to:
POM – 402.1	Understand concept method and model formulation of goal programming.
POM – 402.2	Determine the required resources to achieve a desired set of objectives.
POM – 402.3	Determine the degree of attainment of the goals with the available resources.
POM – 402.4	Use application software such as QSB, Micro-Manager and LIGO.

**POM – 403: Transportation Management**

COs	After completing this course, the students will be able to:
POM – 403.1	Understand the dynamic Transportation Management issues that affect basic transportation systems.
POM – 403.2	Know the basic principles, skills, and tools of transportation management.
POM – 403.3	Identify challenges, limitations and future demand.
POM – 403.4	Aware of the motor vehicle act 1985 and its impact on transport system along with Emission norms.

**POM – 404: Technology Forecasting**

COs	After completing this course, the students will be able to:
POM – 404.1	Understand forecasting systems and step-by-step implementation of forecasting procedures.
POM – 404.2	Understand popular forecasting techniques, assumptions, limitations, interpretations, as well as implementations.
POM – 404.3	Understand basic marketing instruments and their use in demand modelling.
POM – 404.4	Understand to quantify the forecast with the help of various forecasting techniques.

**POM – 405: R&D Management**

COs	After completing this course, the students will be able to:
POM – 405.1	Scan the environment and identify emerging technologies.
POM – 405.2	Identify high-value instrument tests and workshops.
POM – 405.3	Develop various policies about Material management, procurement procedure and vendor.
POM – 405.4	Use design tools for manufacturing.

**POM – 406: Programme Management**

COs	After completing this course, the students will be able to:
POM – 406.1	study the feasibility of the program using management concepts and models such as ADA IGMDP etc.
POM – 406.2	Decide project select and project appraisal with the help of analysis techniques.
POM – 406.3	Understand application use of various network models.
POM – 406.4	Identify major projects in various public and private organizations.

<b>Specialisation- G: ENTREPRENEURSHIP DEVELOPMENT</b>						
<b>SEMESTER-III</b>						
<b>ED-301</b>	Fundamentals of Entrepreneurship Development	100	70	30	5	4
<b>ED-302</b>	Creativity and New Venture Creation	100	70	30	5	4
<b>ED-303</b>	Institutional support to Entrepreneur & MSMEs	100	70	30	5	4
<b>ED-304</b>	Family Business Management	100	70	30	5	4
<b>ED-305</b>	Legal Framework for New Age Businesses	100	70	30	5	4
<b>ED-306</b>	Social Entrepreneurship	100	70	30	5	4
<b>SEMESTER-IV</b>						
<b>ED-401</b>	Enterprise Planning, Appraisal and Financing	100	70	30	5	4
<b>ED-402</b>	Financial Innovation and Entrepreneurship	100	70	30	5	4
<b>ED-403</b>	Marketing Management in New Age Businesses	100	70	30	5	4
<b>ED-404</b>	New Enterprises Human Resource Management	100	70	30	5	4
<b>ED-405</b>	MSMEs Policy Framework	100	70	30	5	4
<b>ED-406</b>	Contemporary Environment in MSMEs	100	70	30	5	4

**ED – 301: Fundamentals of Entrepreneurship Development**

COs	After completing this course, the students will be able to:
ED - 301.1	Become aware and assess entrepreneurial opportunities available for an entrepreneur.
ED - 301.2	Develop and cultivate endurance, create value and mobilize people and resources.
ED - 301.3	Create and design business plan in order to setup their venture in future.
ED - 301.4	Get an overview regarding the schemes and support provided by government.

**ED – 302: Creativity and New Venture Creation**

COs	After completing this course, the students will be able to:
ED - 302.1	Get basic understanding regarding the concept of creativity and innovation.
ED - 302.2	Promote idea generation by learning the sources and techniques of ideas.
ED - 302.3	Recognize Opportunity and map idea with opportunity.
ED - 302.4	Get an insight regarding innovative strategies for business creation.

**ED – 303: Institutional support to Entrepreneur & MSMEs**

COs	After completing this course, the students will be able to:
ED - 303.1	Understand the Contribution of MSME Sector in Indian Economy.
ED - 303.2	Understand the institutional support system available to MSME's.
ED - 303.3	Gain an insight regarding support by Commercial and development banks.
ED - 303.4	Role of RBI in institutional support.

**ED – 304: Family Business Management**

COs	After completing this course, the students will be able to:
ED - 304.1	Understand various concepts relating to family business.
ED - 304.2	Role of trust and commitment in family business.
ED - 304.3	Understand the factors contributing to sustainable family businesses.
ED - 304.4	Governance and conduct of family businesses.

**ED – 305: Legal Framework for New Age Businesses**

COs	After completing this course, the students will be able to:
ED - 305.1	Develop an insight regarding legal framework for startup businesses.
ED - 305.2	Know the importance of brands and goodwill generation.
ED - 305.3	Know the importance of IPR for startups.
ED - 305.4	Know about the various compliances for startups.

**ED – 306: Social Entrepreneurship**

COs	After completing this course, the students will be able to:
ED - 306.1	Role of Social Entrepreneurs in the creation of a better society.
ED - 306.2	Distinguish between an Social entrepreneurship, Corporate entrepreneur and philanthropy.
ED - 306.3	Sources of funding for social ventures.
ED - 306.4	Management and sustainability of social enterprises.

**ED – 401: Enterprise Planning, Appraisal and Financing**

COs	After completing this course, the students will be able to:
ED - 401.1	Understand the systematic management of projects starting from identification till completion.
ED - 401.2	Understand the importance of feasibility study in a project.
ED - 401.3	Escalate the skill of students in executing projects.
ED - 401.4	Give know how regarding conflict management in projects.

**ED – 402: Financial Innovation and Entrepreneurship**

COs	After completing this course, the students will be able to:
ED - 402.1	Familiarize the students with financial management concepts for MSME's.
ED - 402.2	Understand the importance of financial planning for startups and established enterprises.
ED - 402.3	Give an insight regarding innovative sources of finance.
ED - 402.4	Understand financial risks in startups and mitigation strategies.

**ED – 403: Marketing Management in New Age Businesses**

COs	After completing this course, the students will be able to:
ED – 403.1	Give Understanding of marketing management in new age business.
ED – 403.2	Understand pricing and revenue management for startups.
ED – 403.3	Understand Promotional techniques for Intangible products.
ED – 403.4	Understand recent trends in new age marketing viz. digital marketing, CRM.

**ED – 404: New Enterprises Human Resource Management**

COs	After completing this course, the students will be able to:
ED – 404.1	Understand the significance of HRD in MSME’s VIZ. Manpower planning, recruitment and selection.
ED – 404.2	Understand the Various laws/compliances/acts governing MSME.
ED – 404.3	Give understanding of the holistic training programs for HR professionals of new age enterprises.
ED – 404.4	Understand the significance of EDP’s for strategic decision makers.

**ED – 405: MSMEs Policy Framework**

Cos	After completing this course, the students will be able to:
ED – 405.1	Give understanding of policy environment for Micro small and medium enterprises.
ED – 405.2	Understand the dynamics of industrial policy with specific reference to MSME’s .
ED – 405.3	Understanding the prevention measures and revival strategies for MSME’s.
ED – 405.4	Understand the tax benefits available to MSME’s.

**ED – 406: Contemporary Environment in MSMEs**

Cos	After completing this course, the students will be able to:
ED – 406.1	Impact of Global business practices for MSME’s.
ED – 406.2	Understand Entrepreneurial entry strategies into international business.
ED – 406.3	Give an understanding regarding opportunities in rural business area.
ED – 406.4	Women entrepreneurship: Challenges, strategies and institutional support.

**Specialisation- H:  
BUSINESS ANALYTICS**

**Semester-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
BA-301	Business Analysis using Excel	100	70	30	5	4
BA-302	Econometrics for Business Forecasting	100	70	30	5	4
BA-303	Business Data Mining	100	70	30	5	4
BA-304	Decision Modeling and Data Analysis	100	70	30	5	4
BA-305	Data Analytics using R	100	70	30	5	4
BA-306	Social Media Analytics	100	70	30	5	4

**Semester-IV**

BA-401	Time Series Data Analysis	100	70	30	5	4
BA-402	Applied Multi Variant Analysis	100	70	30	5	4
BA-403	Financial Modeling	100	70	30	5	4
BA-404	Predictive Analysis for Business Decision	100	70	30	5	4
BA-405	Data Analysis using Python	100	70	30	5	4
BA-406	IOT and Big Data	100	70	30	5	4

**BA – 301: Business Analysis using Excel**

COs	After completing this course, the students will be able to:
BA - 301.1	Turn the Numbers into Better Business Decisions.
BA - 301.2	Know the Professional Tools available for Business Analysts.
BA - 301.3	Learn the Winning Charts for Business Communication.
BA - 301.4	Compare the different Business Scenarios.

**BA – 302: Econometrics for Business Forecasting**

COs	After completing this course, the students will be able to:
BA - 302.1	Know the econometrics available for analysis.
BA - 302.2	Analyze the available trends.
BA - 302.3	Learn the Econometric modeling.
BA - 302.4	Understand the forecasting process through various models.

**BA – 303: Business Data Mining**

COs	After completing this course, the students will be able to:
BA - 303.1	Understand the concept of data warehousing.
BA - 303.2	Learn the process of data mining.
BA - 303.3	Integrate the Data Mining System with a Data Warehouse.
BA - 303.4	Know about the various mining methods.

**BA – 304: Decision Modeling and Data Analysis**

COs	After completing this course, the students will be able to:
BA - 304.1	Analyze the sensitivity for decision making.
BA - 304.2	Know the Value of Information in Decision Trees.
BA - 304.3	Learn the simulation techniques.
BA - 304.4	Learn the Models available for data analysis.

**BA – 305: Data Analytics using R**

COs	After completing this course, the students will be able to:
BA - 305.1	Understand the basics of R.
BA - 305.2	Explore the data in R.
BA - 305.3	perform clustering operation on data.
BA - 305.4	Know the parallel computing with R.

**BA – 306: Social Media Analytics**

COs	After completing this course, the students will be able to:
BA - 306.1	Understand the basics of social media analytics.
BA - 306.2	Know about the information diffusion.
BA - 306.3	Learn the Geospatial social data mining.
BA - 306.4	Predict the future with social media.

**BA – 401: Time Series Data Analysis**

COs	After completing this course, the students will be able to:
BA - 401.1	Understand the Stochastic process.
BA - 401.2	Learn the Autoregressive-moving average models (ARMA).
BA - 401.3	Learn the methodology to identification of stationary time series models.
BA - 401.4	Know about the available forecasting models.

**BA – 402: Applied Multi Variant Analysis**

COs	After completing this course, the students will be able to:
BA - 402.1	Understand the Basic concepts of multivariate distributions.
BA - 402.2	Learn the application of multidimensional scaling.
BA - 402.3	Learn the various types of multivariate models.
BA - 402.4	Understand the applicability of Confirmatory Factor analysis and structural equation modeling.

**BA – 403:Financial Modeling**

COs	After completing this course, the students will be able to:
BA - 403.1	Enhance the skills in Financial Statements Spreadsheet.
BA - 403.2	Perform vertical analysis of financial statements.
BA - 403.3	Use the financial ratios to benchmark a company’s performance against competitors.
BA - 403.4	Adjust the regression models for changes in trends.

**BA – 404: Predictive Analysis for Business Decision**

COs	After completing this course, the students will be able to:
BA - 404.1	Understand the Supervised Learning and Unsupervised Learning.
BA - 404.2	Learn the process of Data Exploration.
BA - 404.3	Learn the Machine Learning Algorithms.
BA - 404.4	Learn the Statistical Graphics for Comparing and Assessing Models Implementing Predictive Models.

**BA – 405:Data Analysis using Python**

COs	After completing this course, the students will be able to:
BA - 405.1	Understand the Basics of Python Programming.
BA - 405.2	Know the functions of python.
BA - 405.3	Learn the Object-oriented Programming.
BA - 405.4	Learn the File Handling in Python.

**BA – 406: IOT and Big Data**

COs	After completing this course, the students will be able to:
BA - 406.1	Understand the Internet Connectivity Principles.
BA - 406.2	Learn the process of Data Acquiring, Organizing and Analytics in IOT.
BA - 406.3	Learn the Prototyping the Embedded Devices for IOT.
BA - 406.4	Know about the various Business Models.

**Specialisation- I:  
AGRI-BUSINESS MANAGEMENT  
SEMESTER-III**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
ABM-301	Agri-Business Management	100	70	30	5	4
ABM-302	Agricultural Economics	100	70	30	5	4
ABM-303	Agricultural Marketing Management	100	70	30	5	4
ABM-304	Agri- Entrepreneurship	100	70	30	5	4
ABM-305	Agri-Business Finance	100	70	30	5	4
<b>SEMESTER-IV</b>						
ABM-401	Changing Paradigm of Agri-Business	100	70	30	5	4
ABM-402	Agri Supply Chain and Logistics Management	100	70	30	5	4
ABM-403	Food Processing Management	100	70	30	5	4
ABM-404	International Trade in Agri-Business	100	70	30	5	4
ABM-405	Marketing of Agri-Inputs	100	70	30	5	4

**ABM – 301: Agri-Business Management**

COs	After completing this course, the students will be able to:
ABM - 301.1	Understand the conceptual framework of agribusiness and opportunities related to agribusiness.
ABM - 301.2	Learn the activities involved in the agribusiness.
ABM - 301.3	Know about the rules and regulations related to agribusiness in India.
ABM - 301.4	Learn the credit financing to agribusiness.

**ABM – 302: Agricultural Economics**

COs	After completing this course, the students will be able to:
ABM - 302.1	Learn the structure and dynamics of Indian Agricultural System.
ABM - 302.2	Know the agricultural policies and reforms in India.
ABM - 302.3	Understand the role of green revolution in development of agriculture in India.
ABM - 302.4	Learn the role of various agencies such as NABARD etc. in agricultural development.

**ABM – 303: Agricultural Marketing Management**

COs	After completing this course, the students will be able to:
ABM - 303.1	Understand the agricultural produce marketing structure.
ABM - 303.2	Know about the marketing mix of agribusiness.
ABM - 303.3	Learn the role of Retail Institutions and Cooperative Agencies in agribusiness marketing in India.
ABM - 303.4	Apply the IT in marketing of agribusiness.

**ABM – 304: Agri- Entrepreneurship**

COs	After completing this course, the students will be able to:
ABM - 304.1	Understand the entrepreneurial opportunities in agribusiness.
ABM - 304.2	Initiate entrepreneurial venture in agribusiness.
ABM - 304.3	Manage the growth of agribusiness by using various measures.
ABM - 304.4	Know the various assistances provided by Govt. to entrepreneur of agribusiness in India.

**ABM – 305: Agri-Business Finance**

COs	After completing this course, the students will be able to:
ABM - 305.1	Understand the financial forecasting and develop financial plans.
ABM - 305.2	Know the financing opportunities available to agribusiness in India.
ABM - 305.3	Learn the specific requirements of financial statements and harmonization of reports.
ABM - 305.4	Learn the capital expenditure and risk analysis for better decision making.

**ABM – 401: Changing Paradigm of Agri-Business**

COs	After completing this course, the students will be able to:
ABM - 401.1	Understand the different models in E-agribusiness.
ABM - 401.2	Learn the various techniques available for agricultural production.
ABM - 401.3	Know the concept of Agro-tourism.
ABM - 401.4	Apply the IT in Agri supply chain management.

**ABM – 402: Agri Supply Chain and Logistics Management**

COs	After completing this course, the students will be able to:
ABM - 402.1	Learn the demand planning and forecasting in agro supply chain.
ABM - 402.2	Know the purchasing cycle, type of purchases and contract/corporate farming.
ABM - 402.3	Understand the logistics management in agribusiness.
ABM - 402.4	Apply the information technology in logistics management.

**ABM – 403: Food Processing Management**

COs	After completing this course, the students will be able to:
ABM - 403.1	Understand the concept of Organization of a food processing unit.
ABM - 403.2	Know the Management of Agro Processing Industry.
ABM - 403.3	Learn the Waste management in food processing.
ABM - 403.4	Learn the different research institutions and corporations involved in food processing sector.

**ABM – 404: International Trade in Agri-Business**

COs	After completing this course, the students will be able to:
ABM - 404.1	Know the scenario of international trade in agricultural commodities in India.
ABM - 404.2	Understand the implications of WTO provisions on Indian Agriculture-reduction commitments for India.
ABM - 404.3	Learn the Indian agricultural trade.
ABM - 404.4	Know the Competitiveness of Indian Agriculture.

**ABM – 405: Marketing of Agri-Inputs**

COs	After completing this course, the students will be able to:
ABM - 405.1	Understand the concept of agricultural input marketing.
ABM - 405.2	Know about the chemical fertilizers available in India.
ABM - 405.3	Learn the various plant protection chemicals.
ABM - 405.4	Know about the availability of farm machineries.

## 5. Mapping:

Mapping is a process of representing the correlation between COs and POs, COs and PSOs in the scale of 1 to 3 as follows (Table 1):

**Table1: Scale of mapping between COs and POs**

Scale	Description
1	If the contents of course have low correlation (i.e. in agreement with the particular PO to a small extent) with the particular Program outcome.
2	If the contents of course have medium correlation ( i.e. in agreement with the particular PO to a reasonable extent) with the particular Program outcome.
3	If the contents of course have strong correlation ( i.e. in agreement with the particular PO to a large extent) with the particular Program outcome.

### 5.1. CO-PO Mapping Matrix:

Table 2 shows the CO-PO mapping matrix for the course:

**Table 2: CO-PO matrix for the MBA 2-Year Program (course- Wise)**  
*(See Annexure-1)*

### 5.2 CO-PSO Mapping Matrix

**Table 3: CO-PSO matrix for the MBA 2-Year Program (course- Wise)**  
*(See Annexure-2)*

### 5.3 CO-PO-PSO Mapping Matrix

The COs-POs and COs-PSOs mapping matrices are prepared from the Tables 2 and 3 above, for all the courses of the MBA 2-Year Program (Course- Wise). These are then combined to prepare a CO-PO-PSO mapping matrix as shown in the Table 4 below:

**Table 4: CO-PO-PSO matrix for the MBA 2-Year Program (course- Wise)**  
*(See Annexure-3)*

## 6. Attainment of COs:

The attainment of COs will be measured on the basis of the results of internal assessment and semester examination. The attainment is measured on scale of 3 after setting the target for COs attainment. Table 5 shows the CO attainment levels with the set target of 55% marks:

**Table 5: CO Attainment Levels for internal assessment**

ATTAINMENT LEVEL	DESCRIPTION
<b>1</b> <b>(Low level of attainment)</b>	50% of students score more than 55% of marks in internal assessment of a course.
<b>2</b> <b>(Medium level of attainment)</b>	60% of students score more than 55% of marks in internal assessment of a course.
<b>3</b> <b>(High level of attainment)</b>	70% of students score more than 55% of marks in internal assessment of a course.

*Note: Internal assessment marks would be based on class tests, assignments and presentations, attendance and class participation.*

For determining the attainment levels for end semester examination, it is assumed that questions in the end term examination are based on all COs of the course. Attainment levels for end semester examination of a course can be determined after the declaration of the results. The CO attainment levels for end semester examination are given in Table 6.

**Table 6 : CO Attainment Levels for End Semester Examination (ESE)**

Attainment Level	DESCRIPTION
<b>1</b> <b>(low level of attainment)</b>	50% of students obtained letter grade of A or above (for CBCS programs) or score more than 55% of marks (for non-CBCS programs) in ESE of a course
<b>2</b> <b>(Medium level of attainment)</b>	60% of students obtained letter grade of A or above (for CBCS programs) or score more than 55% of marks (for non-CBCS programs) in ESE of a course
<b>3</b> <b>(High level of attainment)</b>	70% of students obtained letter grade of A or above (for CBCS programs) or score more than 55% of marks (for non-CBCS programs) in ESE of a course

### **6.1 Overall CO Attainment Level of a Course:**

The overall CO attainment level of a course will be obtained as:

*Overall CO attainment level = 50% of CO attainment level in Internal Assessment + 50% of CO Attainment level in End semester examination.*

The overall COs attainment level will be obtained for all the courses of the program in a similar manner wherever internal assessment is in the course.

## 7. Attainment of POs:

The overall attainment level of POs is based on the values obtained using direct and indirect methods in the ratio of 70:30. The direct attainment of POs is obtained through the attainment of COs. The overall CO attainment value as calculated above and CO-PO mapping value as shown in Table 4 are used to compute the attainment of POs. PO attainment values obtained using direct method can be written as shown in the Table 7.

**Table 7: PO Attainment Values using Direct Method**

For each semester the PO attainment values will be prepared as per the specimen given below:

Example of first semester PO Attainment Values using Direct Method is given below:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4
MBA-101												
MBA-102												
MBA-103												
MBA-104												
MBA-105												
MBA-106												
MBA-107												
MBA-108												
<b>Total</b>												
<b>Direct PO attainment</b> (Average of above values of each PO and PSO)												

### ***Calculation of the PO attainment value:***

#### **A. Under Direct Method:**

The PO attainment values to be filled in above table will be obtained as follows;

For MBA -101-PO1 Cell:

PO1 attainment value = (Mapping factor of MBA-101-PO1 from Table 4 x Overall CO attainment value for the course MBA101)/3

- i. Mapping factor of MBA-101-PO1 from Table 4
- ii. Overall CO attainment value for the course MBA-101 as calculated in 5.1 above

*Here, (i) will be multiplied by (ii) and the total value will be divided by 3, the extracted/calculated value will be PO1 attainment value under direct method.*

Similarly, for MBA-104-PO1 Cell: PO1 attainment value = (Mapping factor of MBA-104-PO1 from Table 4 x Overall CO attainment value for the course MBA-104/3

Similarly values for each cell of Table 7 can be obtained. The direct attainment of POs is average of individual PO attainment values.

**B. Under Indirect Method:**

To obtain the **PO attainment using indirect method**, a student exit survey based on the questionnaire of POs will be conducted at end of last semester of the program. The format for the same is given in **Table 8**. Average of the responses from the outgoing students for each PO will be calculated.

The overall PO attainment values are obtained by adding attainment values estimated using direct and indirect methods in the proportion of 80:20 as follows:

Overall attainment value for PO1= 1.0

0.8 x average attainment value for PO1 using direct method (from table 7)

0.2 x average response of outgoing students for PO1 (from table 8)

Similarly, overall attainment value can be obtained for each PO.

**Table 8: Questionnaire for Indirect measurement of PO attainment  
(For outgoing students)**

At the end of my degree program I am able to do:

		<b>Please tick any one</b>		
		Strongly Agree	Agree	Average
<b>PO1.</b>	<i>Soft skills and working skills: To comprehend, communicate and execute effectively and efficiently in all of their dealings.</i>	3	2	1
<b>PO2.</b>	<i>Leadership: To develop abilities to both lead and respect the views positions and beliefs of others and to plan and manage effectively.</i>	3	2	1
<b>PO3.</b>	<i>Innovativeness and Entrepreneurship: To explore issues and problem that needs solutions with entrepreneurial orientation.</i>	3	2	1
<b>PO4.</b>	<i>Ethics and Values: To recognize, appreciate and follow ethical standards in all walks of life.</i>	3	2	1
<b>PO5.</b>	<i>Adaptability and Sociability: Ready to understand and adapt the changing environment.</i>	3	2	1
<b>PO6.</b>	<i>Research and Analytical abilities: To explore, analyses and provide solutions on emerging issues concerning various fields including public policy.</i>	3	2	1

<b>PO7.</b> <i>Practical exposure and Employability: Exposure to actual working environment leading to employability.</i>	3	2	1
<b>PO8.</b> <i>Environmental Consciousness: In every action, dealing, service and manifestation.</i>	3	2	1
<b>PSO1:</b> <i>Comprehension and communication</i>	3	2	1
<b>PSO2:</b> <i>Creative thinking</i>	3	2	1
<b>PSO3:</b> <i>Critical thinking</i>	3	2	1
<b>PSO4:</b> <i>Design Thinking</i>	3	2	1
	Strongly Agree	Agree	Average

Overall PO attainment values will be written as shown in Table 9:

**Table 9: Overall PO attainment Values**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO 1</b>	<b>PSO 2</b>	<b>PSO 3</b>	<b>PSO 4</b>
<b>Direct PO attainment</b>												
<b>Indirect PO attainment</b>												
<b>Overall PO attainment</b>												
<b>Target</b>												

The overall PO attainment values obtained above are compared with set targets.

The target for each PO will be finalized by the staff council and notified from time to time as and when required.

The set target for each PO may be different and can be finalized by the staff councils of the departments/institutes.

Target For Each PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4
Target												

In case of overall PO attainment value being less than the set target value then an action plan would be prepared for improvement in the subsequent academic session.

The overall PSO attainment level based on CO-PSO mapping values and overall CO attainment values can be obtained in a similar manner.

**ANNEXURE – 1 TABLE 2 : CO-PO MATRIX**

**Table 2: CO PO MATRIX (FIRST SEMESTER)**

<b>MBA – 101: Management Concepts and Organisational Behaviour</b>									<b>MBA – 102: Managerial Economics</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MBA-101.1	3	3	3	3	2.3	2	3	3	MBA-102.1	3	3	3	3	3	2.7	3	3
MBA-101.2	3	2.9	3	3	2.5	3	3	3	MBA-102.2	3	2.9	3	2.6	3	3	2.8	3
MBA-101.3	3	3	3	3	2.7	3	2.7	3	MBA-102.3	3	2	3	3	2	3	3	2.4
MBA-101.4	3	1.5	3	2.5	3	3	3	3	MBA-102.4	3	3	2.7	3	3	3	1.5	3
<b>Average</b>	3.00	2.60	3.00	2.88	2.63	2.75	2.93	3.00	<b>Average</b>	3.00	2.75	3.00	2.87	2.75	2.87	2.62	2.87
<b>MBA – 103: Business Communication</b>									<b>MBA – 104: Business Environment</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MBA – 103.1	2	3	3	3	3	3	1	2.5	MBA – 104.1	3	3	3	3	2.5	3	3	3
MBA – 103.2	3	3	2.9	3	3	2.5	3	3	MBA – 104.2	2.5	2	2.5	3	3	3	3	3
MBA – 103.3	3	2.7	2	3	3	3	2.8	3	MBA – 104.3	3	3	3	3	3	3	3	3
MBA – 103.4	1.5	3	3	3	3	3	3	3	MBA – 104.4	3	3	3	2.5	3	3	2.5	3
<b>Average</b>	2.37	3.00	2.75	3.00	3.00	2.87	2.50	2.87	<b>Average</b>	2.88	2.75	2.88	2.88	2.88	3.00	2.88	2.88
<b>MBA – 105: Financial Reporting, Statements and Analysis</b>									<b>MBA – 106: Statistics and Analytics for Decision Making</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MBA – 105.1	3	2.5	3	3	3	3	3	3	MBA – 106.1	3	3	3	2	3	3	2	3
MBA – 105.2	3	3	3	2.5	3	2.5	3	3	MBA – 106.2	1.5	3	3	3	3	3	3	3
MBA – 105.3	3	3	3	3	2.5	3	3	3	MBA – 106.3	3	3	2.5	3	3	3	3	3
MBA – 105.4	2.5	3	3	3	3	3	3	3	MBA – 106.4	3	3	3	3	3	3	3	3
<b>Average</b>	2.88	2.88	3.00	2.88	2.88	2.88	3.00	3.00	<b>Average</b>	2.63	3.00	2.88	2.75	3.00	3.00	2.75	3.00
<b>MBA – 107: Computer Applications for Business</b>									<b>MBA – 108: Soft Skills/Seminar/Presentation</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MBA – 107.1	3	3	3	3	2.8	3	3	3	MBA – 108.1	3	3	3	3	3	3	2.5	3
MBA – 107.2	3	1.9	3	3	3	3	2.5	3	MBA – 108.2	2.4	3	2.6	3	3	3	3	3
MBA – 107.3	3	3	3	2.5	2.5	3	3	2.5	MBA – 108.3	3	3	3	3	2.5	3	3	3
MBA – 107.4	3	2.5	3	3	3	3	3	3	MBA – 108.4	3	3	2.9	3	3	2.5	3	3
<b>Average</b>	3.00	2.60	3.00	2.88	2.83	3.00	2.88	2.88	<b>Average</b>	2.85	3.00	2.88	3.00	2.88	2.88	2.88	3.00



**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) COMPULSORY PAPERS**

<b>MBA – 301: Corporate Strategy</b>									<b>MBA – 302: Indian Ethos and Business Ethics</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>MBA – 301.1</b>	2.5	2	2.3	2.9	2.9	2.5	2.9	3	<b>MBA – 302.1</b>	1.8	1.7	2.1	3	2.5	2.4	2	2.9
<b>MBA – 301.2</b>	3	2.7	3	2.7	2.8	2.7	2.5	2.6	<b>MBA – 302.2</b>	1.5	3	2.8	3	2.4	2	2.8	2.5
<b>MBA – 301.3</b>	2.9	2.5	3	2.5	2.9	3	3	2.2	<b>MBA – 302.3</b>	2.8	3	2.6	3	2.6	2	2.3	2
<b>MBA – 301.4</b>	3	3	3	2.4	2.9	2.8	3	2.5	<b>MBA – 302.4</b>	1.8	2.4	2.9	3	2.7	2.5	2	2.3
<b>Average</b>	<b>2.85</b>	<b>2.55</b>	<b>2.83</b>	<b>2.63</b>	<b>2.88</b>	<b>2.75</b>	<b>2.85</b>	<b>2.58</b>	<b>Average</b>	1.98	2.53	2.60	3.00	2.55	2.23	2.28	2.43

  

<b>MBA – 303: Summer Internship/Field Work</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>MBA – 303.1</b>	3	2.6	3	3	3	3	3	3
<b>MBA – 303.2</b>	3	3	3	3	3	3	3	2.7
<b>MBA – 303.3</b>	3	2.7	3	3	2.9	3	3	3
<b>MBA – 303.4</b>	3	3	2.8	3	3	3	3	3
<b>Average</b>	3.00	2.83	2.95	3.00	2.98	3.00	3.00	2.93

  

<b>MBA – 401: Entrepreneurship</b>									<b>MBA – 402: Corporate Social Responsibility and Sustainability</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>MBA-401.1</b>	2.6	3	3	2.6	2.8	3	3	3	<b>MBA-402.1</b>	3	2	3	3	3	3	3	3
<b>MBA-401.2</b>	2.4	3	2.9	2.5	2.9	3	3	2.8	<b>MBA-402.2</b>	3	3	1.9	3	3	3	3	3
<b>MBA-401.3</b>	3	3	3	3	3	3	3	3	<b>MBA-402.3</b>	3	2	3	2.5	3	3	3	3
<b>MBA-401.4</b>	2.4	3	3	2.6	3	3	2.5	3	<b>MBA-402.4</b>	3	3	3	3	3	2.5	3	1.9
<b>Average</b>	<b>2.60</b>	<b>3.00</b>	<b>2.98</b>	<b>2.68</b>	<b>2.93</b>	<b>3.00</b>	<b>2.88</b>	<b>2.95</b>	<b>Average</b>	3.00	2.50	2.73	2.88	3.00	2.88	3.00	2.73

  

<b>MBA – 403: Research Report and Comprehensive Viva-Voce</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>MBA-403.1</b>	3	3	3	3	3	3	3	2.5
<b>MBA-403.2</b>	2	3	2.5	3	3	3	2.5	3
<b>MBA-403.3</b>	3	3	3	3	3	3	3	3
<b>MBA-403.4</b>	3	3	3	3	2.5	3	3	3
<b>Average</b>	2.75	3.00	2.88	3.00	2.88	3.00	2.88	2.88

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
FINANCE – THIRD SEMESTER**

<b>FM-301: Quantitative Analysis for Financial Decision Making</b>									<b>FM – 302: Foreign Exchange Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM – 301.1</b>	3	2	3	2	3	3	3	3	<b>FM – 302.1</b>	3	2.5	2	2.5	3	2	3	3
<b>FM – 301.2</b>	2	3	3	2.5	3	2	2	1.9	<b>FM – 302.2</b>	2.5	3	2	2	3	2	3	2
<b>FM – 301.3</b>	3	2	2	2	3	2	3	3	<b>FM – 302.3</b>	2	3	3	3	2	2	3	2
<b>FM – 301.4</b>	3	2.5	2.5	2	3	2	3	2	<b>FM – 302.4</b>	3	3	2	3	2	2	3	2
<b>Average</b>	2.75	2.38	2.63	2.13	3.00	2.25	2.75	2.48	<b>Average</b>	2.63	2.88	2.25	2.63	2.50	2.00	3.00	2.25
<b>FM – 303: Derivatives Trading in India</b>									<b>FM – 304: Banking and Financial Services</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM – 303.1</b>	3	3	3	2	3	2	3	2	<b>FM – 304.1</b>	2	3	3	3	2.5	3	2.5	3
<b>FM – 303.2</b>	2.5	2.5	3	2	3	3	3	3	<b>FM – 304.2</b>	3	3	3	2	3	3	3	3
<b>FM – 303.3</b>	3	3	2.5	2	3	3	2	2	<b>FM – 304.3</b>	2.5	3	2.5	2	2	2	3	3
<b>FM – 303.4</b>	3	3	3	3	2	3	3	3	<b>FM – 304.4</b>	3	3	3	3	3	3	3	2
<b>Average</b>	2.88	2.88	2.88	2.25	2.75	2.75	2.75	2.50	<b>Average</b>	2.63	3.00	2.88	2.50	2.63	2.75	2.88	2.75
<b>FM – 305: Corporate Restructuring &amp; Control</b>									<b>FM – 306: Security Analysis</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM – 305.1</b>	3	3	2.5	3	2.5	3	2.8	2	<b>FM – 306.1</b>	3	3	3	3	3	2.4	3	3
<b>FM – 305.2</b>	3	2.1	3	2.5	3	2.5	3	3	<b>FM – 306.2</b>	2.5	3	3	3	2.6	3	3	3
<b>FM – 305.3</b>	3	3	3	2.3	3	3	3	3	<b>FM – 306.3</b>	3	3	3	2.7	3	3	2.5	3
<b>FM – 305.4</b>	2	2	3	3	2.1	3	3	2	<b>FM – 306.4</b>	1.9	3	3	3	3	3	2	3
<b>Average</b>	2.75	2.53	2.88	2.70	2.65	2.88	2.95	2.50	<b>Average</b>	2.60	3.00	3.00	2.93	2.90	2.85	2.63	3.00

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
FINANCE – FOURTH SEMESTER**

<b>FM – 401: Financial Engineering</b>									<b>FM – 402: Project Planning and Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM-401.1</b>	3	3	2	3	3	3	2.5	3	<b>FM-402.1</b>	3	3	2.5	3	2	3	2.5	3
<b>FM-401.2</b>	3	2.5	3	2	2.7	3	3	3	<b>FM-402.2</b>	3	3	3	2	2.5	3	3	3
<b>FM-401.3</b>	2.5	3	3	2.5	3	3	3	3	<b>FM-402.3</b>	2.5	3	3	3	3	3	3	3
<b>FM-401.4</b>	3	2	2.7	3	3	3	2.5	3	<b>FM-402.4</b>	2.5	3	3	3	3	3	3	3
<b>Average</b>	2.88	2.63	2.68	2.63	2.93	3.00	2.75	3.00	<b>Average</b>	2.75	3.00	2.88	2.75	2.63	3.00	2.88	3.00
<b>FM – 403: Behavioral Finance</b>									<b>FM – 404: Portfolio Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM-403.1</b>	3	2	3	3	3	3	2.3	3	<b>FM-404.1</b>	3	2.5	3	3	3	3	2.4	3
<b>FM-403.2</b>	2.9	3	3	2.5	3	3	3	3	<b>FM-404.2</b>	3	3	3	3	3	3	3	3
<b>FM-403.3</b>	3	3	2.7	3	3	3	2	3	<b>FM-404.3</b>	3	3	3	3	2.7	3	3	3
<b>FM-403.4</b>	3	3	3	2	3	3	2.5	3	<b>FM-404.1</b>	2.5	3	2.5	3	3	3	3	3
<b>Average</b>	2.98	2.75	2.93	2.63	3.00	3.00	2.45	3.00	<b>Average</b>	2.88	2.88	2.88	3.00	2.93	3.00	2.85	3.00
<b>FM – 405: Insurance and Risk Management</b>									<b>FM – 406: Private Equity and Wealth Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>FM-405.1</b>	3	3	3	3	2.6	3	3	2.5	<b>FM-406.1</b>	3	3	3	2	3	3	3	3
<b>FM-405.2</b>	3	3	3	3	2.3	3	3	3	<b>FM-406.2</b>	3	2	2.5	2.5	3	3	3	3
<b>FM-405.3</b>	3	3	3	3	3	3	3	3	<b>FM-406.3</b>	3	3	3	3	2	2.5	3	
<b>FM-405.4</b>	2	3	2.6	3	3	3	3	3	<b>FM-406.4</b>	3	2	3	3	3	3	3	3
<b>Average</b>	2.75	3.00	2.90	3.00	2.73	3.00	3.00	2.88	<b>Average</b>	3.00	2.50	2.88	2.63	2.75	2.88	3.00	3.00

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
MARKETING – THIRD SEMESTER**

MM – 301: Advertising Management									MM – 302: Marketing Research and Analytics								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MM – 301.1	3	2	3	1.8	3	3	3	2	MM – 302.1	2	3	3	2.1	3	3	3	3
MM – 301.2	3	3	2	2	2	2	3	1.8	MM – 302.2	2	3	3	3	3	2.3	3	3
MM – 301.3	3	2	3	2.1	3	3	3	3	MM – 302.3	1.8	2	2	2	2	3	2	2
MM – 301.4	3	3	2	3	2	2.2	3	2	MM – 302.4	3	3	3	2	1.5	3	3	2.1
<b>Average</b>	3.00	2.50	2.50	2.23	2.50	2.55	3.00	2.20	<b>Average</b>	2.20	2.75	2.75	2.28	2.38	2.83	2.75	2.53
MM – 303: Sales and Logistics Management									MM – 304: Consumer Behaviour								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MM – 303.1	3	2	3	2	2	3	2.8	2	MM – 304.1	3	3	2.6	2	3	2	3	2
MM – 303.2	3	2	3	2.1	2	3	2	2	MM – 304.2	3	3	3	2	2	3	3	3
MM – 303.3	3	2.6	3	3	3	3	3	3	MM – 304.3	3	3	2	2.5	3	2	3	2
MM – 303.4	2.5	3	3	2	2	3	2	2.1	MM – 304.4	3	3	3	2.5	2.3	3	2.5	3
<b>Average</b>	2.88	2.40	3.00	2.28	2.25	3.00	2.45	2.28	<b>Average</b>	3.00	3.00	2.65	2.25	2.58	2.50	2.88	2.50
MM – 305: Strategic Brand Management									MM – 306: Digital and Social Media Marketing								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
MM – 305.1	3	2	3	2.5	3	3	3	2	MM – 306.1	3	2	3	3	3	3	3	2
MM – 305.2	3	3	2	3	2	3	3	3	MM – 306.2	3	2	2	3	2.1	3	3	2.5
MM – 305.3	2	2	3	2.5	3	2	2	2	MM – 306.3	2.3	3	3	3	2.5	3	3	1.8
MM – 305.4	2	3	2.5	1.9	2.8	3	3	3	MM – 306.4	3	2.2	2	2	2	2	3	3
<b>Average</b>	2.50	2.50	2.63	2.48	2.70	2.75	2.75	2.50	<b>Average</b>	2.83	2.30	2.50	2.75	2.40	2.75	3.00	2.33

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
MARKETING – FOURTH SEMESTER**

<b>MM – 401: International Marketing</b>									<b>MM – 402: Business Marketing</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>MM-401.1</b>	2	3	3	2	3	3	3	2.5	<b>MM-402.1</b>	3	3	2	3	3	2	2.5	2.5
<b>MM-401.2</b>	2.1	3	3	2.5	2	3	3	2	<b>MM-402.2</b>	3	3	3	3	3	2.5	3	3
<b>MM-401.3</b>	2	2	3	3	3	3	3	2.1	<b>MM-402.3</b>	2	3	2.5	2	2	3	3	3
<b>MM-401.4</b>	3	3	3	3	2	3	3	2.5	<b>MM-402.4</b>	3	3	3	2	3	3	3	2.5
<b>Average</b>	2.28	2.75	3.00	2.63	2.50	3.00	3.00	2.28	<b>Average</b>	2.75	3.00	2.63	2.50	2.75	2.63	2.88	2.75
<b>MM – 403: Service Marketing</b>									<b>MM – 404: Strategic Marketing</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>MM-403.1</b>	3	3	3	3	3	3	3	2.5	<b>MM-404.1</b>	3	2.2	3	3	3	2	3	2
<b>MM-403.2</b>	3	2.8	2	3	3	3	3	3	<b>MM-404.2</b>	2	3	2.5	3	2.4	3	3	2
<b>MM-403.3</b>	3	3	3	3	2.4	2	2	2	<b>MM-404.3</b>	3	3	1.8	3	2.8	3	3	2.5
<b>MM-403.4</b>	2	2.3	2	3	3	3	3	2	<b>MM-404.1</b>	3	2	2.1	3	3	2	2	3
<b>Average</b>	2.75	2.78	2.50	3.00	2.85	2.75	2.75	2.38	<b>Average</b>	2.75	2.55	2.35	3.00	2.80	2.50	2.75	2.38
<b>MM – 405: Rural and Agribusiness Marketing</b>									<b>MM – 406: Retail and Mall Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>MM-405.1</b>	2.1	3	3	2.7	3	3	3	3	<b>MM-406.1</b>	2.3	2.3	2.5	2.5	3	3	3	3
<b>MM-405.2</b>	2.3	3	2.6	2	2.6	2.8	3	2.8	<b>MM-406.2</b>	2.4	2.5	3	3	2.5	3	3	3
<b>MM-405.3</b>	2	3	3	2.1	3	3	3	3	<b>MM-406.3</b>	2.5	2.8	3	2.5	3	3	2.8	3
<b>MM-405.4</b>	2.2	3	3	2	3	3	3	3	<b>MM-406.4</b>	2.2	2.3	2.6	2.5	3	2.8	3	3
<b>Average</b>	2.15	3.00	2.90	2.20	2.90	2.95	3.00	2.95	<b>Average</b>	2.35	2.48	2.78	2.63	2.88	2.95	2.95	3.00

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
HUMAN RESOURCE (HR) – THIRD SEMESTER**

HRM – 301: HRD: Systems & Strategies									HRM – 302: Indian Labour Legislation								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
HRM – 301.1	3	3	3	3	3	3	2.2	2	HRM – 302.1	2	3	3	2	2	3	3	2
HRM – 301.2	2.4	2	2	3	3	3	2	2	HRM – 302.2	3	3	2	2.1	3	2	3	3
HRM – 301.3	3	3	3	2.4	2	2	3	2	HRM – 302.3	2	3	2.6	3	3	3	2	2
HRM – 301.4	2	2	2	3	3	2.1	3	3	HRM – 302.4	2.4	3	3	2	2	2	3	3
<b>Average</b>	2.60	2.50	2.50	2.85	2.75	2.53	2.55	2.25	<b>Average</b>	2.35	3.00	2.65	2.28	2.50	2.50	2.75	2.50
HRM – 303: Management of Industrial Relations									HRM – 304: Human Resource Metrics and Analytics								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
HRM – 303.1	2	2	3	3	2	2	3	2	HRM – 304.1	3	2	3	3	2	3	3	2
HRM – 303.2	3	3	3	3	3	2	3	2	HRM – 304.2	2	3	3	3	2	3	3	2
HRM – 303.3	3	3	2	3	2	2	3	3	HRM – 304.3	3	2	3	3	2	3	3	2
HRM – 303.4	2	3	3	3	3	2	3	2	HRM – 304.4	2	3	3	3	2	3	3	2
<b>Average</b>	2.50	2.75	2.75	3.00	2.50	2.00	3.00	2.25	<b>Average</b>	2.50	2.50	3.00	3.00	2.00	3.00	3.00	2.00
HRM – 305: Compensation and Reward Management									HRM – 306: Talent Acquisition and Performance Management								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
HRM – 305.1	2	2	3	1.5	3	3	3	1.4	HRM – 306.1	3	2	3	1.4	3	3	3	2.1
HRM – 305.2	2	3	3	2.2	3	3	3	2	HRM – 306.2	3	3	2	2	2	2.1	3	1.5
HRM – 305.3	2.1	2	2	3	2	2	2	2	HRM – 306.3	3	2.6	3	2	3	3	3	3
HRM – 305.4	1.9	3	3	1.5	3	3	2	2	HRM – 306.4	3	3	2.4	3	2	2	3	2
<b>Average</b>	2.00	2.50	2.75	2.05	2.75	2.75	2.50	1.85	<b>Average</b>	3.00	2.65	2.60	2.10	2.50	2.53	3.00	2.15

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
HUMAN RESOURCE(HR) – FOURTH SEMESTER**

<b>HRM – 401: Group Dynamics and Leadership Excellence</b>									<b>HRM – 402: Strategic Human Resource Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>HRM-401.1</b>	2.1	3	3	2	3	3	3	3	<b>HRM-402.1</b>	3	3	2.2	2	3	2	3	2
<b>HRM-401.2</b>	2	3	3	3	3	2.4	3	3	<b>HRM-402.2</b>	2.5	2.5	3	3	3	3	2.8	3
<b>HRM-401.3</b>	1.5	2	2	2	2	3	2.1	2	<b>HRM-402.3</b>	3	2.5	3	2.7	2.5	2.5	3	3
<b>HRM-401.4</b>	3	3	3	2	1.6	3	3	2	<b>HRM-402.4</b>	3	3	3	3	3	3	2.4	3
<b>Average</b>	2.15	2.75	2.75	2.25	2.40	2.85	2.78	2.50	<b>Average</b>	2.88	2.75	2.80	2.68	2.88	2.63	2.80	2.75
<b>HRM – 403: Cross Cultural and Global HRM</b>									<b>HRM – 404: Counselling, Mentoring and Negotiation Skills</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>HRM-403.1</b>	3	3	3	2.5	2.5	2.5	3	3	<b>HRM-404.1</b>	3	2.5	3	2.5	3	2.5	3	2.5
<b>HRM-403.2</b>	2.5	2.5	3	3	2.5	2.5	3	3	<b>HRM-404.2</b>	2.5	3	3	2.5	3	2.5	2.5	3
<b>HRM-403.3</b>	3	3	3	3	2.5	2.5	2.5	2.5	<b>HRM-404.3</b>	3	2.5	3	3	3	2.5	2.5	2.5
<b>HRM-403.4</b>	2.5	2.5	3	3	2.5	2.5	2.5	2.5	<b>HRM-404.1</b>	2.5	3	3	3	3	2.5	3	3
<b>Average</b>	2.75	2.75	3.00	2.88	2.50	2.50	2.75	2.75	<b>Average</b>	2.75	2.75	3.00	2.75	3.00	2.50	2.75	2.75
<b>HRM – 405: Change Management &amp; Organisational Development</b>									<b>HRM – 406: Competency Mapping &amp; Assessment Centres</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>HRM-405.1</b>	3	2.5	3	3	3	2.4	3	3	<b>HRM-406.1</b>	3	3	3	3	2.5	2.5	2.7	2.5
<b>HRM-405.2</b>	3	2.5	2.5	3	3	2.2	3	3	<b>HRM-406.2</b>	3	3	3	3	2.4	3	3	3
<b>HRM-405.3</b>	3	2.4	3	2.5	3	2.5	2.5	2.5	<b>HRM-406.3</b>	2.5	2.6	3	2.5	2.5	3	3	3
<b>HRM-405.4</b>	3	2.4	2.5	2.5	3	2.6	3	2.5	<b>HRM-406.4</b>	3	2.5	3	2.5	2.9	2.5	3	2.5
<b>Average</b>	3.00	2.45	2.75	2.75	3.00	2.43	2.88	2.75	<b>Average</b>	2.88	2.78	3.00	2.75	2.58	2.75	2.93	2.75

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INTERNATIONAL BUSINESS (IB) – THIRD SEMESTER**

<b>IB – 301: International Accounting</b>									<b>IB – 302: Foreign Exchange Management</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>IB – 301.1</b>	3	2.1	3	2.5	2	3	2.5	3	<b>IB – 302.1</b>	2	3	2.1	3	2.5	3	2.5	3
<b>IB – 301.2</b>	3	2.5	3	3	2.6	3	3	3	<b>IB – 302.2</b>	2.5	3	2	3	3	3	3	3
<b>IB – 301.3</b>	2.5	3	2.1	2	3	2.5	1.5	3	<b>IB – 302.3</b>	3	2.5	3	3	2.5	3	2.5	3
<b>IB – 301.4</b>	3	3	3	3	2	3	2.2	2.5	<b>IB – 302.4</b>	3	3	2.5	2	3	2.5	3	3
<b>Average</b>	2.88	2.65	2.78	2.63	2.40	2.88	2.30	2.88	<b>Average</b>	2.63	2.88	2.40	2.75	2.75	2.88	2.75	3.00
<b>IB – 303: Export-Import Procedures and Documentation</b>									<b>IB – 304: India's Foreign Trade and Policy</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>IB – 303.1</b>	2	2	3	2	3	2	3	2.5	<b>IB – 304.1</b>	2.5	3	3	2.5	3	3	3	2.5
<b>IB – 303.2</b>	3	3	3	3	2.7	3	3	2	<b>IB – 304.2</b>	2.5	3	3	2.7	3	3	2.5	3
<b>IB – 303.3</b>	3	1.7	3	3	2.5	3	2	2	<b>IB – 304.3</b>	2	3	2.5	3	2	3	3	2.5
<b>IB – 303.4</b>	2.8	2.5	3	3	2	3	2.5	3	<b>IB – 304.4</b>	3	2.4	3	3	2	2	3	3
<b>Average</b>	2.70	2.30	3.00	2.75	2.55	2.75	2.63	2.38	<b>Average</b>	2.50	2.85	2.88	2.80	2.50	2.75	2.88	2.75
<b>IB – 305: International Business Environment</b>									<b>IB – 306: International Logistics</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>IB – 305.1</b>	3	3	3	3	2.5	2	2.5	3	<b>IB – 306.1</b>	2	3	2.1	3	2.5	3	3	3
<b>IB – 305.2</b>	2.5	2.5	3	3	3	1.5	2.5	3	<b>IB – 306.2</b>	3	2.4	3	3	3	2	2.5	3
<b>IB – 305.3</b>	3	3	3	2	2.5	3	2	3	<b>IB – 306.3</b>	2	3	2.5	2	3	2.1	3	2.5
<b>IB – 305.4</b>	3	1.5	2	3	3	3	2	2	<b>IB – 306.4</b>	3	3	3	2	2	1.8	3	3
<b>Average</b>	2.88	2.50	2.75	2.75	2.75	2.38	2.25	2.75	<b>Average</b>	2.50	2.85	2.65	2.50	2.63	2.23	2.88	2.88

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INTERNATIONAL BUSINESS (IB) – FOURTH SEMESTER**

<b>IB – 401: International Financial Markets</b>									<b>IB – 402: International Marketing</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IB-401.1</b>	3	3	2.5	3	3	3	2	2	<b>IB-402.1</b>	3	3	3	2	2	3	2.5	3
<b>IB-401.2</b>	3	2.5	3	3	3	3	3	2	<b>IB-402.2</b>	3	2.5	2.5	2.5	3	3	2.4	3
<b>IB-401.3</b>	3	3	3	3	1.5	3	2.5	3	<b>IB-402.3</b>	3	3	3	1.6	2	2	3	3
<b>IB-401.4</b>	3	3	3	2	2	3	3	2.5	<b>IB-402.4</b>	3	3	3	3	3	2	2	2
<b>Average</b>	3.00	2.88	2.88	2.75	2.38	3.00	2.63	2.38	<b>Average</b>	3.00	2.88	2.88	2.28	2.50	2.50	2.48	2.75
<b>IB – 403: International Financial Management</b>									<b>IB – 404: International Strategic Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IB-403.1</b>	2.5	2	2.4	2.5	2.5	2	3	3	<b>IB-404.1</b>	3	3	2	3	3	3	2	2
<b>IB-403.2</b>	2.7	2.6	2	2.7	2.5	2.8	3	3	<b>IB-404.2</b>	2.5	2.5	3	3	3	3	3	2.3
<b>IB-403.3</b>	2.5	2	2.6	2.5	2.5	2	2.9	2.7	<b>IB-404.3</b>	2	3	3	1.5	2	2	3	3
<b>IB-403.4</b>	2	2.7	2	2.8	2.5	3	3	2.5	<b>IB-404.1</b>	3	1.6	3	2.5	2.4	3	2.5	3
<b>Average</b>	2.43	2.33	2.25	2.63	2.50	2.45	2.98	2.80	<b>Average</b>	2.63	2.53	2.75	2.50	2.60	2.75	2.63	2.58
<b>IB – 405: Cross-cultural and Global Management</b>									<b>IB – 406: Regional Economic Blocks</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IB-405.1</b>	3	3	3	2	2	3	3	2	<b>IB-406.1</b>	3	2.5	2.5	3	3	2.1	2	3
<b>IB-405.2</b>	3	3	3	3	3	2	3	2	<b>IB-406.2</b>	3	2.5	2.5	3	3	2.5	2	2
<b>IB-405.3</b>	3	3	3	2	3	1.6	2	3	<b>IB-406.3</b>	3	2	2.5	2.5	2.4	2.5	2.5	2.5
<b>IB-405.4</b>	2.4	2.7	3	3	3	3	3	3	<b>IB-406.4</b>	3	2.4	2.5	3	3	3	2.5	3
<b>Average</b>	2.85	2.93	3.00	2.50	2.75	2.40	2.75	2.50	<b>Average</b>	3.00	2.35	2.50	2.88	2.85	2.53	2.25	2.63

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INFORMATION TECHNOLOGY (IT) – THIRD SEMESTER**

<b>IT – 301: Business Intelligence and Analytics</b>									<b>IT – 302: Enterprise Resource Planning</b>								
COs#	PO1	PO	COs#	PO													
		2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
<b>IT – 301.1</b>	3	3	3	2.6	3	3	3	2.5	<b>IT – 302.1</b>	2.5	2.5	3	1.8	2.5	2	2	3
<b>IT – 301.2</b>	3	2.6	3	2.5	3	3	3	3	<b>IT – 302.2</b>	2.1	2	2.5	3	2.5	3	2.5	2
<b>IT – 301.3</b>	3	3	2.5	3	3	2.8	3	2.5	<b>IT – 302.3</b>	2.6	2	3	2	2	3	2.1	3
<b>IT – 301.4</b>	3	2.4	3	3	3	3	3	2.5	<b>IT – 302.4</b>	2.2	3	2.5	1.5	2	3	2.5	2
<b>Average</b>	3.00	2.7	2.8	2.7	3.0	2.9	3.0	2.6	<b>Average</b>	2.3	2.3	2.7	2.0	2.2	2.7	2.2	2.5
		5	8	8	0	5	0	3		5	8	5	8	5	5	8	0

  

<b>IT – 303: Relational Database Management System</b>									<b>IT – 304: E-Customer Relationship Management</b>								
COs#	PO1	PO	COs#	PO													
		2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
<b>IT – 303.1</b>	3	2	3	2.1	2	3	2.5	3	<b>IT – 304.1</b>	2.5	3	3	2	2	2.4	3	3
<b>IT – 303.2</b>	3	2.7	3	2	2.5	3	2.5	3	<b>IT – 304.2</b>	2.4	1.5	2.5	2.5	2.5	3	2.6	3
<b>IT – 303.3</b>	3	2	2.5	1.6	2	3	3	2.5	<b>IT – 304.3</b>	1.6	1.5	1.5	1.6	1.8	2.5	2.5	2
<b>IT – 303.4</b>	3	2.7	2.5	1.5	2.5	3	3	3	<b>IT – 304.4</b>	1.9	1.8	1.5	1.7	2	2.5	2.7	2
<b>Average</b>	3.00	2.3	2.7	1.8	2.2	3.0	2.7	2.8	<b>Average</b>	2.1	1.9	2.1	1.9	2.0	2.6	2.7	2.5
		5	5	0	5	0	5	8		0	5	3	5	8	0	0	0

  

<b>IT – 305: System Analysis and Design</b>									<b>IT – 306: Knowledge Management Systems</b>								
COs#	PO1	PO	COs#	PO													
		2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
<b>IT – 305.1</b>	3	1.5	2	1.7	3	3	3	1.5	<b>IT – 306.1</b>	3	2.6	3	3	2.5	2.5	2	3
<b>IT – 305.2</b>	1.5	1.5	3	2	1.5	3	2	2	<b>IT – 306.2</b>	3	2.5	2.5	2.1	2.1	2.5	2.5	3
<b>IT – 305.3</b>	2	2	2.4	2.5	2	2.5	2.5	3	<b>IT – 306.3</b>	3	2.5	2.4	3	2.5	2.5	2.5	3
<b>IT – 305.4</b>	2.5	1.5	2.5	2	2.4	2.5	3	3	<b>IT – 306.4</b>	3	2.4	3	2	2.5	2.5	3	3
<b>Average</b>	2.25	1.6	2.4	2.0	2.2	2.7	2.6	2.3	<b>Average</b>	3.0	2.5	2.7	2.5	2.4	2.5	2.5	3.0
		3	8	5	3	5	3	8		0	0	3	3	0	0	0	0

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INFORMATION TECHNOLOGY (IT) – FOURTH SEMESTER**

<b>IT – 401: Data Mining for Business Decisions</b>									<b>IT – 402: Software Engineering</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IT-401.1</b>	2.5	1.5	2.5	2	2.5	2.5	2.5	3	<b>IT-402.1</b>	2.5	2	2.5	2.5	3	2.5	2.5	3
<b>IT-401.2</b>	3	3	3	3	3	3	3	3	<b>IT-402.2</b>	2	3	3	2.5	2.5	2.5	3	3
<b>IT-401.3</b>	2.5	1.5	3	3	3	3	3	2.5	<b>IT-402.3</b>	2.5	3	2.5	2.5	3	2.5	3	3
<b>IT-401.4</b>	2	2	2.5	2.5	2.5	2.5	2.5	3	<b>IT-402.4</b>	2.5	3	3	2.5	2.5	2.5	3	3
<b>Average</b>	2.50	2.00	2.75	2.63	2.75	2.75	2.75	2.88	<b>Average</b>	2.38	2.75	2.75	2.50	2.75	2.50	2.88	3.00

  

<b>IT – 403: E-Business Financial Modeling</b>									<b>IT – 404: Internet and Web Designing</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IT-403.1</b>	3	3	2.5	3	2.5	3	3	3	<b>IT-404.1</b>	2.5	2	2	2.5	2.5	2	3	3
<b>IT-403.2</b>	3	3	2.5	3	2.5	3	2.5	3	<b>IT-404.2</b>	2	2	2	2.5	2.5	2	3	3
<b>IT-403.3</b>	3	3	2.5	3	2	3	2.5	3	<b>IT-404.3</b>	2.5	2	2	2.5	2.5	2	3	2.5
<b>IT-403.4</b>	3	3	2.5	3	2.5	3	3	3	<b>IT-404.1</b>	2	2	2	2.5	2.5	3	3	2.5
<b>Average</b>	3.00	3.00	2.50	3.00	2.38	3.00	2.75	3.00	<b>Average</b>	2.25	2.00	2.00	2.50	2.50	2.25	3.00	2.75

  

<b>IT – 405: E-Commerce</b>									<b>IT – 406: Information Security and Cyber Laws</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>IT-405.1</b>	2.5	1.5	3	2	3	3	3	2.5	<b>IT-406.1</b>	3	2.5	3	3	2.5	2.5	3	3
<b>IT-405.2</b>	3	3	2.5	2	2.5	3	3	3	<b>IT-406.2</b>	3	2.5	3	3	2.5	2.5	3	3
<b>IT-405.3</b>	3	3	2.5	2.5	3	3	2.5	2.5	<b>IT-406.3</b>	3	2.5	3	3	3	3	2.5	3
<b>IT-405.4</b>	2.5	2	2.5	2	3	3	2.5	2.5	<b>IT-406.4</b>	3	2.5	3	3	2	2.5	2.5	3
<b>Average</b>	2.75	2.38	2.63	2.13	2.88	3.00	2.75	2.63	<b>Average</b>	3.00	2.50	3.00	3.00	2.50	2.63	2.75	3.00

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
PRODUCTION & OPERATIONS MANAGEMENT (POM) – THIRD SEMESTER**

<b>POM – 301: Purchasing and Materials Management</b>									<b>POM – 302: Total Quality Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM – 301.1</b>	2	2.3	2.2	2.4	2.4	2.2	2.8	2.9	<b>POM – 302.1</b>	1.9	2	2.5	2	2	2.3	2.4	2
<b>POM – 301.2</b>	2.3	2.9	3	2.5	3	2.8	3	2.9	<b>POM – 302.2</b>	2.8	3	3	2.6	2.4	2.5	3	2.3
<b>POM – 301.3</b>	3	2.4	2.9	2.4	2.9	3	3	2.5	<b>POM – 302.3</b>	2.2	3	3	2.4	2.5	3	3	2
<b>POM – 301.4</b>	2.9	2.8	3	2.5	3	3	2.7	2.7	<b>POM – 302.4</b>	2.5	2.9	3	2.3	2.4	3	3	2.9
<b>Average</b>	2.55	2.60	2.78	2.45	2.83	2.75	2.88	2.75	<b>Average</b>	2.35	2.73	2.88	2.33	2.33	2.70	2.85	2.30
<b>POM – 303: Production Planning and Control</b>									<b>POM – 304: Logistics Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM – 303.1</b>	2.1	2	2.5	2	2	2.3	2.4	2	<b>POM – 304.1</b>	2	3	2.9	2	2.5	2	2.3	2.4
<b>POM – 303.2</b>	2.8	3	3	2.6	2.4	2.5	3	2.3	<b>POM – 304.2</b>	3	3	3	2.3	2.5	3	2.7	2.4
<b>POM – 303.3</b>	2.6	3	2.9	2.6	2.7	3	3	2	<b>POM – 304.3</b>	1.9	2	2.3	2	2.5	2.7	2.8	2
<b>POM – 303.4</b>	2.5	2.9	3	2.3	2.4	3	3	1.9	<b>POM – 304.4</b>	3	2.9	3	2.5	2.7	3	3	2.3
<b>Average</b>	2.50	2.73	2.85	2.38	2.38	2.70	2.85	2.05	<b>Average</b>	2.48	2.73	2.80	2.20	2.55	2.68	2.70	2.28
<b>POM – 305: Service Operations Management</b>									<b>POM – 306: Technology Acquisition and Diffusion</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM – 305.1</b>	2	3	2.9	2	2.5	2	2.5	2.4	<b>POM – 306.1</b>	2.9	3	2.2	2.1	2.5	2.7	2.8	2.7
<b>POM – 305.2</b>	3	3	3	2.3	2.5	3	2.4	2.4	<b>POM – 306.2</b>	2.5	3	3	2	3	3	3	2.2
<b>POM – 305.3</b>	2.4	2	2.3	2	2.6	2.5	2.7	2.2	<b>POM – 306.3</b>	3	3	2.9	1.9	2.9	3	3	2.6
<b>POM – 305.4</b>	3	2.8	3	2.5	2.7	3	3	2.6	<b>POM – 306.4</b>	2.9	3	3	2.5	3	2.9	3	2.7
<b>Average</b>	2.60	2.70	2.80	2.20	2.58	2.63	2.65	2.40	<b>Average</b>	2.83	3.00	2.78	2.13	2.85	2.90	2.95	2.55

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
PRODUCTION & OPERATIONS MANAGEMENT (POM)– FOURTH SEMESTER**

<b>POM – 401: Applied Operations Research</b>									<b>POM – 402: Goal Programming in Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM-401.1</b>	3	3	3	2.5	3	3	3	2.7	<b>POM-402.1</b>	2	3	2.9	2	2.5	2	2.5	2.4
<b>POM-401.2</b>	3	3	3	3	2.1	2.4	3	2.6	<b>POM-402.2</b>	3	2.5	2.5	2.3	2.5	3	2.4	2.4
<b>POM-401.3</b>	3	2.8	2.9	1.9	2.3	2.5	2.9	2	<b>POM-402.3</b>	3	2.9	2.3	2	2.5	2.6	2.7	2.4
<b>POM-401.4</b>	3	2.5	2.4	2	2.6	2.7	2.9	2.4	<b>POM-402.4</b>	3	2.5	3	2.5	2.7	3	3	2.4
<b>Average</b>	3.00	2.83	2.83	2.35	2.50	2.65	2.95	2.43	<b>Average</b>	2.75	2.73	2.68	2.20	2.55	2.65	2.65	2.40
<b>POM – 403: Transportation Management</b>									<b>POM – 404: Technology Forecasting</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM-403.1</b>	2	2.5	2	1.7	2.4	2.5	2.7	2.6	<b>POM-404.1</b>	2.9	2.4	2.6	2.3	2.1	2	2.6	2.8
<b>POM-403.2</b>	2.5	2.4	2.6	2.3	2.5	2	2.1	2.9	<b>POM-404.2</b>	2.5	2	2.1	2	2.4	2.6	2.2	3
<b>POM-403.3</b>	2.8	2.2	2.6	2.4	2.6	2.3	2.9	2.9	<b>POM-404.3</b>	2.4	2.5	3	2.8	2.9	2.6	2.8	2.7
<b>POM-403.4</b>	2.7	2.5	2.8	2.4	3	2.2	3	3	<b>POM-404.1</b>	3	3	3	2.2	2.5	3	2.9	3
<b>Average</b>	2.50	2.40	2.50	2.20	2.63	2.25	2.68	2.85	<b>Average</b>	2.70	2.48	2.68	2.33	2.48	2.55	2.63	2.88
<b>POM – 405: R&amp;D Management</b>									<b>POM – 406: Programme Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>POM-405.1</b>	2.6	2.5	2.9	2.3	3	2.9	3	3	<b>POM-406.1</b>	2.7	3	3	2.2	2.5	2.7	3	2.9
<b>POM-405.2</b>	2.7	2.8	3	2.2	2.9	3	3	3	<b>POM-406.2</b>	3	3	3	2.5	2.8	3	3	2.7
<b>POM-405.3</b>	3	3	2.9	2.2	2.8	3	3	2.8	<b>POM-406.3</b>	3	2.5	3	2.2	3	3	3	2.8
<b>POM-405.4</b>	3	3	3	2.5	3	3	3	2.5	<b>POM-406.4</b>	2.6	3	2.8	2.4	2.6	3	2.9	2.5
<b>Average</b>	2.83	2.83	2.95	2.30	2.93	2.98	3.00	2.83	<b>Average</b>	2.83	2.88	2.95	2.33	2.73	2.93	2.98	2.73

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
ENTREPRENEURSHIP DEVELOPMENT (ED) – THIRD SEMESTER**

<b>ED – 301: Fundamentals of Entrepreneurship Development</b>									<b>ED – 302: Creativity and New Venture Creation</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>ED – 301.1</b>	3	3	3	3	3	3	3	3	<b>ED – 302.1</b>	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>ED – 301.2</b>	2.5	3	2.5	3	2.5	3	2.5	3	<b>ED – 302.2</b>	2.5	2.5	3	3	2.5	2.5	3	3
<b>ED – 301.3</b>	3	2.5	3	2.5	3	2.5	3	2.5	<b>ED – 302.3</b>	2.5	2.5	2.5	3	3	3	2.5	2.5
<b>ED – 301.4</b>	3	3	2.5	2.5	3	3	2.5	2.5	<b>ED – 302.4</b>	2.5	2.5	2.5	2.5	3	3	3	3
<b>Average</b>	2.88	2.88	2.75	2.75	2.88	2.88	2.75	2.75	<b>Average</b>	2.50	2.50	2.63	2.75	2.75	2.75	2.75	2.75
<b>ED – 303: Institutional support to Entrepreneur &amp; MSMEs</b>									<b>ED – 304: Family Business Management</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>ED – 303.1</b>	3	2	2.5	2.5	2.5	3	2.5	3	<b>ED – 304.1</b>	2.5	2.5	3	2.5	2.5	2.5	3	2.5
<b>ED – 303.2</b>	3	2.5	2.5	2.5	3	3	3	3	<b>ED – 304.2</b>	2.5	2.5	2.5	2.5	2.5	3	3	3
<b>ED – 303.3</b>	3	3	3	2.5	2.5	2.5	3	3	<b>ED – 304.3</b>	3	2.5	3	2.5	3	3	3	3
<b>ED – 303.4</b>	3	3	3	3	2.5	2.5	2.5	2.5	<b>ED – 304.4</b>	3	3	3	3	3	2.5	2.5	2.5
<b>Average</b>	3.00	2.63	2.75	2.63	2.63	2.75	2.75	2.88	<b>Average</b>	2.75	2.63	2.88	2.63	2.75	2.75	2.88	2.75
<b>ED – 305: Legal Framework for New Age Businesses</b>									<b>ED – 306: Social Entrepreneurship</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>ED – 305.1</b>	2.5	2	3	2.5	2	3	2.5	2	<b>ED – 306.1</b>	3	3	3	3	3	3	3	3
<b>ED – 305.2</b>	2	2.5	3	2.5	2	3	2	2.5	<b>ED – 306.2</b>	2.5	3	2.5	3	2.5	3	2.5	3
<b>ED – 305.3</b>	3	2	2.5	3	2	2.5	3	3	<b>ED – 306.3</b>	3	2.5	3	2.5	3	2.5	3	2.5
<b>ED – 305.4</b>	3	3	2	2.5	3	2.5	2	3	<b>ED – 306.4</b>	3	3	2.5	2.5	3	3	2.5	2.5
<b>Average</b>	2.63	2.38	2.63	2.63	2.25	2.75	2.38	2.63	<b>Average</b>	2.88	2.88	2.75	2.75	2.88	2.88	2.75	2.75

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
ENTREPRENEURSHIP DEVELOPMENT (ED)– FOURTH SEMESTER**

<b>ED – 401: Enterprise Planning, Appraisal and Financing</b>									<b>ED – 402: Financial Innovation and Entrepreneurship</b>									
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	
<b>ED-401.1</b>	2.5	2	3	2.5	2	3	2.5	2	<b>ED-402.1</b>	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>ED-401.2</b>	2	2.5	3	2.5	2	3	2	2.5	<b>ED-402.2</b>	2.5	2.5	3	3	2.5	2.5	3	3	
<b>ED-401.3</b>	3	2	2.5	3	2	2.5	3	3	<b>ED-402.3</b>	2.5	2.5	2.5	3	3	3	2.5	2.5	
<b>ED-401.4</b>	3	3	2	2.5	3	2.5	2	3	<b>ED-402.4</b>	2.5	2.5	2.5	2.5	3	3	3	3	
<b>Average</b>	2.63	2.38	2.63	2.63	2.25	2.75	2.38	2.63	<b>Average</b>	2.50	2.50	2.63	2.75	2.75	2.75	2.75	2.75	2.75
<b>ED – 403: Marketing Management in New Age Businesses</b>									<b>ED – 404: New Enterprises Human Resource Management</b>									
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	
<b>ED-403.1</b>	3	2	2.5	2.5	2.5	3	2.5	3	<b>ED-404.1</b>	3	2.5	2	1.5	3	1.5	2	2.5	
<b>ED-403.2</b>	3	2.5	2.5	2.5	3	3	3	3	<b>ED-404.2</b>	3	3	2.5	1.5	2.5	2	1.5	2.5	
<b>ED-403.3</b>	3	3	3	2.5	2.5	2.5	3	3	<b>ED-404.3</b>	3	2	2.5	1.5	3	2.5	2	1.5	
<b>ED-403.4</b>	3	3	3	3	2.5	2.5	2.5	2.5	<b>ED-404.1</b>	3	2.5	2.5	1.5	3	2.5	2.5	3	
<b>Average</b>	3.00	2.63	2.75	2.63	2.63	2.75	2.75	2.88	<b>Average</b>	3.00	2.50	2.38	1.50	2.88	2.13	2.00	2.38	
<b>ED – 405: MSMEs Policy Framework</b>									<b>ED – 406: Contemporary Environment in MSMEs</b>									
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	
<b>ED-405.1</b>	3	3	3	3	3	3	3	3	<b>ED-406.1</b>	3	2.5	2	1.5	3	3	2.5	3	
<b>ED-405.2</b>	2.5	2.5	2.5	2.5	3	2.5	2	2.5	<b>ED-406.2</b>	3	2.5	2	1.5	2.5	3	2	3	
<b>ED-405.3</b>	3	1.5	2	2.5	1.5	3	2	2.5	<b>ED-406.3</b>	3	2.5	2	1.5	2.5	2.5	3	2	
<b>ED-405.4</b>	3	1.5	2	2.5	2.5	2	2	2	<b>ED-406.4</b>	3	2.5	2	1.5	2.5	2.5	2	2.5	
<b>Average</b>	2.88	2.13	2.38	2.63	2.50	2.63	2.25	2.50	<b>Average</b>	3.00	2.50	2.00	1.50	2.63	2.75	2.38	2.63	

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
BUSINESS ANALYTICS (BA) – THIRD SEMESTER**

<b>BA – 301: Business Analysis using Excel</b>									<b>BA – 302: Econometrics for Business Forecasting</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>BA – 301.1</b>	2	2	3	3	2	3	3	1.5	<b>BA – 302.1</b>	3	2.5	2.5	2.5	3	2	3	2
<b>BA – 301.2</b>	2	2	3	2	2.5	2.5	3	1.5	<b>BA – 302.2</b>	2	2	3	3	3	1.5	3	3
<b>BA – 301.3</b>	3	3	2.5	2	3	2	2.5	2.5	<b>BA – 302.3</b>	3	2.5	2	1.5	2.5	2	2	3
<b>BA – 301.4</b>	3	3	3	2	2.5	3	2	2.5	<b>BA – 302.4</b>	1.5	3	2	3	2	3	2	2
<b>Average</b>	2.50	2.50	2.88	2.25	2.50	2.63	2.63	2.00	<b>Average</b>	2.38	2.50	2.38	2.50	2.63	2.13	2.50	2.50
<b>BA – 303: Business Data Mining</b>									<b>BA – 304: Decision Modeling and Data Analysis</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>BA – 303.1</b>	3	2.5	3	2	3	2	2	3	<b>BA – 304.1</b>	3	3	3	2.5	3	3	3	3
<b>BA – 303.2</b>	2	2	2.5	3	2.5	3	2	2	<b>BA – 304.2</b>	3	3	3	3	3	3	3	3
<b>BA – 303.3</b>	3	3	2	3	2	2	3	2	<b>BA – 304.3</b>	3	3	2.5	3	2.5	3	2.5	3
<b>BA – 303.4</b>	1.5	2	1.5	2.5	3	2	2.5	1.5	<b>BA – 304.4</b>	3	3	3	2.5	3	3	3	3
<b>Average</b>	2.38	2.38	2.25	2.63	2.63	2.25	2.38	2.13	<b>Average</b>	3.00	3.00	2.88	2.75	2.88	3.00	2.88	3.00
<b>BA – 305: Data Analytics using R</b>									<b>BA – 306: Social Media Analytics</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>BA – 305.1</b>	3	2	2.5	2	2.5	3	3	3	<b>BA – 306.1</b>	2.5	2.5	2.5	2.5	2.5	3	3	3
<b>BA – 305.2</b>	3	2	2.5	2	2.5	3	3	3	<b>BA – 306.2</b>	2.5	2.5	3	2.5	3	3	3	3
<b>BA – 305.3</b>	3	2	2	2	2.5	3	3	3	<b>BA – 306.3</b>	3	2	3	3	2.5	3	3	3
<b>BA – 305.4</b>	3	2	2.5	2	2.5	3	3	3	<b>BA – 306.4</b>	3	2.5	3	2.5	3	3	3	3
<b>Average</b>	3.00	2.00	2.38	2.00	2.50	3.00	3.00	3.00	<b>Average</b>	2.75	2.38	2.88	2.63	2.75	3.00	3.00	3.00

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
BUSINESS ANALYTICS (BA)– FOURTH SEMESTER**

<b>BA – 401: Time Series Data Analysis</b>									<b>BA – 402: Applied Multi Variant Analysis</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>BA-401.1</b>	3	3	3	3	2.5	3	3	3	<b>BA-402.1</b>	2.5	3	2.5	3	3	3	3	3
<b>BA-401.2</b>	3	3	3	3	3	3	3	3	<b>BA-402.2</b>	3	3	3	3	3	3	3	3
<b>BA-401.3</b>	3	3	2.5	3	3	2.5	3	3	<b>BA-402.3</b>	3	3	2.5	3	2.5	3	3	2.5
<b>BA-401.4</b>	3	3	3	3	3	3	3	3	<b>BA-402.4</b>	3	3	3	2.5	3	2.5	3	3
<b>Average</b>	3.00	3.00	2.88	3.00	2.88	2.88	3.00	3.00	<b>Average</b>	2.88	3.00	2.75	2.88	2.88	2.88	3.00	2.88
<b>BA – 403: Financial Modeling</b>									<b>BA – 404: Predictive Analysis for Business Decision</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>BA-403.1</b>	3	3	3	3	2.5	3	3	2.5	<b>BA-404.1</b>	3	2.5	3	3	3	3	3	3
<b>BA-403.2</b>	3	2.5	3	3	3	3	3	2.5	<b>BA-404.2</b>	3	3	3	3	3	3	3	3
<b>BA-403.3</b>	3	3	3	2.5	3	3	3	3	<b>BA-404.3</b>	3	3	3	2.5	2.5	3	3	2.5
<b>BA-403.4</b>	3	2.5	3	3	3	3	3	3	<b>BA-404.1</b>	3	3	3	3	3	3	3	2.5
<b>Average</b>	3.00	2.75	3.00	2.88	2.88	3.00	3.00	2.75	<b>Average</b>	3.00	2.88	3.00	2.88	2.88	3.00	3.00	2.75
<b>BA – 405: Data Analysis using Python</b>									<b>BA – 406: IOT and Big Data</b>								
<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>COs#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>BA-405.1</b>	3	2.5	3	2.5	3	3	3	3	<b>BA-406.1</b>	3	2.5	3	2.5	3	3	3	2.7
<b>BA-405.2</b>	3	3	3	3	3	3	3	3	<b>BA-406.2</b>	3	2.7	3	3	3	3	3	3
<b>BA-405.3</b>	3	2.5	3	3	2.5	3	3	3	<b>BA-406.3</b>	3	3	3	2.4	3	3	3	3
<b>BA-405.4</b>	3	3	3	3	3	3	3	3	<b>BA-406.4</b>	3	3	2.9	3	3	3	3	3
<b>Average</b>	3.00	2.75	3.00	2.88	2.88	3.00	3.00	3.00	<b>Average</b>	3.00	2.80	2.98	2.73	3.00	3.00	3.00	2.93

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
AGRIBUSINESS MANAGEMENT (ABM) – THIRD SEMESTER**

ABM – 301: Agri-Business Management									ABM – 302: Agricultural Economics								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
ABM – 301.1	3	2.1	3	3	3	3	3	3	ABM – 302.1	3	3	2.5	3	3	3	2.6	2.5
ABM – 301.2	3	3	2.6	3	2.5	3	3	3	ABM – 302.2	3	3	3	3	2.5	3	3	3
ABM – 301.3	3	3	2.7	3	3	3	3	3	ABM – 302.3	3	3	2.4	2.5	3	3	3	3
ABM – 301.4	3	3	3	3	3	3	3	3	ABM – 302.4	3	3	3	2	2.9	3	3	3
<b>Average</b>	3.00	2.78	2.83	3.00	2.88	3.00	3.00	3.00	<b>Average</b>	3.00	3.00	2.73	2.63	2.85	3.00	2.90	2.88
ABM – 303: Agricultural Marketing Management									ABM – 304: Agri- Entrepreneurship								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
ABM – 303.1	3	3	3	2.5	3	2.8	3	3	ABM – 304.1	3	3	3	2.5	3	3	3	2.6
ABM – 303.2	3	2.5	3	2.5	3	3	2.8	3	ABM – 304.2	3	3	2.5	3	3	3	2.6	2.5
ABM – 303.3	3	3	2.8	2.5	3	2.5	3	3	ABM – 304.3	2.6	3	2.4	3	3	3	3	2
ABM – 303.4	3	3	3	3	2.8	3	3	3	ABM – 304.4	3	3	2.1	2.5	2.5	3	3	2.5
<b>Average</b>	3.00	2.88	2.95	2.63	2.95	2.83	2.95	3.00	<b>Average</b>	2.90	3.00	2.50	2.75	2.88	3.00	2.90	2.40
ABM – 305: Agri-Business Finance																	
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8									
ABM – 305.1	3	3	3	3	3	3	2.3	3									
ABM – 305.2	3	3	3	2.4	3	3	3	3									
ABM – 305.3	3	2.5	2.5	2.8	3	3	3	3									
ABM – 305.4	3	2.5	2.5	3	3	3	2.7	3									
<b>Average</b>	3.00	2.75	2.75	2.80	3.00	3.00	2.75	3.00									

**Table 2: CO PO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
AGRIBUSINESS MANAGEMENT (ABM)– FOURTH SEMESTER**

<b>ABM – 401: Changing Paradigm of Agri-Business</b>									<b>ABM – 402: Agri Supply Chain and Logistics Management</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
ABM-401.1	3	2	3	3	3	3	3	3	ABM-402.1	3	3	2.5	3	3	3	2.4	2.5
ABM-401.2	3	3	2.5	3	3	2.5	2.5	2.5	ABM-402.2	3	3	3	2.2	2.5	2.5	3	3
ABM-401.3	3	3	3	3	3	3	2.5	3	ABM-402.3	2.5	2.5	2.5	3	2.5	2.4	3	3
ABM-401.4	3	3	3	3	3	2.5	3	2.5	ABM-402.4	3	2.6	3	2.5	2.5	3	2.5	3
<b>Average</b>	3.00	2.75	2.88	3.00	3.00	2.75	2.75	2.75	<b>Average</b>	2.88	2.78	2.75	2.68	2.63	2.73	2.73	2.88

  

<b>ABM – 403: Food Processing Management</b>									<b>ABM – 404: International Trade in Agri-Business</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
ABM-403.1	3	3	3	2.5	2.5	2.5	3	3	ABM-404.1	3	3	3	2.5	3	2.5	2.5	3
ABM-403.2	2.5	2.5	2.5	3	3	3	2.5	2.5	ABM-404.2	2.5	3	3	3	3	2.5	3	2.5
ABM-403.3	3	2.5	2.5	2.5	3	2.5	2.5	3	ABM-404.3	3	2.5	3	3	3	2.5	3	3
ABM-403.4	2.5	3	2.5	3	2.5	2.5	2.5	3	ABM-404.1	2.5	3	3	3	2.5	3	2.5	3
<b>Average</b>	2.75	2.75	2.63	2.75	2.75	2.63	2.63	2.88	<b>Average</b>	2.75	2.88	3.00	2.88	2.88	2.63	2.75	2.88

  

<b>ABM – 405: Marketing of Agri-Inputs</b>								
COs#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
ABM-405.1	3	3	3	2.5	3	2.5	2	2.5
ABM-405.2	2.5	2	2	2.5	2	3	3	3
ABM-405.3	2.5	2	2	3	3	2.5	2.5	2
ABM-405.4	3	2.5	2.5	2.5	2.5	3	3	3
<b>Average</b>	2.75	2.38	2.38	2.63	2.63	2.75	2.63	2.63

**ANNEXURE – 2 TABLE 3 - CO-PSO MATRIX**

**Table 3: CO-PSO MATRIX (FIRST SEMESTER)**

<b>MBA – 101: Management Concepts and Organisational Behaviour</b>					<b>MBA – 102: Managerial Economics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-101.1</b>	3	3	2.9	3	<b>MBA-102.1</b>	2.7	3	3	3
<b>MBA-101.2</b>	2.9	3	3	3	<b>MBA-102.2</b>	3	3	2.8	2
<b>MBA-101.3</b>	3	3	2.8	3	<b>MBA-102.3</b>	2.7	2	3	2.5
<b>MBA-101.4</b>	3	1.5	3	2	<b>MBA-102.4</b>	3	3	3	3
<b>Average</b>	2.98	2.63	2.97	2.75	<b>Average</b>	3.00	2.75	3.00	2.87
<b>MBA – 103: Business Communication</b>					<b>MBA – 104: Business Environment</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 103.1</b>	2	3	2.9	3	<b>MBA – 104.1</b>	3	2.9	3	3
<b>MBA – 103.2</b>	3	2.6	3	3	<b>MBA – 104.2</b>	2	2	2	2.8
<b>MBA – 103.3</b>	2.8	3	2	3	<b>MBA – 104.3</b>	3	3	2.8	3
<b>MBA – 103.4</b>	1.5	3	3	2.7	<b>MBA – 104.4</b>	3	2.7	3	2
<b>Average</b>	2.37	3.00	2.75	3.00	<b>Average</b>	2.88	2.75	2.88	2.88
<b>MBA – 105: Financial Reporting, Statements and Analysis</b>					<b>MBA – 106: Statistics and Analytics for Decision Making</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 105.1</b>	3	2	3	3	<b>MBA – 106.1</b>	3	3	3	2
<b>MBA – 105.2</b>	3	3	3	2	<b>MBA – 106.2</b>	1.5	3	2.8	3
<b>MBA – 105.3</b>	3	3	3	3	<b>MBA – 106.3</b>	3	2.9	2	3
<b>MBA – 105.4</b>	2	3	3	3	<b>MBA – 106.4</b>	3	3	3	3
<b>Average</b>	2.88	2.88	3.00	2.88	<b>Average</b>	2.63	2.98	2.70	2.75
<b>MBA – 107: Computer Applications for Business</b>					<b>MBA – 108: Soft Skills/Seminar/Presentation</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 107.1</b>	3	3	3	3	<b>MBA – 108.1</b>	3	3	3	3
<b>MBA – 107.2</b>	3	2.5	3	3	<b>MBA – 108.2</b>	2.5	3	2.5	3
<b>MBA – 107.3</b>	3	3	2.6	2	<b>MBA – 108.3</b>	3	3	2.9	3
<b>MBA – 107.4</b>	3	2.3	3	2.7	<b>MBA – 108.4</b>	3	2.9	3	3
<b>Average</b>	3.00	2.70	2.90	2.68	<b>Average</b>	2.88	2.98	2.85	3.00

**Table 3 : CO PSO MATRIX (SECOND SEMESTER)**

<b>MBA – 201: Optimization Models for Business Decisions</b>					<b>MBA – 202: Business Research Methodology</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-201.1</b>	3	3	3	1.5	<b>MBA-202.1</b>	3	3	3	3
<b>MBA-201.2</b>	3	2.9	3	2	<b>MBA-202.2</b>	3	2.8	3	2.5
<b>MBA-201.3</b>	2.5	3	2.9	3	<b>MBA-202.3</b>	2.5	3	3	3
<b>MBA-201.4</b>	3	3	3	3	<b>MBA-202.4</b>	3	1.5	3	3
<b>Average</b>	2.88	2.98	2.98	2.38	<b>Average</b>	2.88	2.58	3.00	2.88
<b>MBA – 203: Production and Operations Management</b>					<b>MBA – 204: Marketing Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2.5</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 203.1</b>	3	2.5	3	3	<b>MBA – 204.1</b>	2.5	1.5	3	2.5
<b>MBA – 203.2</b>	2.4	2.3	3	2.5	<b>MBA – 204.2</b>	2.5.5	3	3	2.5
<b>MBA – 203.3</b>	3	2.7	2.6	2.5	<b>MBA – 204.3</b>	3	2.5	2.5.5	3
<b>MBA – 203.4</b>	2.5	3	3	1.8	<b>MBA – 204.1</b>	2.5	3	3	3
<b>Average</b>	2.73	2.63	2.90	2.45	<b>Average</b>	2.67	2.50	3.00	2.75
<b>MBA – 205: Corporate Finance</b>					<b>MBA – 206: Human Resource Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2.5</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2.5</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 205.1</b>	3	2.5	3	2.5	<b>MBA – 206.1</b>	2.5	2.5	3	3
<b>MBA – 205.2</b>	3	3	2.5	2.5	<b>MBA – 206.2</b>	3	2.5.5	2.5	3
<b>MBA – 205.3</b>	2.5	3	2.5.5	1.5	<b>MBA – 206.3</b>	2.5	3	3	3
<b>MBA – 205.4</b>	2.5	2.5.5	2.5.5	3	<b>MBA – 206.4</b>	2.5.5	2.5	2.5	3
<b>Average</b>	2.75	2.83	2.75	2.38	<b>Average</b>	2.67	2.67	2.75	3.00
<b>MBA – 207: Legal Environment</b>					<b>MBA – 208: Comprehensive Viva-Voce</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2.5</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 207.1</b>	3	2.5	3	3	<b>MBA – 208</b>	3	3	3	3
<b>MBA – 207.2</b>	2.5	3	3	3	<b>Average</b>	3.00	3.00	3.00	3.00
<b>MBA – 207.3</b>	2.5	3	2.5	2.5					
<b>MBA – 207.4</b>	2.5.5	2.5	3	2.5.5					
<b>Average</b>	2.67	2.75	2.88	2.83					

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) COMPULSORY PAPERS**

<b>MBA – 301: Corporate Strategy</b>					<b>MBA – 302: Indian Ethos and Business Ethics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 301.1</b>	2.5	2	2.3	2.9	<b>MBA – 302.1</b>	1.8	1.5	2.1	3
<b>MBA – 301.2</b>	3	2.7	3	2.7	<b>MBA – 302.2</b>	1.5	3	2.8	3
<b>MBA – 301.3</b>	2.9	2.5	3	2.5	<b>MBA – 302.3</b>	2.8	3	2.6	3
<b>MBA – 301.4</b>	3	3	3	2.4	<b>MBA – 302.4</b>	1.8	2.4	2.9	3
<b>Average</b>	2.85	2.55	2.83	2.63	<b>Average</b>	1.98	2.48	2.60	3.00

  

<b>MBA – 303: Summer Internship/Field Work</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA – 303.1</b>	3	2.7	3	3
<b>MBA – 303.2</b>	3	3	3	3
<b>MBA – 303.3</b>	3	2.7	3	3
<b>MBA – 303.4</b>	3	3	2.8	3
<b>Average</b>	3.00	2.85	2.95	3.00

  

<b>MBA – 401: Entrepreneurship</b>					<b>MBA – 402: Corporate Social Responsibility and Sustainability</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-401.1</b>	2.7	3	3	2.7	<b>MBA-402.1</b>	3	2	3	3
<b>MBA-401.2</b>	2.4	3	2.9	2.5	<b>MBA-402.2</b>	3	3	1.5	3
<b>MBA-401.3</b>	3	3	3	3	<b>MBA-402.3</b>	3	2	3	2.5
<b>MBA-401.4</b>	2.4	3	3	2.7	<b>MBA-402.4</b>	3	3	3	3
<b>Average</b>	2.63	3.00	2.98	2.73	<b>Average</b>	3.00	2.50	2.63	2.88

  

<b>MBA – 403: Research Report and Comprehensive Viva-Voce</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-403.1</b>	3	3	3	3
<b>MBA-403.2</b>	2	3	2.5	3
<b>MBA-403.3</b>	3	3	3	3
<b>MBA-403.4</b>	3	3	3	3
<b>Average</b>	2.75	3.00	2.88	3.00

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
FINANCE – THIRD SEMESTER**

<b>FM-301: Quantitative Analysis for Financial Decision Making</b>					<b>FM – 302: Foreign Exchange Management</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
FM – 301.1	3	2	3	2	FM – 302.1	3	2.5	2	2.5
FM – 301.2	2	3	3	2.5	FM – 302.2	2.5	3	2	2
FM – 301.3	3	2	2	2	FM – 302.3	2	3	3	3
FM – 301.4	3	2.5	2.5	2	FM – 302.4	3	3	2	3
<b>Average</b>	<b>2.75</b>	<b>2.38</b>	<b>2.63</b>	<b>2.13</b>	<b>Average</b>	<b>2.63</b>	<b>2.88</b>	<b>2.25</b>	<b>2.63</b>
<b>FM – 303: Derivatives Trading in India</b>					<b>FM – 304: Banking and Financial Services</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
FM – 303.1	3	3	3	2	FM – 304.1	2	3	3	3
FM – 303.2	2.5	2.5	3	2	FM – 304.2	3	3	3	2
FM – 303.3	3	3	2.5	2	FM – 304.3	2.5	3	2.5	2
FM – 303.4	3	3	3	3	FM – 304.4	3	3	3	3
<b>Average</b>	<b>2.88</b>	<b>2.88</b>	<b>2.88</b>	<b>2.25</b>	<b>Average</b>	<b>2.63</b>	<b>3.00</b>	<b>2.88</b>	<b>2.50</b>
<b>FM – 305: Corporate Restructuring &amp; Control</b>					<b>FM – 306: Security Analysis</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
FM – 305.1	3	3	2.5	3	FM – 306.1	3	3	3	3
FM – 305.2	3	2	3	2.5	FM – 306.2	2.8	3	3	3
FM – 305.3	3	3	3	2	FM – 306.3	3	3	3	2.8
FM – 305.4	2	2	3	3	FM – 306.4	2	3	3	3
<b>Average</b>	<b>2.75</b>	<b>2.50</b>	<b>2.88</b>	<b>2.63</b>	<b>Average</b>	<b>2.70</b>	<b>3.00</b>	<b>3.00</b>	<b>2.95</b>

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
FINANCE – FOURTH SEMESTER**

<b>FM – 401: Financial Engineering</b>					<b>FM – 402: Project Planning and Management</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>FM-401.1</b>	3	3	2	3	<b>FM-402.1</b>	3	3	2.8	3
<b>FM-401.2</b>	3	2.8	3	2	<b>FM-402.2</b>	3	3	3	2
<b>FM-401.3</b>	2.8	3	3	2.8	<b>FM-402.3</b>	2.8	3	3	3
<b>FM-401.4</b>	3	2	3	3	<b>FM-402.4</b>	2.8	3	3	3
<b>Average</b>	2.95	2.70	2.75	2.70	<b>Average</b>	2.90	3.00	2.95	2.75

  

<b>FM – 403: Behavioural Finance</b>					<b>FM – 404: Portfolio Management</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>FM-403.1</b>	3	2	3	3	<b>FM-404.1</b>	3	2.8	3	3
<b>FM-403.2</b>	3	3	3	2.8	<b>FM-404.2</b>	3	3	3	3
<b>FM-403.3</b>	3	3	3	3	<b>FM-404.3</b>	3	3	3	3
<b>FM-403.4</b>	3	3	3	2	<b>FM-404.1</b>	2.8	3	2.8	3
<b>Average</b>	3.00	2.75	3.00	2.70	<b>Average</b>	2.95	2.95	2.95	3.00

  

<b>FM – 405: Insurance and Risk Management</b>					<b>FM – 406: Private Equity and Wealth Management</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>FM-405.1</b>	3	3	3	3	<b>FM-406.1</b>	3	3	3	2
<b>FM-405.2</b>	3	3	3	3	<b>FM-406.2</b>	3	2	2.5	2.5
<b>FM-405.3</b>	3	3	3	3	<b>FM-406.3</b>	3	3	3	3
<b>FM-405.4</b>	2	3	2.5	3	<b>FM-406.4</b>	3	2	3	3
<b>Average</b>	2.75	3.00	2.88	3.00	<b>Average</b>	3.00	2.50	2.88	2.63

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
MARKETING – THIRD SEMESTER**

<b>MM – 301: Advertising Management</b>					<b>MM – 302: Marketing Research and Analytics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO2.9</b>	<b>PSO4</b>
<b>MM – 301.1</b>	2.9	2	2.9	1.5	<b>MM – 302.1</b>	2	2.9	2.9	2
<b>MM – 301.2</b>	2.9	2.9	2	2	<b>MM – 302.2</b>	2	2.9	2.9	2.9
<b>MM – 301.3</b>	2.9	2	2.9	2	<b>MM – 302.3</b>	1.5	2	2	2
<b>MM – 301.4</b>	2.9	2.9	2	2.9	<b>MM – 302.4</b>	2.9	2.9	2.9	2
<b>Average</b>	2.90	2.45	2.45	2.10	<b>Average</b>	2.10	2.68	2.68	2.23

  

<b>MM – 303: Sales and Logistics Management</b>					<b>MM – 304: Consumer Behaviour</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MM – 303.1</b>	3	2	3	2	<b>MM – 304.1</b>	3	3	2	2
<b>MM – 303.2</b>	3	2	3	2	<b>MM – 304.2</b>	3	3	3	2
<b>MM – 303.3</b>	3	2.5	3	3	<b>MM – 304.3</b>	3	3	2	2.5
<b>MM – 303.4</b>	2.5	3	3	2	<b>MM – 304.4</b>	3	3	3	2.5
<b>Average</b>	2.88	2.38	3.00	2.25	<b>Average</b>	3.00	3.00	2.50	2.25

  

<b>MM – 305: Strategic Brand Management</b>					<b>MM – 306: Digital and Social Media Marketing</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MM – 305.1</b>	3	2	3	2.5	<b>MM – 306.1</b>	3	2	3	3
<b>MM – 305.2</b>	3	3	2	3	<b>MM – 306.2</b>	3	2	2	3
<b>MM – 305.3</b>	2	2	3	2.5	<b>MM – 306.3</b>	2	3	3	3
<b>MM – 305.4</b>	2	3	2.5	1.5	<b>MM – 306.4</b>	3	2	2	2
<b>Average</b>	2.50	2.50	2.63	2.38	<b>Average</b>	2.75	2.25	2.50	2.75

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
MARKETING – FOURTH SEMESTER**

<b>MM – 401: International Marketing</b>					<b>MM – 402: Business Marketing</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MM-401.1</b>	2	3	3	2	<b>MM-402.1</b>	3	3	2	3
<b>MM-401.2</b>	2	3	3	2.5	<b>MM-402.2</b>	3	3	3	3
<b>MM-401.3</b>	2	2	3	3	<b>MM-402.3</b>	2	3	2.5	2
<b>MM-401.4</b>	3	3	3	3	<b>MM-402.4</b>	3	3	3	2
<b>Average</b>	2.25	2.75	3.00	2.63	<b>Average</b>	2.75	3.00	2.63	2.50

  

<b>MM – 403: Service Marketing</b>					<b>MM – 404: Strategic Marketing</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MM-403.1</b>	3	3	3	3	<b>MM-404.1</b>	3	2	3	3
<b>MM-403.2</b>	3	3	2	3	<b>MM-404.2</b>	2	3	2.5	3
<b>MM-403.3</b>	3	3	3	3	<b>MM-404.3</b>	3	3	1.5	3
<b>MM-403.4</b>	2	2	2	3	<b>MM-404.1</b>	3	2	2	3
<b>Average</b>	2.75	2.75	2.50	3.00	<b>Average</b>	2.75	2.50	2.25	3.00

  

<b>MM – 405: Rural and Agribusiness Marketing</b>					<b>MM – 406: Retail and Mall Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MM-405.1</b>	2	3	3	2.8	<b>MM-406.1</b>	2.3	2.3	2.5	2.5
<b>MM-405.2</b>	2.2	3	2.6	2	<b>MM-406.2</b>	2.4	2.5	3	3
<b>MM-405.3</b>	2	3	3	2	<b>MM-406.3</b>	2.5	2.8	3	2.5
<b>MM-405.4</b>	2	3	3	2	<b>MM-406.4</b>	2.2	2.3	2.6	2.5
<b>Average</b>	2.05	3.00	2.90	2.20	<b>Average</b>	2.35	2.48	2.78	2.63

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
HUMAN RESOURCE (HR) – THIRD SEMESTER**

<b>HRM – 301: HRD: Systems &amp; Strategies</b>					<b>HRM – 302: Indian Labour Legislation</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM – 301.1</b>	3	3	3	3	<b>HRM – 302.1</b>	2	3	3	2
<b>HRM – 301.2</b>	2	2	2	3	<b>HRM – 302.2</b>	3	3	2	2
<b>HRM – 301.3</b>	3	3	3	2	<b>HRM – 302.3</b>	2	3	2	3
<b>HRM – 301.4</b>	2	2	2	3	<b>HRM – 302.4</b>	2	3	3	2
<b>Average</b>	2.50	2.50	2.50	2.75	<b>Average</b>	2.25	3.00	2.50	2.25
<b>HRM – 303: Management of Industrial Relations</b>					<b>HRM – 304: Human Resource Metrics and Analytics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM – 303.1</b>	2	2	3	3	<b>HRM – 304.1</b>	3	2	3	3
<b>HRM – 303.2</b>	3	3	3	3	<b>HRM – 304.2</b>	2	3	3	3
<b>HRM – 303.3</b>	3	3	2	3	<b>HRM – 304.3</b>	3	2	3	3
<b>HRM – 303.4</b>	2	3	3	3	<b>HRM – 304.4</b>	2	3	3	3
<b>Average</b>	2.50	2.75	2.75	3.00	<b>Average</b>	2.50	2.50	3.00	3.00
<b>HRM – 305: Compensation and Reward Management</b>					<b>HRM – 306: Talent Acquisition and Performance Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM – 305.1</b>	2	2	3	1.5	<b>HRM – 306.1</b>	3	2	3	1.5
<b>HRM – 305.2</b>	2	3	3	2	<b>HRM – 306.2</b>	3	3	2	2
<b>HRM – 305.3</b>	2	2	2	3	<b>HRM – 306.3</b>	3	2	3	2
<b>HRM – 305.4</b>	1.5	3	3	1.5	<b>HRM – 306.4</b>	3	3	2	3
<b>Average</b>	1.88	2.50	2.75	2.00	<b>Average</b>	3.00	2.50	2.50	2.13

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
HUMAN RESOURCE(HR) – FOURTH SEMESTER**

<b>HRM – 401: Group Dynamics and Leadership Excellence</b>					<b>HRM – 402: Strategic Human Resource Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM-401.1</b>	2	3	3	2	<b>HRM-402.1</b>	3	3	2	2
<b>HRM-401.2</b>	2	3	3	3	<b>HRM-402.2</b>	2.5	2.5	3	3
<b>HRM-401.3</b>	1.5	2	2	2	<b>HRM-402.3</b>	3	2.5	3	2.5
<b>HRM-401.4</b>	3	3	3	2	<b>HRM-402.4</b>	3	3	3	3
<b>Average</b>	2.13	2.75	2.75	2.25	<b>Average</b>	2.88	2.75	2.75	2.63
<b>HRM – 403: Cross Cultural and Global HRM</b>					<b>HRM – 404: Counselling, Mentoring and Negotiation Skills</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM-403.1</b>	3	3	3	2.5	<b>HRM-404.1</b>	3	2.5	3	2.5
<b>HRM-403.2</b>	2.5	2.5	3	3	<b>HRM-404.2</b>	2.5	3	3	2.5
<b>HRM-403.3</b>	3	3	3	3	<b>HRM-404.3</b>	3	2.5	3	3
<b>HRM-403.4</b>	2.5	2.5	3	3	<b>HRM-404.1</b>	2.5	3	3	3
<b>Average</b>	2.75	2.75	3.00	2.88	<b>Average</b>	2.75	2.75	3.00	2.75
<b>HRM – 405: Change Management &amp; Organisational Development</b>					<b>HRM – 406: Competency Mapping &amp; Assessment Centres</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>HRM-405.1</b>	3	2.5	3	3	<b>HRM-406.1</b>	3	3	3	3
<b>HRM-405.2</b>	3	2.5	2.5	3	<b>HRM-406.2</b>	3	3	3	3
<b>HRM-405.3</b>	3	2.5	3	2.5	<b>HRM-406.3</b>	2.5	2.5	3	2.5
<b>HRM-405.4</b>	3	2.5	2.5	2.5	<b>HRM-406.4</b>	3	2.5	3	2.5
<b>Average</b>	3.00	2.50	2.75	2.75	<b>Average</b>	2.88	2.75	3.00	2.75

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INTERNATIONAL BUSINESS (IB) – THIRD SEMESTER**

<b>IB – 301: International Accounting</b>					<b>IB – 302: Foreign Exchange Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB – 301.1</b>	3	2	3	2.5	<b>IB – 302.1</b>	2	3	2	3
<b>IB – 301.2</b>	3	2.5	3	3	<b>IB – 302.2</b>	2.5	3	2	3
<b>IB – 301.3</b>	2.5	3	2	2	<b>IB – 302.3</b>	3	2.5	3	3
<b>IB – 301.4</b>	3	3	3	3	<b>IB – 302.4</b>	3	3	2.5	2
<b>Average</b>	2.88	2.63	2.75	2.63	<b>Average</b>	2.63	2.88	2.38	2.75
<b>IB – 303: Export-Import Procedures and Documentation</b>					<b>IB – 304: India’s Foreign Trade and Policy</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB – 303.1</b>	2	2	3	2	<b>IB – 304.1</b>	2.5	3	3	2.5
<b>IB – 303.2</b>	3	3	3	3	<b>IB – 304.2</b>	2.5	3	3	2.5
<b>IB – 303.3</b>	3	1.5	3	3	<b>IB – 304.3</b>	2	3	2.5	3
<b>IB – 303.4</b>	3.5	2.5	3	3	<b>IB – 304.4</b>	3	2.5	3	3
<b>Average</b>	2.88	2.25	3.00	2.75	<b>Average</b>	2.50	2.88	2.88	2.75
<b>IB – 305: International Business Environment</b>					<b>IB – 306: International Logistics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB – 305.1</b>	3	3	3	3	<b>IB – 306.1</b>	2	3	2	3
<b>IB – 305.2</b>	2.5	2.5	3	3	<b>IB – 306.2</b>	3	2.5	3	3
<b>IB – 305.3</b>	3	3	3	2	<b>IB – 306.3</b>	2	3	2.5	2
<b>IB – 305.4</b>	3	1.5	2	3	<b>IB – 306.4</b>	3	3	3	2
<b>Average</b>	2.88	2.50	2.75	2.75	<b>Average</b>	2.50	2.88	2.63	2.50

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INTERNATIONAL BUSINESS (IB) – FOURTH SEMESTER**

<b>IB – 401: International Financial Markets</b>					<b>IB – 402: International Marketing</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB-401.1</b>	3	3	2.5	3	<b>IB-402.1</b>	3	3	3	2
<b>IB-401.2</b>	3	2.5	3	3	<b>IB-402.2</b>	3	2.5	2.5	2.5
<b>IB-401.3</b>	3	3	3	3	<b>IB-402.3</b>	3	3	3	1.5
<b>IB-401.4</b>	3	3	3	2	<b>IB-402.4</b>	3	3	3	3
<b>Average</b>	3.00	2.88	2.88	2.75	<b>Average</b>	3.00	2.88	2.88	2.25
<b>IB – 403: International Financial Management</b>					<b>IB – 404: International Strategic Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB-403.1</b>	2.5	2	2.4	2.5	<b>IB-404.1</b>	3	3	2	3
<b>IB-403.2</b>	2.7	2.6	2	2.7	<b>IB-404.2</b>	2.5	2.5	3	3
<b>IB-403.3</b>	2.5	2	2.6	2.5	<b>IB-404.3</b>	2	3	3	1.5
<b>IB-403.4</b>	2	2.7	2	2.8	<b>IB-404.1</b>	3	1.5	3	2.5
<b>Average</b>	2.43	2.33	2.25	2.63	<b>Average</b>	2.63	2.50	2.75	2.50
<b>IB – 405: Cross-cultural and Global Management</b>					<b>IB – 406: Regional Economic Blocks</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IB-405.1</b>	3	3	3	2	<b>IB-406.1</b>	3	2.5	2.5	3
<b>IB-405.2</b>	3	3	3	3	<b>IB-406.2</b>	3	2.5	2.5	3
<b>IB-405.3</b>	3	3	3	2	<b>IB-406.3</b>	3	2	2.5	2.5
<b>IB-405.4</b>	2.5	2.5	3	3	<b>IB-406.4</b>	3	2.5	2.5	3
<b>Average</b>	2.88	2.88	3.00	2.50	<b>Average</b>	3.00	2.38	2.50	2.88

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INFORMATION TECHNOLOGY (IT) – THIRD SEMESTER**

<b>IT – 301: Business Intelligence and Analytics</b>					<b>IT – 302: Enterprise Resource Planning</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT – 301.1</b>	3	3	3	2.5	<b>IT – 302.1</b>	2.5	2.5	3	1.5
<b>IT – 301.2</b>	3	2.5	3	2.5	<b>IT – 302.2</b>	2	2	2.5	3
<b>IT – 301.3</b>	3	3	2.5	3	<b>IT – 302.3</b>	2.5	2	3	2
<b>IT – 301.4</b>	3	2.5	3	3	<b>IT – 302.4</b>	2	3	2.5	1.5
<b>Average</b>	3.00	2.75	2.88	2.75	<b>Average</b>	2.25	2.38	2.75	2.00

  

<b>IT – 303: Relational Database Management System</b>					<b>IT – 304: E-Customer Relationship Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT – 303.1</b>	3	2	3	2	<b>IT – 304.1</b>	2.5	3	3	2
<b>IT – 303.2</b>	3	2.5	3	2	<b>IT – 304.2</b>	2.5	1.5	2.5	2.5
<b>IT – 303.3</b>	3	2	2.5	1.5	<b>IT – 304.3</b>	1.5	1.5	1.5	1
<b>IT – 303.4</b>	3	2.5	2.5	1.5	<b>IT – 304.4</b>	1.5	1.5	1.5	1
<b>Average</b>	3.00	2.25	2.75	1.75	<b>Average</b>	2.00	1.88	2.13	1.63

  

<b>IT – 305: System Analysis and Design</b>					<b>IT – 306: Knowledge Management Systems</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT – 305.1</b>	3	1.5	2	1.5	<b>IT – 306.1</b>	3	2.5	3	3
<b>IT – 305.2</b>	1.5	1.5	3	2	<b>IT – 306.2</b>	3	2.5	2.5	2.5
<b>IT – 305.3</b>	2	2	2.5	2.5	<b>IT – 306.3</b>	3	2.5	2.5	3
<b>IT – 305.4</b>	2.5	1.5	2.5	2	<b>IT – 306.4</b>	3	2.5	3	2
<b>Average</b>	2.25	1.63	2.50	2.00	<b>Average</b>	3.00	2.50	2.75	2.63

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
INFORMATION TECHNOLOGY (IT) – FOURTH SEMESTER**

<b>IT – 401: Data Mining for Business Decisions</b>					<b>IT – 402: Software Engineering</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT-401.1</b>	2.5	1.5	2.5	2	<b>IT-402.1</b>	2.5	2	2.5	2.5
<b>IT-401.2</b>	3	3	3	3	<b>IT-402.2</b>	2	3	3	2.5
<b>IT-401.3</b>	2.5	1.5	3	3	<b>IT-402.3</b>	2.5	3	2.5	2.5
<b>IT-401.4</b>	2	2	2.5	2.5	<b>IT-402.4</b>	2.5	3	3	2.5
<b>Average</b>	2.50	2.00	2.75	2.63	<b>Average</b>	2.38	2.75	2.75	2.50

  

<b>IT – 403: E-Business Financial Modeling</b>					<b>IT – 404: Internet and Web Designing</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT-403.1</b>	3	3	2.5	3	<b>IT-404.1</b>	2.5	2	2	2.5
<b>IT-403.2</b>	3	3	2.5	3	<b>IT-404.2</b>	2	2	2	2.5
<b>IT-403.3</b>	3	3	2.5	3	<b>IT-404.3</b>	2.5	2	2	2.5
<b>IT-403.4</b>	3	3	2.5	3	<b>IT-404.1</b>	2	2	2	2.5
<b>Average</b>	3.00	3.00	2.50	3.00	<b>Average</b>	2.25	2.00	2.00	2.50

  

<b>IT – 405: E-Commerce</b>					<b>IT – 406: Information Security and Cyber Laws</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>IT-405.1</b>	2.5	1.5	3	2	<b>IT-406.1</b>	3	2.5	3	3
<b>IT-405.2</b>	3	3	2.5	2	<b>IT-406.2</b>	3	2.5	3	3
<b>IT-405.3</b>	3	3	2.5	2.5	<b>IT-406.3</b>	3	2.5	3	3
<b>IT-405.4</b>	2.5	2	2.5	2	<b>IT-406.4</b>	3	2.5	3	3
<b>Average</b>	2.75	2.38	2.63	2.13	<b>Average</b>	3.00	2.50	3.00	3.00

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
PRODUCTION & OPERATIONS MANAGEMENT (POM) – THIRD SEMESTER**

<b>POM – 301: Purchasing and Materials Management</b>					<b>POM – 302: Total Quality Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM – 301.1</b>	2	2.3	2.2	2.4	<b>POM – 302.1</b>	1.9	2	2.5	2
<b>POM – 301.2</b>	2.3	2.9	3	2.5	<b>POM – 302.2</b>	2.8	3	3	2.6
<b>POM – 301.3</b>	3	2.8	2.9	2.4	<b>POM – 302.3</b>	2.2	3	3	2.4
<b>POM – 301.4</b>	2.9	2.8	3	2.5	<b>POM – 302.4</b>	2.5	2.9	3	2.3
<b>Average</b>	2.55	2.70	2.78	2.45	<b>Average</b>	2.35	2.73	2.88	2.33
<b>POM – 303: Production Planning and Control</b>					<b>POM – 304: Logistics Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM – 303.1</b>	2.1	2	2.5	2	<b>POM – 304.1</b>	2	3	2.9	2
<b>POM – 303.2</b>	2.8	3	3	2.6	<b>POM – 304.2</b>	3	3	3	2.3
<b>POM – 303.3</b>	2.6	3	2.9	2.6	<b>POM – 304.3</b>	1.9	2	2.3	2
<b>POM – 303.4</b>	2.5	2.9	3	2.3	<b>POM – 304.4</b>	3	2.9	3	2.5
<b>Average</b>	2.50	2.73	2.85	2.38	<b>Average</b>	2.48	2.73	2.80	2.20
<b>POM – 305: Service Operations Management</b>					<b>POM – 306: Technology Acquisition and Diffusion</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM – 305.1</b>	2	3	2.9	2	<b>POM – 306.1</b>	2.9	3	2.2	2.1
<b>POM – 305.2</b>	3	3	3	2.3	<b>POM – 306.2</b>	2.5	3	3	2
<b>POM – 305.3</b>	2.4	2	2.3	2	<b>POM – 306.3</b>	3	3	2.9	1.9
<b>POM – 305.4</b>	3	2.8	3	2.5	<b>POM – 306.4</b>	2.9	3	3	2.5
<b>Average</b>	2.60	2.70	2.80	2.20	<b>Average</b>	2.83	3.00	2.78	2.13

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
PRODUCTION & OPERATIONS MANAGEMENT (POM)– FOURTH SEMESTER**

<b>POM – 401: Applied Operations Research</b>					<b>POM – 402: Goal Programming in Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM-401.1</b>	3	3	3	2.5	<b>POM-402.1</b>	2	3	2.9	2
<b>POM-401.2</b>	3	3	3	3	<b>POM-402.2</b>	3	2.5	2.5	2.3
<b>POM-401.3</b>	3	2.8	2.9	1.9	<b>POM-402.3</b>	3	2.9	2.3	2
<b>POM-401.4</b>	3	2.5	2.4	2	<b>POM-402.4</b>	3	2.5	3	2.5
<b>Average</b>	3.00	2.83	2.83	2.35	<b>Average</b>	2.75	2.73	2.68	2.20
<b>POM – 403: Transportation Management</b>					<b>POM – 404: Technology Forecasting</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM-403.1</b>	2	2.5	2	1.7	<b>POM-404.1</b>	2.9	2.4	2.6	2.3
<b>POM-403.2</b>	2.5	2.4	2.6	2.3	<b>POM-404.2</b>	2.5	2	2.1	2
<b>POM-403.3</b>	2.8	2.2	2.6	2.4	<b>POM-404.3</b>	2.4	2.5	3	2.8
<b>POM-403.4</b>	2.7	2.5	2.8	2.4	<b>POM-404.1</b>	3	3	3	2.2
<b>Average</b>	2.50	2.40	2.50	2.20	<b>Average</b>	2.70	2.48	2.68	2.33
<b>POM – 405: R&amp;D Management</b>					<b>POM – 406: Programme Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>POM-405.1</b>	2.6	2.5	2.9	2.3	<b>POM-406.1</b>	2.7	3	3	2.2
<b>POM-405.2</b>	2.7	2.8	3	2.2	<b>POM-406.2</b>	3	3	3	2.5
<b>POM-405.3</b>	3	3	2.9	2.2	<b>POM-406.3</b>	3	2.5	3	2.2
<b>POM-405.4</b>	3	3	3	2.5	<b>POM-406.4</b>	2.6	3	2.8	2.4
<b>Average</b>	2.83	2.83	2.95	2.30	<b>Average</b>	2.83	2.88	2.95	2.33

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
ENTREPRENEURSHIP DEVELOPMENT (ED) – THIRD SEMESTER**

<b>ED – 301: Fundamentals of Entrepreneurship Development</b>					<b>ED – 302: Creativity and New Venture Creation</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED – 301.1</b>	3	3	3	3	<b>ED – 302.1</b>	2.5	2.5	2.5	2.5
<b>ED – 301.2</b>	2.5	3	2.5	3	<b>ED – 302.2</b>	2.5	2.5	3	3
<b>ED – 301.3</b>	3	2.5	3	2.5	<b>ED – 302.3</b>	2.5	2.5	2.5	3
<b>ED – 301.4</b>	3	3	2.5	2.5	<b>ED – 302.4</b>	2.5	2.5	2.5	2.5
<b>Average</b>	2.88	2.88	2.75	2.75	<b>Average</b>	2.50	2.50	2.63	2.75
<b>ED – 303: Institutional support to Entrepreneur &amp; MSMEs</b>					<b>ED – 304: Family Business Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED – 303.1</b>	3	2	2.5	2.5	<b>ED – 304.1</b>	2.5	2.5	3	2.5
<b>ED – 303.2</b>	3	2.5	2.5	2.5	<b>ED – 304.2</b>	2.5	2.5	2.5	2.5
<b>ED – 303.3</b>	3	3	3	2.5	<b>ED – 304.3</b>	3	2.5	3	2.5
<b>ED – 303.4</b>	3	3	3	3	<b>ED – 304.4</b>	3	3	3	3
<b>Average</b>	3.00	2.63	2.75	2.63	<b>Average</b>	2.75	2.63	2.88	2.63
<b>ED – 305: Legal Framework for New Age Businesses</b>					<b>ED – 306: Social Entrepreneurship</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED – 305.1</b>	2.5	2	3	2.5	<b>ED – 306.1</b>	3	3	3	3
<b>ED – 305.2</b>	2	2.5	3	2.5	<b>ED – 306.2</b>	2.5	3	2.5	3
<b>ED – 305.3</b>	3	2	2.5	3	<b>ED – 306.3</b>	3	2.5	3	2.5
<b>ED – 305.4</b>	3	3	2	2.5	<b>ED – 306.4</b>	3	3	2.5	2.5
<b>Average</b>	2.63	2.38	2.63	2.63	<b>Average</b>	2.88	2.88	2.75	2.75

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
ENTREPRENEURSHIP DEVELOPMENT (ED)– FOURTH SEMESTER**

<b>ED – 401: Enterprise Planning, Appraisal and Financing</b>					<b>ED – 402: Financial Innovation and Entrepreneurship</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED-401.1</b>	2.5	2	3	2.5	<b>ED-402.1</b>	2.5	2.5	2.5	2.5
<b>ED-401.2</b>	2	2.5	3	2.5	<b>ED-402.2</b>	2.5	2.5	3	3
<b>ED-401.3</b>	3	2	2.5	3	<b>ED-402.3</b>	2.5	2.5	2.5	3
<b>ED-401.4</b>	3	3	2	2.5	<b>ED-402.4</b>	2.5	2.5	2.5	2.5
<b>Average</b>	2.63	2.38	2.63	2.63	<b>Average</b>	2.50	2.50	2.63	2.75
<b>ED – 403: Marketing Management in New Age Businesses</b>					<b>ED – 404: New Enterprises Human Resource Management</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED-403.1</b>	3	2	2.5	2.5	<b>ED-404.1</b>	3	2.5	2	1.5
<b>ED-403.2</b>	3	2.5	2.5	2.5	<b>ED-404.2</b>	3	3	2.5	1.5
<b>ED-403.3</b>	3	3	3	2.5	<b>ED-404.3</b>	3	2	2.5	1.5
<b>ED-403.4</b>	3	3	3	3	<b>ED-404.1</b>	3	2.5	2.5	1.5
<b>Average</b>	3.00	2.63	2.75	2.63	<b>Average</b>	3.00	2.50	2.38	1.50
<b>ED – 405: MSMEs Policy Framework</b>					<b>ED – 406: Contemporary Environment in MSMEs</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>ED-405.1</b>	3	3	3	3	<b>ED-406.1</b>	3	2.5	2	1.5
<b>ED-405.2</b>	2.5	2.5	2.5	2.5	<b>ED-406.2</b>	3	2.5	2	1.5
<b>ED-405.3</b>	3	1.5	2	2.5	<b>ED-406.3</b>	3	2.5	2	1.5
<b>ED-405.4</b>	3	1.5	2	2.5	<b>ED-406.4</b>	3	2.5	2	1.5
<b>Average</b>	2.88	2.13	2.38	2.63	<b>Average</b>	3.00	2.50	2.00	1.50

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
BUSINESS ANALYTICS (BA) – THIRD SEMESTER**

<b>BA – 301: Business Analysis using Excel</b>					<b>BA – 302: Econometrics for Business Forecasting</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA – 301.1</b>	2	2	3	3	<b>BA – 302.1</b>	3	2.5	2.5	2.5
<b>BA – 301.2</b>	2	2	3	2	<b>BA – 302.2</b>	2	2	3	3
<b>BA – 301.3</b>	3	3	2.5	2	<b>BA – 302.3</b>	3	2.5	2	1.5
<b>BA – 301.4</b>	3	3	3	2	<b>BA – 302.4</b>	1.5	3	2	3
<b>Average</b>	2.50	2.50	2.88	2.25	<b>Average</b>	2.38	2.50	2.38	2.50

  

<b>BA – 303: Business Data Mining</b>					<b>BA – 304: Decision Modeling and Data Analysis</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA – 303.1</b>	3	2.5	3	2	<b>BA – 304.1</b>	3	3	3	2.5
<b>BA – 303.2</b>	2	2	2.5	3	<b>BA – 304.2</b>	3	3	3	3
<b>BA – 303.3</b>	3	3	2	3	<b>BA – 304.3</b>	3	3	2.5	3
<b>BA – 303.4</b>	1.5	2	1.5	2.5	<b>BA – 304.4</b>	3	3	3	2.5
<b>Average</b>	2.38	2.38	2.25	2.63	<b>Average</b>	3.00	3.00	2.88	2.75

  

<b>BA – 305: Data Analytics using R</b>					<b>BA – 306: Social Media Analytics</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA – 305.1</b>	3	2	2.5	2	<b>BA – 306.1</b>	2.5	2.5	2.5	2.5
<b>BA – 305.2</b>	3	2	2.5	2	<b>BA – 306.2</b>	2.5	2.5	3	2.5
<b>BA – 305.3</b>	3	2	2	2	<b>BA – 306.3</b>	3	2	3	3
<b>BA – 305.4</b>	3	2	2.5	2	<b>BA – 306.4</b>	3	2.5	3	2.5
<b>Average</b>	3.00	2.00	2.38	2.00	<b>Average</b>	2.75	2.38	2.88	2.63

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
BUSINESS ANALYTICS (BA)– FOURTH SEMESTER**

<b>BA – 401: Time Series Data Analysis</b>					<b>BA – 402: Applied Multi Variant Analysis</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA-401.1</b>	3	3	3	3	<b>BA-402.1</b>	2.5	3	2.5	3
<b>BA-401.2</b>	3	3	3	3	<b>BA-402.2</b>	3	3	3	3
<b>BA-401.3</b>	3	3	2.5	3	<b>BA-402.3</b>	3	3	2.5	3
<b>BA-401.4</b>	3	3	3	3	<b>BA-402.4</b>	3	3	3	2.5
<b>Average</b>	3.00	3.00	2.88	3.00	<b>Average</b>	2.88	3.00	2.75	2.88

  

<b>BA – 403: Financial Modeling</b>					<b>BA – 404: Predictive Analysis for Business Decision</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA-403.1</b>	3	3	3	3	<b>BA-404.1</b>	3	2.5	3	3
<b>BA-403.2</b>	3	2.5	3	3	<b>BA-404.2</b>	3	3	3	3
<b>BA-403.3</b>	3	3	3	2.5	<b>BA-404.3</b>	3	3	3	2.5
<b>BA-403.4</b>	3	2.5	3	3	<b>BA-404.1</b>	3	3	3	3
<b>Average</b>	3.00	2.75	3.00	2.88	<b>Average</b>	3.00	2.88	3.00	2.88

  

<b>BA – 405: Data Analysis using Python</b>					<b>BA – 406: IOT and Big Data</b>				
<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>COs#</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>BA-405.1</b>	3	2.5	3	2.5	<b>BA-406.1</b>	3	2.5	3	2.5
<b>BA-405.2</b>	3	3	3	3	<b>BA-406.2</b>	3	3	3	3
<b>BA-405.3</b>	3	2.5	3	3	<b>BA-406.3</b>	3	3	3	2.5
<b>BA-405.4</b>	3	3	3	3	<b>BA-406.4</b>	3	3	3	3
<b>Average</b>	3.00	2.75	3.00	2.88	<b>Average</b>	3.00	2.88	3.00	2.75

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
AGRIBUSINESS MANAGEMENT (ABM) – THIRD SEMESTER**

<b>ABM – 301: Agri-Business Management</b>					<b>ABM – 302: Agricultural Economics</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM – 301.1</b>	3	2	3	3	<b>ABM – 302.1</b>	3	3	2.5	3
<b>ABM – 301.2</b>	3	3	2.5	3	<b>ABM – 302.2</b>	3	3	3	3
<b>ABM – 301.3</b>	3	3	3	3	<b>ABM – 302.3</b>	3	3	2.5	2.5
<b>ABM – 301.4</b>	3	3	3	3	<b>ABM – 302.4</b>	3	3	3	2
<b>Average</b>	3.00	2.75	2.88	3.00	<b>Average</b>	3.00	3.00	2.75	2.63

  

<b>ABM – 303: Agricultural Marketing Management</b>					<b>ABM – 304: Agri- Entrepreneurship</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM – 303.1</b>	3	3	3	2.5	<b>ABM – 304.1</b>	3	3	3	2.5
<b>ABM – 303.2</b>	3	2.5	3	2.5	<b>ABM – 304.2</b>	3	3	2.5	3
<b>ABM – 303.3</b>	3	3	3	2.5	<b>ABM – 304.3</b>	2.5	3	2.5	3
<b>ABM – 303.4</b>	3	3	3	3	<b>ABM – 304.4</b>	3	3	2	2.5
<b>Average</b>	3.00	2.88	3.00	2.63	<b>Average</b>	2.88	3.00	2.50	2.75

  

<b>ABM – 305: Agri-Business Finance</b>				
COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM – 305.1</b>	3	3	3	3
<b>ABM – 305.2</b>	3	3	3	2.5
<b>ABM – 305.3</b>	3	2.5	2.5	3
<b>ABM – 305.4</b>	3	2.5	2.5	3
<b>Average</b>	3.00	2.75	2.75	2.88

**Table 3 : CO PSO MATRIX (THIRD & FOURTH SEMESTER) SPECIALISATION PAPERS  
AGRIBUSINESS MANAGEMENT (ABM)– FOURTH SEMESTER**

<b>ABM – 401: Changing Paradigm of Agri-Business</b>					<b>ABM – 402: Agri Supply Chain and Logistics Management</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM-401.1</b>	3	2	3	3	<b>ABM-402.1</b>	3	3	2.5	3
<b>ABM-401.2</b>	3	3	2.5	3	<b>ABM-402.2</b>	3	3	3	2.5
<b>ABM-401.3</b>	3	3	3	3	<b>ABM-402.3</b>	2.5	2.5	2.5	3
<b>ABM-401.4</b>	3	3	3	3	<b>ABM-402.4</b>	3	2.5	3	2.5
<b>Average</b>	3.00	2.75	2.88	3.00	<b>Average</b>	2.88	2.75	2.75	2.75

  

<b>ABM – 403: Food Processing Management</b>					<b>ABM – 404: International Trade in Agri-Business</b>				
COs#	PSO1	PSO2	PSO3	PSO4	COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM-403.1</b>	3	3	3	2.5	<b>ABM-404.1</b>	3	3	3	2.5
<b>ABM-403.2</b>	2.5	2.5	2.5	3	<b>ABM-404.2</b>	2.5	3	3	3
<b>ABM-403.3</b>	3	2.5	2.5	2.5	<b>ABM-404.3</b>	3	2.5	3	3
<b>ABM-403.4</b>	2.5	3	2.5	3	<b>ABM-404.1</b>	2.5	3	3	3
<b>Average</b>	2.75	2.75	2.63	2.75	<b>Average</b>	2.75	2.88	3.00	2.88

  

<b>ABM – 405: Marketing of Agri-Inputs</b>				
COs#	PSO1	PSO2	PSO3	PSO4
<b>ABM-405.1</b>	3	3	3	2.5
<b>ABM-405.2</b>	2.5	2	2	2.5
<b>ABM-405.3</b>	2.5	2	2	3
<b>ABM-405.4</b>	3	2.5	2.5	2.5
<b>Average</b>	2.75	2.38	2.38	2.63

**ANNEXURE – 2 TABLE 4 - CO-PO-PSO MATRIX**

**Table 4: CO PO PSO MATRIX  
(FIRST & SECOND SEMESTER)**

First Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
MBA-101	3.00	2.60	3.00	2.88	2.63	2.75	2.93	3.00	3.0	2.6	3.0	2.8
MBA-102	3.00	2.75	3.00	2.87	2.75	2.87	2.62	2.87	3.0	2.8	3.0	2.9
MBA-103	2.37	3.00	2.75	3.00	3.00	2.87	2.50	2.87	2.4	3.0	2.8	3.0
MBA-104	2.88	2.75	2.88	2.88	2.88	3.00	2.88	2.88	2.9	2.8	2.9	2.9
MBA-105	2.88	2.88	3.00	2.88	2.88	2.88	3.00	3.00	2.9	2.9	3.0	2.9
MBA-106	2.63	3.00	2.88	2.75	3.00	3.00	2.75	3.00	2.6	3.0	2.7	2.8
MBA-107	3.00	2.60	3.00	2.88	2.83	3.00	2.88	2.88	3.0	2.7	2.9	2.7
MBA-108	2.85	3.00	2.88	3.00	2.88	2.88	2.88	3.00	2.9	3.0	2.9	3.0
<b>Average</b>	<b>2.83</b>	<b>2.82</b>	<b>2.92</b>	<b>2.89</b>	<b>2.85</b>	<b>2.91</b>	<b>2.80</b>	<b>2.94</b>	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>	<b>2.9</b>

  

Second Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
MBA-201	2.88	2.98	3.00	2.43	2.83	2.85	3.00	2.93	2.9	3.0	3.0	2.4
MBA-202	2.88	2.63	3.00	2.88	3.00	2.88	2.88	3.00	2.9	2.6	3.0	2.9
MBA-203	2.63	2.50	2.88	2.13	2.75	2.25	2.25	3.00	2.7	2.6	2.9	2.5
MBA-204	2.40	2.68	2.93	2.50	2.63	2.33	3.00	2.68	2.7	2.5	3.0	2.8
MBA-205	2.58	2.65	2.48	2.20	2.75	2.63	2.53	2.63	2.8	2.8	2.8	2.4
MBA-206	2.38	2.45	2.58	3.00	3.00	2.35	2.18	3.00	2.7	2.7	2.8	3.0
MBA-207	2.38	2.50	2.75	2.63	2.38	2.13	2.75	2.18	2.7	2.8	2.9	2.8
MBA-208	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3	3	3	3
<b>Average</b>	<b>2.64</b>	<b>2.67</b>	<b>2.83</b>	<b>2.59</b>	<b>2.79</b>	<b>2.55</b>	<b>2.70</b>	<b>2.80</b>	<b>2.8</b>	<b>2.7</b>	<b>2.9</b>	<b>2.7</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
COMPULSORY PAPERS**

<b>Third Semester-Compulsory Papers</b>												
<b>Course Code</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-301</b>	2.85	2.55	2.83	2.63	2.88	2.75	2.85	2.58	2.9	2.6	2.8	2.6
<b>MBA-302</b>	1.98	2.53	2.60	3.00	2.55	2.23	2.28	2.43	2.0	2.5	2.6	3.0
<b>MBA-303</b>	3.00	2.83	2.95	3.00	2.98	3.00	3.00	2.93	3.0	2.9	3.0	3.0
<b>Average</b>	<b>2.61</b>	<b>2.63</b>	<b>2.79</b>	<b>2.88</b>	<b>2.80</b>	<b>2.66</b>	<b>2.71</b>	<b>2.64</b>	<b>2.6</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>

  

<b>Fourth Semester-Compulsory Papers</b>												
<b>Course Code</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>MBA-401</b>	2.60	3.00	2.98	2.68	2.93	3.00	2.88	2.95	2.6	3.0	3.0	2.7
<b>MBA-402</b>	3.00	2.50	2.73	2.88	3.00	2.88	3.00	2.73	3.0	2.5	2.6	2.9
<b>MBA-403</b>	2.75	3.00	2.88	3.00	2.88	3.00	2.88	2.88	2.8	3.0	2.9	3.0
<b>Average</b>	<b>2.78</b>	<b>2.83</b>	<b>2.86</b>	<b>2.85</b>	<b>2.93</b>	<b>2.96</b>	<b>2.92</b>	<b>2.85</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- FINANCE**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
FM-301	2.75	2.38	2.63	2.13	3.00	2.25	2.75	2.48	2.8	2.4	2.6	2.1
FM-302	2.63	2.88	2.25	2.63	2.50	2.00	3.00	2.25	2.6	2.9	2.3	2.6
FM-303	2.88	2.88	2.88	2.25	2.75	2.75	2.75	2.50	2.9	2.9	2.9	2.3
FM-304	2.63	3.00	2.88	2.50	2.63	2.75	2.88	2.75	2.6	3.0	2.9	2.5
FM-305	2.75	2.53	2.88	2.70	2.65	2.88	2.95	2.50	2.8	2.5	2.9	2.6
FM-306	2.60	3.00	3.00	2.93	2.90	2.85	2.63	3.00	2.7	3.0	3.0	3.0
Average	<b>2.70</b>	<b>2.78</b>	<b>2.75</b>	<b>2.52</b>	<b>2.74</b>	<b>2.58</b>	<b>2.83</b>	<b>2.58</b>	<b>2.7</b>	<b>2.8</b>	<b>2.8</b>	<b>2.5</b>

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
FM-401	2.88	2.63	2.68	2.63	2.93	3.00	2.75	3.00	3.0	2.7	2.8	2.7
FM-402	2.75	3.00	2.88	2.75	2.63	3.00	2.88	3.00	2.9	3.0	3.0	2.8
FM-403	2.98	2.75	2.93	2.63	3.00	3.00	2.45	3.00	3.0	2.8	3.0	2.7
FM-404	2.88	2.88	2.88	3.00	2.93	3.00	2.85	3.00	3.0	3.0	3.0	3.0
FM-405	2.75	3.00	2.90	3.00	2.73	3.00	3.00	2.88	2.8	3.0	2.9	3.0
FM-406	3.00	2.50	2.88	2.63	2.75	2.88	3.00	3.00	3.0	2.5	2.9	2.6
Average	<b>2.87</b>	<b>2.79</b>	<b>2.85</b>	<b>2.77</b>	<b>2.83</b>	<b>2.98</b>	<b>2.82</b>	<b>2.98</b>	<b>2.9</b>	<b>2.8</b>	<b>2.9</b>	<b>2.8</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- MARKETING**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
MM-301	3.00	2.50	2.50	2.23	2.50	2.55	3.00	2.20	2.9	2.5	2.5	2.1
MM-302	2.20	2.75	2.75	2.28	2.38	2.83	2.75	2.53	2.1	2.7	2.7	2.2
MM-303	2.88	2.40	3.00	2.28	2.25	3.00	2.45	2.28	2.9	2.4	3.0	2.3
MM-304	3.00	3.00	2.65	2.25	2.58	2.50	2.88	2.50	3.0	3.0	2.5	2.3
MM-305	2.50	2.50	2.63	2.48	2.70	2.75	2.75	2.50	2.5	2.5	2.6	2.4
MM-306	2.83	2.30	2.50	2.75	2.40	2.75	3.00	2.33	2.8	2.3	2.5	2.8
<b>Average</b>	<b>2.73</b>	<b>2.58</b>	<b>2.67</b>	<b>2.38</b>	<b>2.47</b>	<b>2.73</b>	<b>2.80</b>	<b>2.39</b>	<b>2.7</b>	<b>2.5</b>	<b>2.6</b>	<b>2.3</b>

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
MM-401	2.28	2.75	3.00	2.63	2.50	3.00	3.00	2.28	2.3	2.8	3.0	2.6
MM-402	2.75	3.00	2.63	2.50	2.75	2.63	2.88	2.75	2.8	3.0	2.6	2.5
MM-403	2.75	2.78	2.50	3.00	2.85	2.75	2.75	2.38	2.8	2.8	2.5	3.0
MM-404	2.75	2.55	2.35	3.00	2.80	2.50	2.75	2.38	2.8	2.5	2.3	3.0
MM-405	2.15	3.00	2.90	2.20	2.90	2.95	3.00	2.95	2.1	3.0	2.9	2.2
MM-406	2.35	2.48	2.78	2.63	2.88	2.95	2.95	3.00	2.4	2.5	2.8	2.6
<b>Average</b>	<b>2.50</b>	<b>2.76</b>	<b>2.69</b>	<b>2.66</b>	<b>2.78</b>	<b>2.80</b>	<b>2.89</b>	<b>2.62</b>	<b>2.5</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- HUMAN RESOURCE(HR)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
HRM-301	2.60	2.50	2.50	2.85	2.75	2.53	2.55	2.25	2.5	2.5	2.5	2.8
HRM-302	2.35	3.00	2.65	2.28	2.50	2.50	2.75	2.50	2.3	3.0	2.5	2.3
HRM-303	2.50	2.75	2.75	3.00	2.50	2.00	3.00	2.25	2.5	2.8	2.8	3.0
HRM-304	2.50	2.50	3.00	3.00	2.00	3.00	3.00	2.00	2.5	2.5	3.0	3.0
HRM-305	2.00	2.50	2.75	2.05	2.75	2.75	2.50	1.85	1.9	2.5	2.8	2.0
HRM-306	3.00	2.65	2.60	2.10	2.50	2.53	3.00	2.15	3.0	2.5	2.5	2.1
<b>Average</b>	<b>2.49</b>	<b>2.65</b>	<b>2.71</b>	<b>2.55</b>	<b>2.50</b>	<b>2.55</b>	<b>2.80</b>	<b>2.17</b>	<b>2.4</b>	<b>2.6</b>	<b>2.7</b>	<b>2.5</b>

  

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
HRM-401	2.15	2.75	2.75	2.25	2.40	2.85	2.78	2.50	2.1	2.8	2.8	2.3
HRM-402	2.88	2.75	2.80	2.68	2.88	2.63	2.80	2.75	2.9	2.8	2.8	2.6
HRM-403	2.75	2.75	3.00	2.88	2.50	2.50	2.75	2.75	2.8	2.8	3.0	2.9
HRM-404	2.75	2.75	3.00	2.75	3.00	2.50	2.75	2.75	2.8	2.8	3.0	2.8
HRM-405	3.00	2.45	2.75	2.75	3.00	2.43	2.88	2.75	3.0	2.5	2.8	2.8
HRM-406	2.88	2.78	3.00	2.75	2.58	2.75	2.93	2.75	2.9	2.8	3.0	2.8
<b>Average</b>	<b>2.73</b>	<b>2.70</b>	<b>2.88</b>	<b>2.68</b>	<b>2.73</b>	<b>2.61</b>	<b>2.81</b>	<b>2.71</b>	<b>2.7</b>	<b>2.7</b>	<b>2.9</b>	<b>2.7</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- INTERNATIONAL BUSINESS (IB)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
<b>IB-301</b>	2.88	2.65	2.78	2.63	2.40	2.88	2.30	2.88	2.9	2.6	2.8	2.6
<b>IB-302</b>	2.63	2.88	2.40	2.75	2.75	2.88	2.75	3.00	2.6	2.9	2.4	2.8
<b>IB-303</b>	2.70	2.30	3.00	2.75	2.55	2.75	2.63	2.38	2.9	2.3	3.0	2.8
<b>IB-304</b>	2.50	2.85	2.88	2.80	2.50	2.75	2.88	2.75	2.5	2.9	2.9	2.8
<b>IB-305</b>	2.88	2.50	2.75	2.75	2.75	2.38	2.25	2.75	2.9	2.5	2.8	2.8
<b>IB-306</b>	2.50	2.85	2.65	2.50	2.63	2.23	2.88	2.88	2.5	2.9	2.6	2.5
<b>Average</b>	<b>2.68</b>	<b>2.67</b>	<b>2.74</b>	<b>2.70</b>	<b>2.60</b>	<b>2.64</b>	<b>2.61</b>	<b>2.77</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>

  

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
<b>IB-401</b>	3.00	2.88	2.88	2.75	2.38	3.00	2.63	2.38	3.0	2.9	2.9	2.8
<b>IB-402</b>	3.00	2.88	2.88	2.28	2.50	2.50	2.48	2.75	3.0	2.9	2.9	2.3
<b>IB-403</b>	2.43	2.33	2.25	2.63	2.50	2.45	2.98	2.80	2.43	2.33	2.25	2.63
<b>IB-404</b>	2.63	2.53	2.75	2.50	2.60	2.75	2.63	2.58	2.6	2.5	2.8	2.5
<b>IB-405</b>	2.85	2.93	3.00	2.50	2.75	2.40	2.75	2.50	2.9	2.9	3.0	2.5
<b>IB-406</b>	3.00	2.35	2.50	2.88	2.85	2.53	2.25	2.63	3.0	2.4	2.5	2.9
<b>Average</b>	<b>2.82</b>	<b>2.65</b>	<b>2.71</b>	<b>2.59</b>	<b>2.60</b>	<b>2.60</b>	<b>2.62</b>	<b>2.60</b>	<b>2.8</b>	<b>2.6</b>	<b>2.7</b>	<b>2.6</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- INFORMATION TECHNOLOGY (IT)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
IT-301	3.00	2.75	2.88	2.78	3.00	2.95	3.00	2.63	3.0	2.8	2.9	2.8
IT-302	2.35	2.38	2.75	2.08	2.25	2.75	2.28	2.50	2.3	2.4	2.8	2.0
IT-303	3.00	2.35	2.75	1.80	2.25	3.00	2.75	2.88	3.0	2.3	2.8	1.8
IT-304	2.10	1.95	2.13	1.95	2.08	2.60	2.70	2.50	2.0	1.9	2.1	1.6
IT-305	2.25	1.63	2.48	2.05	2.23	2.75	2.63	2.38	2.3	1.6	2.5	2.0
IT-306	3.00	2.50	2.73	2.53	2.40	2.50	2.50	3.00	3.0	2.5	2.8	2.6
Average	<b>2.62</b>	<b>2.26</b>	<b>2.62</b>	<b>2.20</b>	<b>2.37</b>	<b>2.76</b>	<b>2.64</b>	<b>2.65</b>	<b>2.6</b>	<b>2.2</b>	<b>2.6</b>	<b>2.1</b>

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
IT-401	2.50	2.00	2.75	2.63	2.75	2.75	2.75	2.88	2.5	2.0	2.8	2.6
IT-402	2.38	2.75	2.75	2.50	2.75	2.50	2.88	3.00	2.4	2.8	2.8	2.5
IT-403	3.00	3.00	2.50	3.00	2.38	3.00	2.75	3.00	3	3	2.5	3
IT-404	2.25	2.00	2.00	2.50	2.50	2.25	3.00	2.75	2.25	2	2	2.5
IT-405	2.75	2.38	2.63	2.13	2.88	3.00	2.75	2.63	2.75	2.375	2.625	2.125
IT-406	3.00	2.50	3.00	3.00	2.50	2.63	2.75	3.00	3.0	2.5	3.0	3.0
Average	<b>2.65</b>	<b>2.44</b>	<b>2.60</b>	<b>2.63</b>	<b>2.63</b>	<b>2.69</b>	<b>2.81</b>	<b>2.88</b>	<b>2.6</b>	<b>2.4</b>	<b>2.6</b>	<b>2.6</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- PRODUCTION & OPERATIONS MANAGEMENT (POM)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
<b>POM-301</b>	2.55	2.60	2.78	2.45	2.83	2.75	2.88	2.75	2.6	2.7	2.8	2.5
<b>POM-302</b>	2.35	2.73	2.88	2.33	2.33	2.70	2.85	2.30	2.4	2.7	2.9	2.3
<b>POM-303</b>	2.50	2.73	2.85	2.38	2.38	2.70	2.85	2.05	2.5	2.7	2.9	2.4
<b>POM-304</b>	2.48	2.73	2.80	2.20	2.55	2.68	2.70	2.28	2.5	2.7	2.8	2.2
<b>POM-305</b>	2.60	2.70	2.80	2.20	2.58	2.63	2.65	2.40	2.6	2.7	2.8	2.2
<b>POM-306</b>	2.83	3.00	2.78	2.13	2.85	2.90	2.95	2.55	2.8	3.0	2.8	2.1
<b>Average</b>	<b>2.55</b>	<b>2.75</b>	<b>2.81</b>	<b>2.28</b>	<b>2.58</b>	<b>2.73</b>	<b>2.81</b>	<b>2.39</b>	<b>2.6</b>	<b>2.8</b>	<b>2.8</b>	<b>2.3</b>

  

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
<b>POM-401</b>	3.00	2.83	2.83	2.35	2.50	2.65	2.95	2.43	3.0	2.8	2.8	2.4
<b>POM-402</b>	2.75	2.73	2.68	2.20	2.55	2.65	2.65	2.40	2.8	2.7	2.7	2.2
<b>POM-403</b>	2.50	2.40	2.50	2.20	2.63	2.25	2.68	2.85	2.5	2.4	2.5	2.2
<b>POM-404</b>	2.70	2.48	2.68	2.33	2.48	2.55	2.63	2.88	2.7	2.5	2.7	2.3
<b>POM-405</b>	2.83	2.83	2.95	2.30	2.93	2.98	3.00	2.83	2.8	2.8	3.0	2.3
<b>POM-406</b>	2.83	2.88	2.95	2.33	2.73	2.93	2.98	2.73	2.8	2.9	3.0	2.3
<b>Average</b>	<b>2.77</b>	<b>2.69</b>	<b>2.76</b>	<b>2.28</b>	<b>2.63</b>	<b>2.67</b>	<b>2.81</b>	<b>2.68</b>	<b>2.8</b>	<b>2.7</b>	<b>2.8</b>	<b>2.3</b>

**Table 4:CO PO PSO MATRIX**  
**(THIRD & FOURTH SEMESTER)**  
**SPECIALISATION- ENTREPRENEURSHIP DEVELOPMENT (ED)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
ED-301	2.88	2.88	2.75	2.75	2.88	2.88	2.75	2.75	2.9	2.9	2.8	2.8
ED-302	2.50	2.50	2.63	2.75	2.75	2.75	2.75	2.75	2.5	2.5	2.6	2.8
ED-303	3.00	2.63	2.75	2.63	2.63	2.75	2.75	2.88	3.0	2.6	2.8	2.6
ED-304	2.75	2.63	2.88	2.63	2.75	2.75	2.88	2.75	2.8	2.6	2.9	2.6
ED-305	2.63	2.38	2.63	2.63	2.25	2.75	2.38	2.63	2.6	2.4	2.6	2.6
ED-306	2.88	2.88	2.75	2.75	2.88	2.88	2.75	2.75	2.9	2.9	2.8	2.8
<b>Average</b>	<b>2.77</b>	<b>2.65</b>	<b>2.73</b>	<b>2.69</b>	<b>2.69</b>	<b>2.79</b>	<b>2.71</b>	<b>2.75</b>	<b>2.8</b>	<b>2.6</b>	<b>2.7</b>	<b>2.7</b>

  

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
ED-401	2.63	2.38	2.63	2.63	2.25	2.75	2.38	2.63	2.6	2.4	2.6	2.6
ED-402	2.50	2.50	2.63	2.75	2.75	2.75	2.75	2.75	2.5	2.5	2.6	2.8
ED-403	3.00	2.63	2.75	2.63	2.63	2.75	2.75	2.88	3.0	2.6	2.8	2.6
ED-404	3.00	2.50	2.38	1.50	2.88	2.13	2.00	2.38	3.0	2.5	2.4	1.5
ED-405	2.88	2.13	2.38	2.63	2.50	2.63	2.25	2.50	2.9	2.1	2.4	2.6
ED-406	3.00	2.50	2.00	1.50	2.63	2.75	2.38	2.63	3.0	2.5	2.0	1.5
<b>Average</b>	<b>2.83</b>	<b>2.44</b>	<b>2.46</b>	<b>2.27</b>	<b>2.60</b>	<b>2.63</b>	<b>2.42</b>	<b>2.63</b>	<b>2.8</b>	<b>2.4</b>	<b>2.5</b>	<b>2.3</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- BUSINESS ANALYTICS (BA)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
BA-301	2.50	2.50	2.88	2.25	2.50	2.63	2.63	2.00	2.5	2.5	2.9	2.3
BA-302	2.38	2.50	2.38	2.50	2.63	2.13	2.50	2.50	2.4	2.5	2.4	2.5
BA-303	2.38	2.38	2.25	2.63	2.63	2.25	2.38	2.13	2.4	2.4	2.3	2.6
BA-304	3.00	3.00	2.88	2.75	2.88	3.00	2.88	3.00	3.0	3.0	2.9	2.8
BA-305	3.00	2.00	2.38	2.00	2.50	3.00	3.00	3.00	3.0	2.0	2.4	2.0
BA-306	2.75	2.38	2.88	2.63	2.75	3.00	3.00	3.00	2.8	2.4	2.9	2.6
Average	<b>2.67</b>	<b>2.46</b>	<b>2.60</b>	<b>2.46</b>	<b>2.65</b>	<b>2.67</b>	<b>2.73</b>	<b>2.60</b>	<b>2.7</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
BA-401	3.00	3.00	2.88	3.00	2.88	2.88	3.00	3.00	3.0	3.0	2.9	3.0
BA-402	2.88	3.00	2.75	2.88	2.88	2.88	3.00	2.88	2.9	3.0	2.8	2.9
BA-403	3.00	2.75	3.00	2.88	2.88	3.00	3.00	2.75	3.0	2.8	3.0	2.9
BA-404	3.00	2.88	3.00	2.88	2.88	3.00	3.00	2.75	3.0	2.9	3.0	2.9
BA-405	3.00	2.75	3.00	2.88	2.88	3.00	3.00	3.00	3.0	2.8	3.0	2.9
BA-406	3.00	2.80	2.98	2.73	3.00	3.00	3.00	2.93	3.0	2.9	3.0	2.8
Average	<b>2.98</b>	<b>2.86</b>	<b>2.93</b>	<b>2.87</b>	<b>2.90</b>	<b>2.96</b>	<b>3.00</b>	<b>2.88</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>

**Table 4:CO PO PSO MATRIX  
(THIRD & FOURTH SEMESTER)  
SPECIALISATION- AGRIBUSINESS MANAGEMENT (ABM)**

Third Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
ABM-301	3.00	2.78	2.83	3.00	2.88	3.00	3.00	3.00	3.0	2.8	2.9	3.0
ABM-302	3.00	3.00	2.73	2.63	2.85	3.00	2.90	2.88	3.0	3.0	2.8	2.6
ABM-303	3.00	2.88	2.95	2.63	2.95	2.83	2.95	3.00	3.0	2.9	3.0	2.6
ABM-304	2.90	3.00	2.50	2.75	2.88	3.00	2.90	2.40	2.9	3.0	2.5	2.8
ABM-305	3.00	2.75	2.75	2.80	3.00	3.00	2.75	3.00	3.0	2.8	2.8	2.9
<b>Average</b>	<b>2.98</b>	<b>2.88</b>	<b>2.75</b>	<b>2.76</b>	<b>2.91</b>	<b>2.97</b>	<b>2.90</b>	<b>2.86</b>	<b>3.0</b>	<b>2.9</b>	<b>2.8</b>	<b>2.8</b>

Fourth Semester												
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
ABM-401	3.00	2.75	2.88	3.00	3.00	2.75	2.75	2.75	3.0	2.8	2.9	3.0
ABM-402	2.88	2.78	2.75	2.68	2.63	2.73	2.73	2.88	2.9	2.8	2.8	2.8
ABM-403	2.75	2.75	2.63	2.75	2.75	2.63	2.63	2.88	2.8	2.8	2.6	2.8
ABM-404	2.75	2.88	3.00	2.88	2.88	2.63	2.75	2.88	2.8	2.9	3.0	2.9
ABM-405	2.75	2.38	2.38	2.63	2.63	2.75	2.63	2.63	2.8	2.4	2.4	2.6
<b>Average</b>	<b>2.83</b>	<b>2.71</b>	<b>2.73</b>	<b>2.79</b>	<b>2.78</b>	<b>2.70</b>	<b>2.70</b>	<b>2.80</b>	<b>2.8</b>	<b>2.7</b>	<b>2.7</b>	<b>2.8</b>

## SEMESTER-I

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>MBA-101</b>	Management Process and Organizational Behaviour	100	70	30	5	4
<b>MBA -102</b>	Managerial Economics	100	70	30	5	4
<b>MBA -103</b>	Business Communication	100	70	30	5	4
<b>MBA -104</b>	Business Environment	100	70	30	5	4
<b>MBA -105</b>	Financial Reporting, Statements and Analysis	100	70	30	5	4
<b>MBA -106</b>	Statistics and Analytics for Decision Making	100	70	30	5	4
<b>MBA -107</b>	Computer Applications for Business	100	70	30	5	4
<b>MBA -108</b>	Soft Skills/Seminar/Presentation	50	-	50	2.5	2
	<b>Total Marks/Credit</b>	<b>750</b>				<b>30</b>

## **MBA - 101: Management Process and Organizational Behaviour**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 101.1	Understand evolution and basic concepts of management.
MBA - 101.2	Understand the behavioral dynamics in an organizational setting.
MBA - 101.3	Understand individual behaviour like personality, attitude, emotions, perception and learning and apply this knowledge in people management at workplace.
MBA - 101.4	Apply the understanding of group dynamics and its importance in organisational development.

### **Course Contents:**

Management: Meaning, Nature, Significance; Evolution of Management Thought; Managerial Processes, Principles, Functions, Roles of Manager in an organization;

Planning (Strategies, Decision Making and MBO), Organizing (Organizational Design and Structure), Staffing (HR Functions), Directing (Leadership, Motivation and Communication) and Controlling (Control Measures).

Understanding and Managing Individual Behavior: Personality; Perception, Attitude, Emotions & Emotional Intelligence, Learning.

Understanding and Managing Group Processes- Interpersonal and Group Dynamics; Power & Politics at work, Organizational Culture; Learning Organizations and Organizational Learning.

Organizational Change; Organizational Development; Organizational Effectiveness: Concept, Perspectives & Approaches; Conflict Management, Negotiations and Stress Management; Workplace Spirituality; Happiness Quotient.

Contemporary Management Issues and Challenges. Guidelines for Managerial Excellence in Contemporary business environment.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the managerial processes in business organizations for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Robbins, S.P. Management Concepts, Pearson Education India, New Delhi.
2. Koontz, Weilhrich, Management: A Global and Entrepreneurial Perspective, McGraw Hill.
3. Jones and George, Contemporary Mangement , McGraw Hill.
4. Richard L. Draft, The New Era of Management, Cengage India
5. Mullins. J, Management and OB, 8th Edn. Pearson Education
6. Stoner, J., Management, Prentice Hall of India., New Delhi
7. Koontz.Essentials of Management, Tata McGraw-Hill, 8th Ed.,
8. Chandan, J.S. Management Concepts and Strategies, Vikas Publishing House.

## **MBA - 102: Managerial Economics**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 102.1	Understand the nature of managerial decision making and objectives of a firm.
MBA - 102.2	Estimate demand.
MBA - 102.3	Understand the cost & price behavior of a firm.
MBA - 102.4	Understand macro-economic variables impacting business decisions.

### Course Contents:

Nature and Scope of Managerial Economics. Basic economic concepts used in managerial decision making; Objective of a firm: Wealth, Profit, Sales and Value maximization.

Understanding demand function: Law of demand, Elasticity of demand and its significance in Managerial decision-making; Consumer equilibrium-utility and indifference curve approach; Price, income and substitution effects; Essentials of demand estimation and forecasting.

Short-run and long-run costs and production functions; Cost curves and economics of scale; Price and output determination under perfect competition, monopoly, monopolistic competition, and oligopoly. Pricing strategies and tactics.

National Income— Alternative concepts, measurement and determination of National income; Inflation— types, measurement and control: Monetary and Fiscal Policies. Currency flows and essentials of exchange rate determination.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Peterson, Lewis, Managerial Economics, Prentice Hall of India, N. Delhi.
2. Salvatore, Managerial Economics in Global Economy; Thomson learning; Bombay.
3. EF. Brigham And J,L. Pappas, Managerial Economics, Dryden Press, illinois.
4. Dwivedi, D.N. Managerial Economics, Vikas Publishing House, New Delhi.
5. Mehta, P.L. Managerial Economics, Sultan Chand & Sons, New Delhi.
6. Thomas & Maurice, Managerial Economics: Concepts and Applications (SIE) 9 th edn  
McGrawHill Education
7. Geetika, Managerial Economics 3rd edn. McGraw hill Education

## MBA - 103: Business Communication

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 103.1	Familiarize with the fundamentals of communication practices and strategies used in businesses.
MBA - 103.2	Understand the process of communication along with key barriers to communication
MBA - 103.3	Comprehend the contemporary challenges of business communication.
MBA - 103.4	Gain insights into communication delivery channels in virtual era.

### Course Contents:

Business Communication: Understanding communication process, communication channels, barriers to communication and the importance/miracles of effective communication at workplaces, communication networks in organizations.

Communication Basics-Just-A-Minute Presentation Workshop-Jam Feedback and overcoming Gloss phobia.

Business presentations: Planning & Preparing, Visual Aids, Delivery, Graded Team Presentations, Reading, listening & Questioning.

Writing Business Communication: Writing Reports, Proposals, Emails, circulars and memorandums, Summaries, Presentation feedback, Writing Bios and Resumes. Writing job application letters, Contemporary challenges of business communication.

External media communication and advertising: Communication with media through news releases, communication about the organization through Advertising. Communication delivery in virtual era.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the communication processes and challenges for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Sinha, K.K :Business Communication , Galgotia Publishing company.
2. Pradhan,Homai, et al : Business Communication, Himalaya Publishing House
3. Paul, Rajendra and : Business Communication, Sultan Chand and Sons
4. Murphy and Hilderbranth : Business Communication
5. Lesikar Business Communication : Connecting in a Digital World (SIE) 13 th edn., Mcgraw Hill Education.
6. Murphy, : Effective Business Communication 7th edn McGraw Hill Education

## MBA - 104: Business Environment

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 104.1	Comprehend business ecosystem.
MBA - 104.2	Understand various micro and macro environmental forces influencing the business.
MBA - 104.3	Make themselves future ready concerning availing opportunities and overcoming threats present in business ecosystem.
MBA - 104.4	Understand the current dynamics and possible future outlook of Indian business ecosystem.

### Course Contents:

Nature, Scope and components of Business Environment: Socio-economic and politico-legal. Structure of Indian Economy: Issues and challenges, India demographics and consumption patterns, Distribution of wealth and purchasing power in India, India business innovations and entrepreneurship: Issues and Challenges.

Constituents of India GDP (Agriculture, Manufacturing, Services and External sector): Issues and challenges. India trade sector (import-exports): composition and direction. India Trade Policy. Micro, Small and Medium Enterprises: Issues and challenges. India Business Competitiveness and Ease of Doing Business.

Role of Govt. in Business, PSU disinvestment, India business taxation and GST, Fiscal and monetary policies, Fiscal balances and forex reserves: Issues and challenges, Bank consolidation/restructuring, NPAs and bank re-capitalisation, Capital flows and exchange rate fluctuations. Financial health of Indian businesses: financial leverage/stress, sickness and corporate debt restructuring in India.

Contemporary issues in Indian business environment: Business implications of Make in India, Start up India, and Atamnirbhar Bharat initiatives. Business Governance: issues and challenges, Social Responsibility of Business.

A brief overview of India business regulation and facilitation: Telcom Regulatory Authority of India, Insurance Regulatory and Development Authority, Pension Fund Development and Regulatory Authority, Securities and Exchange Board of India, Competition Commission of India. Role of India business representation in policy making (FICCI, CII, ASSOCHAM, etc.)

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding business opportunities and challenges for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Sundram, KPM, Datt, G and Mahajan, A, Indian Economy, S Chand & sons, 2012 Edition.
2. Misra, S.K and Puri, V.K, Indian Economy, Himalya Publication, 27<sup>th</sup> Edition.
3. Worthington, I and Britton, C, The Business Environment, Prentice Hall, 5<sup>th</sup> Edition.
4. Cherunillam, F, A Course Book on Business Environment, Himalya Publishers, 1st Edition.
5. Daniel, JD and Radebangh, LH, International Business, Addison Wesley Publishing Company Hill, CW, International Business, Tata Mcgraw Hill
6. Alhuwalia, IJ and Little, IMD, India's Economic Reforms and Development, Oxford University Press

7. Aswathapa, K, Business Environment, Excel Books Bedi, SK, Business Environment, Excel Books
8. Paul, Business Environment Text and Cases 3rd edn McGraw hill Education.

## **MBA - 105: Financial Reporting, Statements and Analysis**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 105.1	Develop an insight of postulates, principles and techniques of accounting.
MBA - 105.2	Understand the steps involved in preparation and analysis of financial statements.
MBA - 105.3	Understand the concept of Marginal costing and Responsibility Accounting.
MBA - 105.4	Know the preparation of Budgets and its applications.

### **Course Contents:**

Accounting principles, concepts and conventions, Accounting process, Preparation of Financial statements, Financial Reporting and the reporting practices.

Accounting for Decision Making- A Managerial Perspective, Financial Accounting and Management Accounting, Accounting as an information system, Indian Accounting Standards, IFRS. Preparation of the financial statements.

Financial statement analysis: Meaning, significance, and the analytical tools: Ratio analysis; Du Pont analysis and the Cash flow analysis.

Marginal costing: Cost Volume Profit and Break even analysis, contribution margin, profit volume graph, make or buy decision, dropping a product line and accepting a special order.

Budgeting: conceptual framework; types of budget: Master budget, fixed and flexible budgets, Zero-base budgeting and Performance budgeting.

Responsibility accounting and segmental analysis- meaning, types, process, advantages, Transfer pricing: objectives, transfer pricing methods; Contemporary issues in accounting: HR accounting and the Life Cycle Costing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of accounting and financial practices and analysis for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Anthony, R. N., Hawkins, F. D., & Merchant, K. A. (2006). *Accounting: Text and Cases* (12<sup>th</sup>ed.). New Delhi: Tata McGraw Hill.
2. Albrecht, W. S., Stice, D. J., E. K., Monte, R., & Swain, R.M. (2010). *Accounting: Concepts and applications* (11<sup>th</sup> ed.). U.S.A: South Western.
3. Belverd, E., Needles, Jr. & Powers, M. (2010). *Principles of Financial Accounting* (11th ed.). South Western Publication.
4. Garrison, R.H., Noreen, E.W. (2007). *Managerial accounting* (12<sup>th</sup> ed.). New Delhi: Tata McGraw Hill.
5. Anthony, Accounting: Text and Cases, 13 edn McGraw Hill Education
6. Khan and Jain, Management Accounting, 7th edn McGraw Hill Education

## **MBA - 106: Statistics and Analytics for Decision Making**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 106.1	Learn about the application of statistical and analytical tools.
MBA - 106.2	Gain an insight regarding probability distributions and their applications in business decision making.
MBA - 106.3	Understand sampling, sampling methods and their applications.
MBA - 106.4	Understand the use of statistical estimation and hypothesis testing in business decision making.

### **Course Contents:**

Probability Theory; Classical, relative and subjective probability, Addition and multiplication probability models; Conditional probability and Baye's Theorem. Probability Distributions: Binomial, Poisson, and Normal distributions: characteristics and applications. Application of Probability and probability distributions in business decision making.

Application of Sampling and sampling methods in business decision-making; Sampling and non- sampling errors; Law of Large Number and Central Limit Theorem; Sampling distributions and their characteristics.

Statistical Estimation and Testing; Point and interval estimation of population mean, proportion, and variance; Statistical testing of hypothesis and errors; Large and small sampling tests, Non—Parametric Tests: Chi-square tests; Sign tests; Wilcoxon Signed— Rank tests; Kruskal—Wallis H- test.

Data Analysis using the Microsoft Excel and the SPSS.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of analytical techniques for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Hooda, R.P. : Statistics for Business and Economics, Macmillan, New Delhi.
2. Heinz; Kohler : Statistics for Business & Economics,. Harper Collins; New York.
3. Heinz, LW : Quantitative Approach to Managerial Decisions, Prentice Hall, NJ.
4. Lawrence, B. Morse: Statistics for Business & Economics, Harper Collins, NY.
5. Levin, Richard I and David S Rubin : Statistics for Management Prentice Hail, Delhi.
6. Watsnam Terry J. and Keith Parramor: Quantitative Methods in Finance international, Thompson Business Press, London.
7. Srivastava, Statistics for Management, McGraw Hill Education
8. Aczel, Complete Business Statistics, McGraw hill Education

## MBA - 107: Computer Applications for Business

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 107.1	Understand the basics of computers (Hardware and Software), Computer Networks.
MBA - 107.2	Understand concepts of operating system, applications and programming languages.
MBA - 107.3	Work with of Microsoft PowerPoint, Excel and Word.
MBA - 107.4	Familiarize with business applications being used in the field of Management, finance, Human resources, production and operations.

### Course Contents:

Introduction and definition of computer; Brief history (Analog, Digital, Binary language); Major components of a computer system; Interfacing with a computer; Hardware and Software.

Introduction to languages, compiler, interpreter and assembler; Operating Systems: Definition, Functions, Types and Classification. Computer Networks: Overview and Types (LAN, WAN and MAN) and network topologies.

Internet Basics: Basic ways of connecting to the internet, Web Browsers, Search Engines, Internet Protocols and IP Address.

E-commerce: Introduction, Comparison between Traditional commerce and E-commerce, Advantages & disadvantages of E-commerce; Buying & Selling on Internet.

MS-Office-Word, Excel and PowerPoint application for documentation and making reports; and presentations.

Database Management Systems: Overview of DBMS, Components of DBMS.

Information Technology applications functional areas of management; Production / Operations, Marketing, Human Resource, and Finance. Digitization of businesses: Issues, opportunities and challenges. IT applications in financial services, healthcare and retailing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of computer and IT techniques for managerial decision making for discussion during the session.

### Suggested Readings:

1. Kenneth C. Laudon and Jane P. Laudon, "Information Systems", Pearson Publication.2013. Dorling Kindersley (India) Pvt. Ltd.
2. Sudalaimuthu&Hariharan, Information Technology for Managers, Himalaya publications.
3. D.Monley& CS Parker, Understanding Computers Today & Tomorrow, Cengage, Thomson.
4. Sinha, P. K., & Sinha, P. (2010). *Computer Fundamentals* (6<sup>th</sup> ed.). New Delhi: BPB Publications.
5. Rajaraman, V. &Adabala, N. ( 2014). Fundamentals of Computers (6<sup>th</sup> ed.). New Delhi: Prentice Hall of India Pvt. Ltd.
6. Behl,Information Technology for Management 2 nd edn McGraw Hill Education

**MBA - 108      Soft Skills/Seminar/Presentation**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
50	Nil	50	--	2

**Notes:** There will be eight (8) questions in all. Students are required to attempt five questions carrying 10 Marks each.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 108.1	Enhance their communication and presentation skills.
MBA - 108.2	Make themselves industry ready concerning soft-skills requirements.
MBA - 108.3	Get insights on body language and mannerism.
MBA - 108.4	Get much needed inputs for professional development.

**Course Contents:**

**Soft Skills:** An overview, Significance of Soft Skills, Major types Soft Skills, Other essential soft skills, Difference between soft skills and hard skills, Importance of Soft skills in industry, work place and students, Merits of Soft Skills, Ways to develop soft skills.

**Communication skills:** Definition, Process, the level of Communication, the flow of Communication, Communication Network, The Importance of Technical Communication, Professional Email, Contents, Structure, Email Types, Email Etiquette

**Protocol:** Meaning, Etiquettes, Body language, Business Meeting, Business Dress, Global Business Etiquette

**Presentation Skills:** Fear of Public Speaking, Group Discussion skills, Presentation Checkups, Presentation Delivery, Maintain audience level of attention, Presentation Delivery Problems, Emotional Intelligence, Time Management.

**Job Search Techniques:** Networking, Internet Resources, Classified Ads, Contacting Employees, Employment Agencies, Professional Associations, Job Fairs, Organize your Job Search, Managing Stress, Tips to Manage Stress, **CV and Writing Resume**, CV and Resume, Objectives of Resume/CV, Rules of Resume writing, things to be included in Resume, Never include in resume, References, Covering letter, (types, design of CV/Cover letter), Structure of Covering Letter, **Job Interview Skills**, Definition, Interview Tips, Before interview, During interview, After interview, Do's and Don'ts of job interview, Telephone interviews.

**Note:** In addition, teacher conducting the course may share and discuss 4-5 case studies related to the subject for the deeper understanding of the same in the classes during the session.

## SEMESTER II

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA -201</b>	Optimization Models for Business Decisions	100	70	30	5	4
<b>MBA -202</b>	Business Research Methodology	100	70	30	5	4
<b>MBA -203</b>	Production and Operations Management	100	70	30	5	4
<b>MBA -204</b>	Marketing Management	100	70	30	5	4
<b>MBA -205</b>	Corporate Finance	100	70	30	5	4
<b>MBA -206</b>	Human Resource Management	100	70	30	5	4
<b>MBA -207</b>	Legal Environment	100	70	30	5	4
<b>MBA -208</b>	Comprehensive Viva-Voce	50	50	-	-	2
	<b>Total Marks</b>	<b>750</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>
OE-I	Open Elective-I	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>800</b>				<b>32</b>

## **MBA - 201: Optimization Models for Business Decisions**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 201.1	Gain knowledge of concepts and tools of Operations Research.
MBA - 201.2	Understand mathematical models used in Operations Research.
MBA - 201.3	Apply these techniques constructively to make effective business decisions.
MBA - 201.4	Formulate and solve problems as networks and graphs. develop linear programming (LP) models for shortest path, maximum flow, minimal spanning tree, critical path, minimum Cost flow, and transshipment problems.

### **Course Contents:**

Management Science - Basic concepts and its role in decision- making. Linear programming, meaning, scope & assumptions. Formulation of linear programming problem and its solution by graphical and Simplex methods.

THEORY OF GAMES: Introduction – Minimax (maximin) – Criterion and optimal strategy – Solution of games with saddle points – Rectangular games without saddle points – 2 X 2 games – dominance principle – m X 2 & 2 X n games.

INVENTORY Models : Introduction – Single item – Deterministic models – Purchase inventory models with one price break and multiple price breaks – Stochastic models– Instantaneous production. Instantaneous demand and continuous demand and no set up cost. Application of Inventory management techniques in business.

Sensitivity analysis. Integer programming, goal programming, and non-linear Programming. Transportation and Assignment models including trans-shipment and routing problems. Role and importance of PERT/CPM in business decision making; Decision theory and decision trees.

SIMULATION analysis: simulation models – phases of simulation– applications of simulation, Waiting Lines: Introduction – Single Channel – Poisson arrivals – exponential service times, Multichannel – Poisson arrivals – exponential service times with infinite population single channel Poisson arrivals.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of optimization techniques for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Budnik, Frank S. Dennis Meleavey, Reichard : Principles of Operations Research, 2<sup>nd</sup> ed., Richard Irwin, Illinois – All India Traveller Bookseller, New Delhi, 1995.
2. Gould, F.J. etc.: Introduction to Management Science, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1993.
3. Mathur, K and Solow, D.: Management Science, Englewood, New Jersey, Prentice Hall Inc. 1994.
4. Sharma, J.K.: Operations Research: Theory and Applications, New Delhi, Macmillian India Ltd., 1997.
5. Theirouf, R.J. and Klekamp, RC. : Decision-Making Through Operations Research, New York, John Wiley, 1989.
6. N.D. Vohra : Quantitative Techniques in Management, Tata McGraw Hill, 2001.

## MBA - 202: Business Research Methodology

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 202.1	Understand the concepts and process of Business research.
MBA - 202.2	Formulate research problem and develop an understanding of various major research designs.
MBA - 202.3	Determine various data sources and to design data collection tools.
MBA - 202.4	Develop understanding of data collection field work and analyse data using various techniques. To apprehend various software used for data analysis and presentation of research results.

### Course Contents:

Introduction to Research Methodology: Research-Meaning, Nature, Scope, Objectives and Types of business research; Research Process. Hypothesis: Qualities of Good Hypothesis, Scientific Method of Research. Recent Trends in Usage of Research in Indian Corporate Sector.

Research Design- Meaning and Need of a Research Design, Exploratory, Descriptive, Experimental Research Design, Qualitative Research, Observation Studies, Surveys, Experiments & Test Markets.

Sources of Data- Nature and Types, Sampling Techniques-Nature and Types, Sampling Errors. Scaling & Measurement Techniques. Multidimensional Scaling.

Data Editing, Coding and Tabulation, Analysis & Interpretation of Data Business Research Reports-Format, Criterion for Judgment of good research report.

Advance Techniques of Data Analysis: Factor analysis. Conjoint Analysis, Cluster Analysis. Use of statistical tools such as Correlation and Regression analyses to analyze univariate, bivariate and multivariate problems.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of statistical techniques for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Malhotra, Naresh K.: Marketing Research an Applied Orientation, 5<sup>th</sup> edition, Pearson.
2. Cooper, Business Research Methods, 11<sup>th</sup> edn McGraw Hill Education.
3. Boyd & Westfall: Marketing Research, Prentice Hall.
4. Kothari, C. R.: Research Methodology, New Age International Publishers.
5. Shekharan & Uma: Business Research Methods-A Skill- Building Approach, 7<sup>th</sup> ed., New York, John Willy, 2002.
6. Creswell, John W.: Research Design-Qualitative & Quantitative Methods, New York, John Willy, 2002
7. Sandhi and Chawla: Research Methodology-Concepts and cases, 1st Edition, Vikas
8. Nargundkar, Marketing Research - Text and Cases 3<sup>rd</sup> edn, McGraw Hill Education

## MBA - 203: Production and Operations Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 203.1	Understand the fundamentals of production and get an insight on prominent production systems.
MBA - 203.2	Comprehend factors governing plant location and layout and understand basics of inventory management.
MBA - 203.3	Get an awareness of concepts of production forecasting, planning and control.
MBA - 203.4	Gain an in-depth knowledge of the concepts of work and time study as well as to gain insights on the concept of quality management.

### Course Contents:

Plant location, scale and cost optimization decisions: Operations as a source of competitive advantage; Trade-offs and combinations.

Process Analysis: Manufacturing and Service Operations Product Process Matrix, capacity planning- Process Selection and Facility layout: Designing product and process layouts and line balancing, Forecasting and its narratives.

Inventory Management: Deterministic demand model–EOQ- Continuous and Periodic review Inventory models; Supply chain management; Lean vs Agile supply chains; Aggregate

Production Planning; Master Production Schedule and MRP, Project Management, Quality management and Sustainable Operations Management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of production and operations strategies for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Admn, E. E. & Ebert, R.J. : Production and Operations Management, 6th ed., New Delhi, Prentice Hall of India 1995.
2. Chary, S.N. : Production and Operations Management, New Delhi, Tata McGraw Hill, 2ndEdition.
3. Ashwathapa: Production and Operations Management, Himalaya Publishing House.
4. Dobler, Conald W and Lee, Lamar :Pruchasing and Materials Management, New York, McGraw Hill, 1984.
5. Chunawalla & Patel : Production and Operations Management, Himalaya Publishing
6. Nair: Production and Operations Management, TMH
7. Chary, Production and Operations Management 5<sup>th</sup> edn, McGraw Hill Education
8. Stevenson, Operations Management, 12 ed. McGraw Hill Education

## MBA - 204: Marketing Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 204.1	Understand the dynamics of a prominent functional area of management viz. Marketing.
MBA - 204.2	Comprehend the issues and challenges involved in framing marketing policies.
MBA - 204.3	Derive how the companies get an edge over their competitors through innovative marketing practices.
MBA - 204.4	Get insights on the emerging trends in the field of marketing.

### Course Contents:

Marketing: Meaning, Nature, Scope, Evolution and Importance. Modern concept of marketing. Holistic Marketing, Ethics in marketing. Role of Information Technology in marketing.

The dynamic marketing Environment. Marketing Mix and STP (Segmentation, Targeting and Positioning) Marketing Information System: Concept and Components of a marketing information system.

Marketing Research: meaning, scope and techniques. Consumer Behaviour: meaning and importance, buying motives, buying process, factors influencing consumer behaviour. Product decisions: concept, classification, product-line decisions.

New product development process, product life cycle, Packaging and Branding decisions. Pricing Concepts: objectives, policies and procedures, factors affecting pricing, pricing strategy and product life cycle, price changes and organizational strategies, product line pricing.

Integrated Marketing Communication: Promotion-Mix; Advertising, sales promotion, public relations, personal selling and direct marketing. Channels of distributions: Concept, types and factors affecting channel selection. Recent developments in marketing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of marketing operations and strategies for discussion in tutorial classes during the session.

### Suggested Readings:

- 1 Michael J. Etzel : Marketing Concepts and Cases, Tata McGraw-Hill  
Bruce J. Walker Publishing Company Limited.  
William J. Stanton
- 2 Michael R. Czinkota : Marketing Management, Thomson, South  
Masaaki Kotabe Western.
- 3 Philip Kotler : Marketing Management, Pearson Prentice-Hall.  
Kevin lane Keller
- 4 Dhruv Grewal : Marketing, Tata McGraw Hill Publishing Company Limited.  
Michael Levy
5. V.S. Ramaswamy : Marketing Management, Macmillan Publisher India Ltd.  
S. Nama Kumari
6. Rajan Sexena : Marketing Management, Tata McGraw Hill  
Publishing Company Limited.
7. Nargundkar, : Marketing Research - Text and Cases 3rd edn, McGraw Hill

**MBA - 205: Corporate Finance**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA – 205.1	Familiarize with the principles and techniques of corporate finance.
MBA - 205.2	Develop and sharpen analytical abilities for financial decision making.
MBA - 205.3	Extrapolate how companies make financial decisions.
MBA - 205.4	Understand financial modelling framework.

**Course Contents:**

Nature, Scope and objectives of Corporate Finance, Time value of money, sources of finance, Investment decisions: Importance, Difficulties determining cash flows, methods of capital budgeting and Risk analysis.

Cost of capital; Concept and importance, Computations of cost of various sources of finance; Weighted Average Cost of Capital.

Capital Structure decisions; Theories of capital structure, Factors determining capital structure. Optimum capital structure.

Management of working capital - Cash, Receivables and Inventory Management, Internal Financing and Dividend Policy.

Financial Modeling: essentials and financial modeling framework.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of corporate financial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Hamton, John; Financial Decision-Making, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1997.
2. Khan, M.Y. and Jam, P.K.: Financial Management, McGraw Hill, 2001.
3. Pandey, IM. : Financial Management, Vikas Publication House, 2000.
4. Van Home, James C.: Financial Management and Policy, 10th ed., New Delhi, Prentice Hall of India, 1997.
5. Winger, Bernard and Mohan, Nancy: Principles of Financial Management, New York, Macmillan Publishing Company, 1991.
6. Kishore, Ravi M.: Financial Management, Taxmann Publishers, New Delhi.
7. Chandra, Financial Management 9th edn McGraw Hill Education.
8. Ross, Corporate Finance 11 th edn McGraw Hill Education

**MBA - 206: Human Resource Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 206.1	Understand the evolution, fundamental concepts and functions of HRM in a dynamic business environment.
MBA - 206.2	Understand the interlinkages among the pivotal functions concerning procurement of human resources viz. human resource policy, human resource planning, recruitment, selection, induction and socialisation.
MBA - 206.3	Get the knowledge of different aspects concerning work motivation, training and development, performance management and compensation management in an organization.
MBA - 206.4	Gain knowledge of emerging HR issues concerning employee engagement, unions and their role in management of industrial relations and grievance management.

**Course Contents:**

Human Resource Management- Concept, Scope and Functions of HRM; Evolution of HRM: HR Philosophy, HR Policies.; Theoretical Perspectives; HR Models; HR Challenges in a changing business environment.

Human Resource Planning and Forecasting; Job Analysis; Recruitment, Selection and Retention of human resources; Placement, Induction and Socialization.

Learning, Training and Development, Performance Appraisal, Performance Management and Potential Appraisal and Career Management.

Job Evaluation; Compensation Management, Rewards and Recognition Programs; Employee Separations Practices.

Industrial Relations and Trade Unions; Industrial Dispute/Conflict Resolution and Grievance Management; Occupational Safety and Health and HR Ethics.

Recent advance concepts and Contemporary Trends in HRM: Employee Engagement; Social Media and HR; HR Analytics; Competency Based HRM; HR quality and Six Sigma in HR.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of corporate HR function and performance for discussion in tutorial classes during the session.

**Suggesting Readings**

1. Dessler & Varakkey, Human Resource Management, Pearson Education
2. K.Aswhatha, Human Resource Management: Text and Cases, 8th Ed., Tata McGraw Hill, New Delhi.
3. Seema Sanghi, Human Resource Management, Macmillan India Publication. 2012
4. Armstrong, Michael Handbook of HRM Practice, Kogan Page,
5. P. Jyothi, Human Resource Management, Oxford University Press.2012
6. Lepak & Gowan, Human Resource Management, Pearson Education. 2011
7. V.S.P.Rao, Human Resource Management, Himalaya Publication House.

**MBA - 207: Legal Environment**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA - 207.1	Get knowledge on basic legal concepts and the Indian legal environment in which business operates.
MBA - 207.2	Understand the various different Indian contracts, role of agency and various acts used while entering into any type of contract.
MBA - 207.3	Understand the functioning of numerous negotiable instruments.
MBA - 207.4	Understand the major provisions of the sale of goods act, consumer protection act and IPRs.

**Course Contents:**

Legal Aspect of Business: Introduction to Business Laws- Business Management and Jurisprudence; structure of the Indian Legal Systems: sources of Law; Manager and Legal System.

Fundamentals of contract laws-Formation of Contracts; Principles of Contract Laws-Legality of Object, Consideration; Performance of contract-Discharge of contract- breach of contract-Quasi contracts, Special Contracts-Laws of Agency; Principal-Agent Problem-Bailment, Pledge, Guarantee and Indemnity.

Negotiable Instruments Act, 1881: Salient features, endorsement, crossing and dishonor of cheque.

Sales of Goods- Principles of Sales of Goods- Transfer of Ownership & Property-Performance of contract. Quality standards and certifications in India, Consumer and competition protection Laws in India

Protecting the property of Business-Copyright, Trademark, patents, Geographical Indicators.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of legal framework of businesses for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Pathak-Legal Aspects of Business 6th edn McGraw Hill Education
2. Tulsian, Business Law 3rd edn McGraw Hill Education
3. M c Kuchhal – Business Laws, Vikas Publications, New Delhi
4. V S Datey – Business Laws, Taxman publications, New Delhi

**MBA - 208: Comprehensive Viva-Voce**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
50	50	Nil	--	2

**Course Outcomes:** After completing this course, the students will be able to:  
MBA – 208.1 Analyze their SWOT for further studies. Through guidance from / detailed discussion with the examiner during comprehensive viva voce, it becomes easier for the students to decide about their specialization area to be taken in further semesters.

**OE-I            Open Elective-I – Entrepreneurship Semester-II  
(Only at USM, KUK Campus under LOCF)**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
50	50	Nil	--	2

**Note:** There will be eight (8) questions in all. Students are required to attempt five questions carrying 10 Marks each.

**Objectives:** -The objective of the course is to acquaint the students with the importance of conceptual framework of entrepreneurship; opportunities available to entrepreneurs and challenges faced by the entrepreneur.

**Course Contents:**

Entrepreneurship: Evolution, Characteristics, Types, Functions of Entrepreneur; Entrepreneur Vs. Entrepreneurship, Entrepreneur Vs. Manager, Entrepreneur Vs. Intrapreneur; Growth of Entrepreneurship in India; Role of Entrepreneurship in Economic Development with special reference to Self-employment.

Idea to opportunity: opportunity, opportunity process, sources of opportunity, idea to opportunity mapping  
Basics of Business plan; contents of business plan; Business Plan drivers; perspectives to be considered while business plan preparation

Women Entrepreneurship; Social Entrepreneurship: Motivation for a Social Entrepreneur;

Creativity and Business ideas: idea generation, techniques of creativity; Blocks to creativity;

Institutional Support to Entrepreneurs: Need for Institutional support –financial and non-financial incentives by national and state institutions; challenges faced by entrepreneurs;

**Note:** In addition, teacher conducting the course may share and discuss 4-5 case studies related to the subject for the deeper understanding of the same in the classes during the session.

**Suggested Readings:**

- 1 Roy Rajeev, Entrepreneurship, Oxford, Latest Edition
- 2 E. Gordon & K. Natarajan, Entrepreneurship Development, Himalaya 2008
- 3 Coulter, Entrepreneurship in Action, PHI 2nd Edition
- 4 Collins, Jim (2001), Good to Great (1st edition), New York, NY: HarperCollins Publishers.
- 5 Lesonsky, Rieva (2007), Start Your Own Business (4th edition), Canada: Entrepreneur Media.
- 6 Kumar, Arya. Entrepreneurship: Creating and leading an entrepreneurial organization. Pearson Education India, 2012.

### SEMESTER-III

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA - 301</b>	Corporate Strategy	100	70	30	5	4
<b>MBA - 302</b>	Indian Ethos and Business Ethics	100	70	30	5	4
<b>MBA - 303</b>	Summer Internship/Field Work	100	50	50	-	4
	Elective papers <b>four</b> From Major and <b>two</b> from Minor specialization area					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective -I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
<b>OE - II</b>	Open Elective-II	50	50	-	-	2
	<b>Total Marks/Credit (CBCS)</b>	<b>950</b>	<b>-</b>	<b>-</b>		<b>38</b>

**MBA - 301: Corporate Strategy**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA – 301.1	Get awareness about the way strategic thinking shapes the organization.
MBA – 301.2	Get grooming to adopt strategic thinking from organization’s perspective.
MBA – 301.3	Understand various tools and techniques governing corporate strategy.
MBA – 301.4	Comprehend strategic outlook governing corporate sector.

**Course Contents:**

An Introduction to Business Policy — Nature, objective and importance of business policy; Strategic Management –meaning, historical evolution and significance to contemporary organizations. Strategic Management Process, levels of strategy in organization.

Strategy Formulation- Company's mission, purpose and objectives; corporate strategy - concept, significance and objectives; Generic strategies.

Environmental and organizational appraisal (Internal & external) techniques of business environment analysis, Strategic alternatives and choice; Business ethics and corporate strategy. Concept of value chain and competitive advantage.

Strategy implementation - Designing organizational structure and activating strategies; matching structure and activating strategy, Structural, Behavioral and Functional implementation, concept of synergy.

Strategy Evaluation - Strategic evaluation and Control, Strategic and Operational Control; techniques of evaluation and control. Role of organizational system in evaluation.

Current trends in Strategic management- trends in external environment of business, new directions in strategic thinking and new modes of leadership. Digital transformation of businesses – A strategic perspective.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of strategic perspective of businesses for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Jauch & Glueck : Business Policy and Strategic Management.
2. Thompson LA. and Stickland A.J.: Strategic Management - Concept and cases.
3. Michael Potter: Competitive Advantage of Nations.
4. Azhar Kazmi : Business Policy and Strategic Management.
5. Kenneth, A. Andrews: Concepts of corporate Strategy.
6. Melvin J. Stanford: Management Policy
7. John A. Pearce Hand R.B. Robinson Strategic Management
8. Applegate, Corporate Information Strategy and Management, 8th edn McGraw Hill Education
9. Thompson, Crafting and Executing Strategy, 19th Ed. McGraw Hill Education

**MBA - 302: Indian Ethos and Business Ethics**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA – 302.1	Understand basic concepts of Indian Ethos and Business Ethics.
MBA – 302.2	Embrace value system in decision making.
MBA – 302.3	Know the role of Indian Wisdom for managers.
MBA – 302.4	Recognize organizational challenges to ethical behavior and ethical dilemma resolution process.

**Course Contents:** Understanding need for Ethics, ethical values, myths and ambiguity, Ethics v/s Ethos, Theories of Ethics, Absolutism versus Relativism, Teleological approach, the Deontological approach, Kohlberg’s six stages of moral development, Ethical Principles in Business.

Indian wisdom & Indian approaches towards business ethics: Tenets of Indian cultural heritage, Role of Indian Ethos in Managerial Practices, Scriptures in understanding ethics: Management Lessons from Vedas, Mahabharata, Bible, and Quran. Indian v/s Western Management styles.

Work Ethos and Values for Indian Managers- Relevance of value based management in global perspective- Impact of values on stakeholders, Trans-cultural human values, Secular v/s spiritual values, Value Systems and work cultures.

Indian Systems of Learning-Gurukul system of learning, Karma philosophy and its importance to Managers- Nishkama Karma- Laws of Karma, Law of Creation- Law of Humility- Law of Growth- Law of Responsibility- Law of connection - Corporate Karma Leadership.

Ethical tenets of organization culture, developing codes of ethics and conduct, Ethical decision making, ethical reasoning, ethical and value based leadership, Ethical dilemmas in different business areas of operations, finance, marketing HRM and international business, ethical dilemma resolution process.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of Indian perspective of businesses for discussion in tutorial classes during the session.

**Suggested Readings:**

- 1 Ahmedabad Management Association (AMA), “Ancient Indian Wisdom for Self-Development”, Ahmedabad, 1995.
- 2 Bowle N.E. and Duska R.F., “Business Ethics”, New Jersey, Prentice Hall Inc., 1990.
- 3 Brately Peter, “The Essence of Business Ethics”, New Delhi, Prentice Hall of India, 1997.
- 4 B.K.S. Iyengar, Light on Life, Rodale Publishers, 2005.
- 5 Chakraborty S.K., “Management Transformation by Values”, New Delhi, Sage Publication, 1990.
- 6 Chakraborty S.K., Chakraborty Debangshu, Spirituality in Management: Means Or End?, Oxford University Press, 2008.
- 7 Chakraborty, S.K., Ethics in Management-Vedantic Approach, New Delhi, Oxford India Ltd. 1995.
- 8 Fernando A.C., Business Ethics: An Indian Perspective, Pearson, 2009.
- 9 Gini AI, Case Studies in Business Ethics, 6th edition, Pearson Education, 2009.
- 10 Jitatananda Swami, Indian Ethos for Management, Rajkot, Ramakrishna Ashrama, 1996.

- 11 Kautilya's Arthashastra, King, Governance, and Law in Ancient India, Oxford University Press, 2016.
- 12 Narayana G., "The Responsible Leader: A Journey through Gita", Ahmedabad, AMA 2000.
- 13 Shashtri J.L., Bhatt G.P. and Gangadharan N., Ancient Indian Tradition and Mythology, 1st ed, Motilal Banarsidass, New Delhi, 2004.
- 14 Someswarananda Swami, Indian Wisdom for Management, Ahmedabad, AMA. 2000.
- 15 Velasquez, Business Ethics, Concepts & Cases, 6th edition, PHI, 2009.
- 16 Weiss, Business Ethics concept & cases, 1st edition, Cengage Learning, 2009.
- 17 Hartman, Business Ethics, 2nd Edn McGraw Hill Education
18. Francia, Business Ethics: An Indian Perspective 1st edn McGraw Hill Education

### **MBA - 303 Summer Internship/Field Work**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	50 (Evaluation of Training Report by External Examiner)	50 (Presentation on Training Report)	--	2+2 = 4

- Course Outcomes:** After completing this course, the students will be able to:
- MBA – 303.1 Get the familiarity of the organization culture.
  - MBA – 303.2 Get the practical exposure of business environment and working of an organization.
  - MBA – 303.3 Learn how the theoretical concepts are implemented in real life business situations.
  - MBA – 303.4 Polish their soft skills and personality traits.

**Open Elective-II (Digital and Social Media Marketing) – Semester-III**  
**(Only at the USM, KUK Campus under LOCF)**

Max. Marks	External	Internal	Time	Credits
50	50	Nil	3 Hours	2

**Note:** There will be eight (8) questions in all . Students are required to attempt five questions carrying 10 Marks each.

**Course Outcome:** The objective of this course is to enable students understand dynamic operational mechanism of digital and social media marketing for customer value creation.

**Course Contents:**

Evolution of Digital marketing from traditional to modern era. Role of Internet; current trends, Info-graphics, implications for business & society; Emergence of digital marketing as a tool; Drivers of the new marketing environment; Digital marketing strategy; P.O.E.M. framework, Digital landscape, Digital marketing plan, Digital marketing models. Search Engine Optimization; introduction, onpage and offpage optimization. Search Engine Marketing with google AdWords; PPC, Display Advertising. Social Media Marketing; introduction to social media platforms, Penetration & characteristics; Building a successful social media marketing strategy. Affiliate marketing & strategic partnerships. Email and mobile marketing; Content and strategies. Google analytics; meaning, importance and tools.

**Note:** In addition, teacher conducting the course may share & discuss 4-5 case studies at the commencement of session for deeper understanding of the digital and social media marketing for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Hanson, W and Kirthi Kalyanam, Internet Marketing and E-Commerce, Cengage Learning, 2015.
2. Mullen, J and D Daniels, E-Marketing- An Hour a Day, Sybex Publisher, First Edition.
3. Chaffey, Dave and Fiona Ellis Chadwick, Digital Marketing- Strategy, Implementation and Practice, Pearson Education Inc., 2012.
4. Kotler et. Al, Principles of Marketing, Pearson Education Inc., New Delhi, 13<sup>th</sup> Edition.
5. Kaufman, Era and Chris Hortan, Digital Marketing- Integrating Strategies and Tactics with Values, Routledge, 2014.
6. Ahuja, Vandana, Digital Marketing, Oxford University Press, First Edition.
7. Harvard Business Review, South Asia Edition, India today Group

**SEMESTER-IV**

<b>Paper Code</b>	<b>Title of Course</b>	<b>Total Marks</b>	<b>Ext. Marks</b>	<b>Int. Marks</b>	<b>Hrs</b>	<b>Credits</b>
<b>MBA - 401</b>	Entrepreneurship	100	70	30	5	4
<b>MBA - 402</b>	Corporate Social Responsibility and Sustainability	100	70	30	5	4
<b>MBA - 403</b>	Research Report and Comprehensive Viva-Voce	100	50 Marks for Research Report and 50 Marks for Viva-Voce		5	4 (2+2)
	Elective papers <b>four</b> From Major and <b>two</b> from Minor specialization area					
	Major Elective-I	100	70	30	5	4
	Major Elective-II	100	70	30	5	4
	Major Elective-III	100	70	30	5	4
	Major Elective -IV	100	70	30	5	4
	Minor Elective –I	100	70	30	5	4
	Minor Elective -II	100	70	30	5	4
	<b>Grand Total</b>	<b>3400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>136</b>

## MBA - 401: Entrepreneurship

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

MBA-401.1	Become aware and assess entrepreneurial opportunities available for an entrepreneur.
MBA-401.2	Develop and cultivate endurance, create value and mobilize people and resources.
MBA-401.3	Create and design business plan in order to setup their venture in future.
MBA-401.4	Get an overview regarding the schemes and support provided by government.

### Course Contents:

Entrepreneurship and Intrapreneurship—similarities and variance—India's start up revolution—Trends, Imperatives, benefits; the players involved in the start-up ecosystem, Business Incubators. Recent emergence of Indian based Unicorns.

Rural entrepreneurship, social entrepreneurship, women entrepreneurs- The entrepreneurial mind-set, Key attributes of an entrepreneur -Desirable and acquirable attitudes and behaviors-Readiness-The right time, right age, right conditions; Myths and realities of entrepreneurship.

Transition to the world of start-ups: Personal finance- Explaining to family- Entrepreneurial Stress-Composition—complementarities; Different life stages- Relative importance- Disagreements- Idea, opportunity and retrospective determinism.

Creating and appropriating value- Scarcity, choice and trade-offs; Identifying 'paying customers, developing market understanding; Narrowing focus; End user profiling, Ideal Persona. Market segmentation, Market sizing, Marketing plan, Pricing- Strategy; Rigor of another kind: Heuristics and Gut-feel- Business Plan.

Unit economics, scalability, defensibility; Venture feasibility analysis-Pitching. Legal Matters; Organizational form—partnership, sole proprietorship, corporation. Intellectual property—copyright, trademarks- Tax, Personnel law, contract law-Law vs Ethics-Legal expenses, hiring the service provider.

Digital Haves and Have-nots; Digital Economy as a resource- Promotion tools-the value of Likes and Shares-Matchmakers-Long Tail markets-Micro—Apps-Funding and Incubation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of entrepreneurial ecosystem and mindset for discussion in tutorial classes during the session.

### Suggested Readings:

1. Kumar, Arya (2012); Entrepreneurship, Pearson, New Delhi.
2. Greene, Cynthia L (2006), Entrepreneurship, Cengage Learning, New Delhi
3. Timmons, Jeffry A and Spinelli, Stephen(2007), New Venture Creation, McGrawHill, seventh edition, New Delhi
4. Wickham, Phillip A (1998); Strategic Entrepreneurship, Pitman, UK.
5. Shukla, MB, (2011), Entrepreneurship and Small Business Management, Kitab Mahal, Allahabad
6. Zenas Block and Ian C Macmillan, Corporate Venturing, Harvard Business School Press, Boston
7. Sahay A., A. Nirjar (2006), Entrepreneurship: Education, Theory and Practice, Excel Books, New Delhi.
8. Bamford, Entrepreneurship: A Small Business Approach 1st edn, McGraw Hill Education
9. Hisrich, Entrepreneurship (SIE) 9 th edn McGraw Hill Education

## **MBA - 402: Corporate Social Responsibility and Sustainability**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA-402.1	Appreciate and understand role of CSR in corporate settings.
MBA-402.2	Understand the scope and complexity of corporate social responsibility.
MBA-402.3	Develop knowledge about corporate governance, business failure and innovative practices for future governance.
MBA-402.4	Frame sustainable corporate strategies.

### **Course Contents:**

Definition- Evolution- Need for CSR: Theoretical perspectives. Legal framework, Scope and mandate of CSR and the CSR practices in India. Corporate citizenship, Strategies for CSR-Challenges and implementation.

Evolution of corporate governance-Governance practices and regulation-structure and development of boards, Board diversity and audit responsibility, Role of capital market and government, Governance ratings, Innovative practices with lessons learnt, Corporate governance and business failures, Future of governance.

Sustainability: Meaning and Scope- Corporate Social Responsibility and Corporate Sustainability, Sustainability Terminologies, Sustainability Imperative of businesses -Triple Bottom Line (TBL).

Corporate Sustainability Reporting Frameworks, Global Reporting Initiative Guidelines and National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business, International Sustainability Standards.

Sustainability Indices-Principles of Responsible Investment-Challenges in Mainstreaming Sustainability Reporting.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of CSR and Sustainability ecosystems for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Tom Cannon, Corporate Responsibility: Governance, Compliance and Ethics in a Sustainable Environment, Pearson Publication.
2. Samuel & Celine, Theory and Practice of Corporate Social Responsibility, Springer
3. Maria Aluchna, Samuel The Dynamics of Corporate Social Responsibility, Springer
4. B.N. Mandal, Corporate Social Responsibility in India, Global Vision Publishing House.
5. Subhasis Ray & S.Siva Raju, Implementing Corporate Social Responsibility, Springer.

## **MBA - 403 Research Report and Comprehensive Viva-Voce**

<b>Max. Marks</b>	<b>External Evaluation Marks</b>	<b>External Viva-Voce Marks</b>	<b>Time</b>	<b>Credits</b>
100	50	50	--	4

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MBA-403.1	Develop the understanding of various research designs.
MBA-403.2	Design the blueprint of the research methodology.
MBA-403.3	Apply the tools and techniques to extract the research findings.
MBA-403.4	Extract and present the managerial implications on the basis of research findings.

**SPECIALISATION: FINANCE****SEMESTER-III**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>FM-301</b>	Quantitative Analysis for Financial Decision Making	100	70	30	5	4
<b>FM-302</b>	Foreign Exchange Management	100	70	30	5	4
<b>FM-303</b>	Derivatives Trading in India	100	70	30	5	4
<b>FM-304</b>	Banking and Financial Services	100	70	30	5	4
<b>FM-305</b>	Corporate Restructuring & Control	100	70	30	5	4
<b>FM-306</b>	Security Analysis	100	70	30	5	4

**SEMESTER-IV**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>FM-401</b>	Financial Engineering	100	70	30	5	4
<b>FM-402</b>	Project Planning and Management	100	70	30	5	4
<b>FM-403</b>	Behavioral Finance	100	70	30	5	4
<b>FM-404</b>	Portfolio Management	100	70	30	5	4
<b>FM-405</b>	Insurance and Risk Management	100	70	30	5	4
<b>FM-406</b>	Private Equity and Wealth Management	100	70	30	5	4

**SEMESTER-III  
FINANCE**

**FM - 301: Quantitative Analysis for Financial Decision Making**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-301.1	Acquaint with the quantitative finance nudges to understand volatilities.
FM-301.2	Ascertain profit probabilities in volatile markets. Understand financial forecasting and develop financial plans.
FM-301.3	Understand financial forecasting and develop financial plans amidst volatilities.
FM-301.4	Develop inquisitive way of thinking in finance space.

**Course Contents:**

**Basic Statistical and Mathematical Concepts:**

An overview of Descriptive Statistics including Central Tendency, Dispersion, Skewness, Kurtosis, expectations and the theoretical distributions.

**Risk & Return and Time Series Concepts:**

Evaluating forecasts of risks and returns, Simple Interest, Compound Interest, Frequency of Compounding, Continuous Compounding, Present Value, determination of best forecast models. Basic time series concepts, fundamental topics in time series analysis: autocorrelation, unit root tests, white noise processes and ARMA processes.

**Modeling Asset Return Volatility:**

Volatility of asset returns, volatility modeling and forecasting methods, the estimation of these models, and methods of testing for volatility predictability. ARCH/GARCH class of models, both univariate and multivariate, leverage effects.

**Risk management and Value-at-Risk.**

Measuring and managing the exposure to risk, Value-at-Risk (VaR), Common models for measuring VaR.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the financial risk and return volatilities for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Patton, A. (2007). Quantitative Finance, UoL Study Guide. (AP)
2. Christoffersen, P.F. Elements of Financial Risk Management. (Academic Press, London, 2003).(PC)
3. Diebold, F.X. Elements of Forecasting. (Thomson South-Western, Canada, 2006) fourth edition. (FD)
4. Wilmott, P. Paul Wilmott on Quantitative Finance (selected chapters). 2nd ed. Wiley, 2006.
5. McNeil, A. J. et al, Quantitative Risk Management. Princeton University Press, 2005.
6. Chris Brooks, Introductory Econometrics for Finance. 2<sup>nd</sup> Edition, Cambridge
7. Bradley, T. (2007) Essential Statistics for Economics, Business and Management. 1st edn.Chichester: Wiley.

**FM - 302: Foreign Exchange Management  
(Common with IB-302)**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-302.1	Understand the foreign exchange trade dealings and settlements including exchange rate determination and risk management.
FM-302.2	Gain understanding of the basic concepts and principles of international financial flows.
FM-302.3	Brace up with risk management techniques to hedge foreign exchange risk.
FM-302.4	Develop an understanding of foreign exchange management practices in India.

**Course Contents:**

International Monetary Systems: Bretton Woods institutions and forex market structure and participants. Foreign exchange quotations: Direct and indirect. Convertibility of Rupee, current account convertibility and capital account convertibility.

Exchange rate: meaning, Spread, official and free market rates, cross currency rates, forward rates. Exchange rates determination theories, factors affecting exchange rate determination, flexible vs. fixed exchange rates, Liberalized Exchange Rate Management System (LERMS). Liquidity and exchange rate stabilization policies, Relation between the interest rate, inflation and exchange rates: Fisher effect.

Currency Forwards, Currency Futures and Currency Options, Currency Swaps. Currency Forwards vs. Currency Futures Contracts. Trade settlements in the spot and currency futures and forward markets.

Foreign Exchange Risk and Exposure: Techniques for the Measurement and Management of Currency Risk and Exposure, parameters and constraints of Exposure Management. Forecasting Exchange Rates: Techniques of forecasting Exchange Rates.

Tax treatment of Foreign Exchange gains and losses. Foreign Exchange Control in India, RBI guidelines, Salient features of FEMA.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of forex management for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Bhorali, D. and Sikidar, S.: International Financial Institution and Monetary Management.
2. Chaudhary, B.K.: Financing of Foreign Trade and Foreign Exchange.
3. Shapiro, Alan C.: Multinational Financial Management, P.H.I., New Delhi.
4. Henning, Pigott & Scott: International Financial Management.
5. Keith Pilbeam : International Finance, MacMillan India Ltd., New Delhi.
6. Apte P.G.: International Financial Management, TMH, New Delhi.
7. Chatterjee, A.K.: Principle of Foreign Exchange.
8. Saran (V): International Financial Management, PHI. New Delhi

## FM - 303: Derivatives Trading in India

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-303.1	Have a fair understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management.
FM-303.2	Understand the use of mathematical models on financial instruments and knowledge of innovative tools in terms of financial derivatives.
FM-303.3	Understand the pricing of the options, futures and swaps using theoretical models.
FM-303.4	Understand the mechanism of derivative trading to devise profit earning trading strategies.

### Course Contents:

Introduction and evolution of Commodities and Financial Derivatives trading in India. Understanding Underlying Markets microstructures and trading mechanism for equities, commodities and currency derivatives.

Options and Option Pricing Models for equities (Indices and individual stock products) and commodities. Forwards and Futures trading mechanisms in equities, commodities and currencies.

Designing trading strategies based on equities, commodities and currencies in respective markets, viz., options, futures and forwards: underlying assumptions, risk hedging and return generation.

Derivative Trade Clearing, Settlement & Risk Management for equities ( including indices products), commodities and currencies.

Legal and regulatory environment for derivative trading in equities, commodities and currencies, Accounting and Taxation issues in derivative trading, risk mitigation and management strategies for equity, currencies and commodities based derivative trading.

Code of conduct and investor protection measures for equity, currencies and commodities based derivative trading in India.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding derivatives trading for discussion in tutorial classes during the session.

### Suggested Readings:

1. Hull C. John, Basu, Sankarshan (2010), Options, Futures and Other Derivatives, 7th edition, Pearson Educations.
2. Overhaus Marcus. (2008), Equity Derivative - Theory and Application, John Wiley & Sons.
3. Vohra, N.D. and Bagri, B.R. (2009), Futures and Options, 9 th edition, Tata McGraw-Hill.
4. Hand book on Derivatives Trading by National Stock Exchange of India
5. Bansal, (2010), Derivatives and Financial Innovations, 1st edition, Tata McGraw Hill.
6. Gupta S.L. Financial Derivatives: Theory, Concepts and Problems, PHI New Delhi

**FM - 304: Banking and Financial Services**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
<b>FM-304.1</b>	Understand the theoretical and professional disciplines of banking, finance, and the Indian financial ecosystem.
<b>FM-304.2</b>	Understand the dynamic policy changes of the banking industry including the fintech.
<b>FM-304.3</b>	Have a practical understanding of the various distribution channels of financial and insurance products for effective marketing.
<b>FM-304.4</b>	Have a practical understanding of regulatory and compliance mechanisms in the financial services industry.

**Course Contents:**

Overview of financial services – meaning, nature of financial services, type and importance of financial services in an economy. Growth and evolution of financial services companies in India.

Merchant Banking Services: Meaning, types, functions, registration and Code of Conduct.

Securitization: securitization as a funding mechanism, securitization in India. Merchant banking: nature, scope and the regulation of merchant banking in India. SEBI guidelines for public issues.

Equipment leasing – Concept, evolution and classification. Leasing in India: legal aspects, tax consideration, risks in leasing business, lease evaluation from lessee's and lessor's perspective.

Mutual funds (MFs) – evolution, types, regulation, organizational structure and assets under management (AUM) in mutual funds in India.

Credit rating – concept, rationale, process, methodology, SEBI regulations for credit rating in India.

Consumer finance – role of consumer credit in the financial system, legal framework, credit screening methods in India. Credit cards – concept, types, billing and payment, settlement procedure, mechanism of transactions.

Venture capital (VC) – nature, stages, role of venture capital and private equity. Venture capital financing in India with respect to investment process and evaluation criteria.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding financial services domain for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Bansal, L.K., Merchant Banking and Financial Services, Tata McGraw Hill.
2. Bhole, L.M., Financial Institutions and Markets: Structure, Growth and Innovations, Tata McGraw-Hill.
3. Gurusamy, S., Financial Markets and Institutions, Thompson Learning.
4. Khan, M.Y., Management of Financial Services, Tata McGraw-Hill.
5. Kohn, M., Financial Institutions and Markets, Tata McGraw-Hill.
6. Padmalatha, S., Management of Banking and Financial Services, Sultan Chand and Sons.
7. Sengupta, A.K., International Factoring in India: Issues, Problems and Prospects.
8. Tripathy, N.P., Mutual Funds in India: Emerging Issues, Excel Books.

## FM - 305: Corporate Restructuring & Control

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-305.1	Understand the reasons to acquire, choice of target and recognition of the anticipated challenges, risks and pitfalls of the approach of corporate organic/inorganic growth
FM-305.2	Have an understanding of value creation through corporate restructuring.
FM-305.3	Understand the strategic considerations and external pressures, risks and challenges in the corporate restructuring
FM-305.4	Practice case studies to analyze valuation strategies, pre and post merger issues and challenges.

### Course Contents:

Corporate restructuring: Need, scope and modes of restructuring, emerging trends and global scenario.

Mergers and Amalgamations: Concept, need, legal and procedural aspects of mergers and acquisition in India. SEBI guidelines.

Takeovers and Corporate Control: Types of takeovers and legal aspects - SEBI takeover regulations. Procedural, economic, financial, accounting and taxation considerations.

Valuation of Shares and Business, Corporate Demergers/Splits. Difference between demerger and reconstruction; Modes of demerger – by agreement, under scheme of arrangement, by voluntary winding up; tax aspects, tax reliefs, Indian scenario, Reverse mergers.

Post Merger Re-organisation: objectives and criteria of success, profitability, gains to shareholders; post merger valuation; measuring post merger efficiency; factors in post merger reorganization.

Financial Restructuring: Buy-back of shares – concept and necessity; procedure and practice for buy-back of shares and the SEBI guidelines;

Alliances: Integrating alliances into corporate strategy; preparing for alliance, cross cultural alliances; implementing and managing the alliances.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the corporate restructuring and control for discussion in tutorial classes during the session.

### Suggested Readings:

1. Mergers et.al; by S. Ramanujam, Tata McGraw Hill Publishing Company Ltd, New Delhi
2. Takeover of Companies by J.M Thakur, Snow White Publications Pvt, Ltd;
3. Corporate Takeovers in India by V.K Kaushal, Sarup& Sons, New Delhi
4. Corporate Merger and Takeovers by Dr. J.C. Varma, Bharat Publishing House

**FM - 306: Security Analysis**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-306.1	Get Acquaintance of the Indian securities market and its constituents and operations.
FM-306.2	Analyze and identify securities for investment and trading in Indian markets.
FM-306.3	Understand, Analyze and apply valuation models to securities price forecasting
FM-306.4	Evaluate the intrinsic value of financial asset and analyzing the factors that influence its price in the future.

**Course Contents:**

Investment – meaning and avenues of investment, Concept of risk and return in stock investing: determinants of stock return, nature and sources of investment risk, measurement of underlying risk and return.

Investment choices and asset allocation decision – Investment process, individual investor life cycle and asset allocation, security and portfolio approaches, continuous and discrete compounding.

Organization and functioning of financial markets in India - primary, secondary markets, and financial intermediaries. Listing of securities, securities trading and settlement, investor protection and regulation of securities trading and markets: SEBI guidelines.

Security evaluation framework: Common evaluation framework for bonds and equities, Random walk theory and Efficient market hypothesis: forms, tests and anomalies, Fundamental analysis – Economic, industry and company analyses.

Technical analysis – DOW theory, technical trading tools and underlying rules: Bollinger bands and Fibonacci lines, Moving averages convergence and divergence (MACD) and Relative strength Index (RSI), Volume indicators (VI), Accumulation/Distribution (A/D) and Directional Index (DI).

Passives and active investing, investing in fixed income securities: principles and valuation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of investment decisions and analysis for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Alexander, G.J., Sharpe, W.F. and Bailey, J.V., *Fundamentals of Investments*, Prentice Hall.
2. Bodie, Z., Kane, A., Marcus, A.J. and Mohanty, P., *Investments*, Tata McGraw-Hill.
3. Chandra, P., *Investment Analysis and Portfolio Management*, Tata McGraw-Hill.
4. Elton, E.J. and Gruber, M.J., *Modern Portfolio Theory and Investment Analysis*, John Wiley and Sons.
5. Fabozzi, F.J. and Markowitz, H.M., *The Theory and Practice of Investment Management*:
6. Graham and Dodd, "Security Analysis *Asset Allocation, Valuation, Portfolio Construction, and Strategies*", Wiley.
7. Fischer, Donald E. and Jordan, Ronald J., *Security Analysis and Portfolio Management*, Prentice Hall.
8. Mayo, H.B., *Investments: An Introduction*, Thomson Asia.

## SEMESTER-IV

### FM - 401: Financial Engineering

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-401.1	Identify and apply the appropriate techniques (tools) to real financial engineering opportunities for value creation.
FM-401.2	Articulate innovative solutions to financial problems with particular emphasis on understanding new risks in volatile financial markets business firms.
FM-401.3	Focus on finding optimal and outbox solutions to financial problems in broader and challenging environments.
FM-401.4	Understand and analyze underlying risk and incidental value opportunities in traditional, hybrid and innovative financial instruments.

**Course Contents:** Financial engineering – meaning and need of financial engineering, financial engineering *vis-à-vis* financial analysis, tools used in financial engineering, growth and need for financial engineering, skill set required for financial engineering.

Financial engineering in India: Financial Derivatives and futures markets. Nature, types and value drivers of financial instruments and products viz., time value of money, required rate of return, valuation: Absolute and relative valuation, risk –return, investment horizon and portfolio considerations.

Financial engineering processes and strategies – assets and liabilities management, securitization, asset backed securities, mortgage backed securities, corporate restructuring and leverage buyouts/ management buyout, value at risk (VAR).

Emerging instruments: Hybrid securities, credit derivatives, options on debt instruments, exotic options, synthetic instruments, and issues related to accounting treatment of derivatives.

Corporate risk management – planning and controlling reasons for hedging, cash flow hedges and value hedges, capital structure and hedging, interest rate risk management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding corporate risk management and wealth creation for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Dubofsky, D.A., Derivatives, Oxford University Press.
2. Gupta, S.L., Financial Derivatives, Prentice Hall.
3. Hull, J.C., Options, Futures and Other Derivatives, Prentice Hall of India.
4. Marchall, J.F. and Bansal, V.K., Financial Engineering, Prentice Hall.
5. Neftci, S.N., Financial Engineering, Elsevier Academic Press.
6. Strong, R.A., Derivatives: An Introduction, Thomson South-Western.
7. Varma, J.R., Derivatives and Risk Management, Tata McGraw Hill.
8. Walmsley, J., New Financial Instruments, Prentice Hall of India.

**FM - 402: Project Planning and Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-402.1	Understand the concepts of project management for planning to execution of projects.
FM-402.2	Comprehend the fundamentals of contract acquisition, administration, costing and the budgeting.
FM-402.3	Understand the feasibility analysis of project management and network analysis tools for cost and time estimation.
FM-402.4	Make them capable to analyze, apply and appreciate contemporary project management tools and methodologies in Indian context.

**Course Contents:** Theoretical foundations for capital expenditure decisions, Project ideation and idea generation, Screening of Project Idea. Feasibility study, Market and demand analysis. Technical analysis, financial estimation and projections.

Financing of Projects: Investment criteria, term financing and consortium lending, sovereign funds, Venture capital and the PPP, BOT and TOT models. Project risk analysis: firm risk and market risk identification and estimation. Multiple Projects: Cash flow estimation, risk mitigation and constraints.

Network Techniques for Project Management: critical review of PERT and CPM, Time-cost overruns and project review. Legal, tax and regulatory considerations.

Social cost and benefit analysis (SCBA), Environment impact assessment and appraisal, Manpower planning and human aspects in project management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding operational functioning and challenges in project financing for discussion in tutorial classes during the session.

**Suggested Readings:**

1. W. Ahuja, G.K. & Gupta, Ravi : Systematic Approach to Income Tax, Allahabad, Bharat Law Hose, 1997.
2. Bhalla, V.K. : Financial Management and Policy, 2<sup>nd</sup> ed., New Delhi, Anmol, 1998.
3. Chandra, Prasanna : Projects : Preparation, Appraisal, Budgeting and Implementation, 3<sup>rd</sup> ed., New Delhi, Tata McGraw Hill, 1987.
4. Dhankar, Raj S.: Financial Management of Public Sector Undertakings. New Delhi, Westville, 1995.

**FM - 403: Behavioral Finance**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-403.1	Have theoretical and practical understanding of behavioral finance.
FM-403.2	Understand how cognitive disposition affects the financial decision-making of investors, portfolio managers, and firms, and how this results in market anomalies.
FM-403.3	Develop prudent and productive disposition wisely and effectively for financial decision making.
FM-403.4	Understand behavioral biases and psychological characteristics of investors affecting investment decisions.

**Course Contents:**

Conceptual, theoretical foundations and evolution of behavioral finance, Nature and scope of behavioral finance, behavioral finance and conventional finance: A comparison.

Understanding Investor psychology: Beliefs, Attitude, Learning, Herding, Momentum, Biases and Heuristics, Over-confidence and optimism, winners' curse, over reaction and under reaction and cross-cultural behavior.

Investor Preferences: Framing, Irrationality and violation of expected utility, mental accounting, Prospect theory and attention, Saving behavior.

Investment anomalies: Accounting based anomalies, Calendar anomalies, Attention based anomalies: Value v/s Growth, size, equity premium, myopia in investment decision making.

Behavioral Corporate Finance: Introduction, limits to Arbitrage, aggregation. Contemporary issues in Behavioral Finance.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the behavioral disposition influence on investment decisions for discussion in tutorial classes during the session.

**Suggested Readings:**

1. William Forbes, *Behavioral Finance*, John Wiley.
2. Mihe Elvin, *An Introduction to the psychology of Trading and Behavioral Finance*, John Wiley.
3. James Montier, *Behavioral Investing: A Practitioners Guide to Applying Behavioral Finance*, John Wiley.
4. James Montier, *Behavioral Investing: Insights into Irrational Minds and Markets*, John Wiley.
5. Paragh Parikh, *Value Investing and Behavioral Finance*, Tata McGraw-Hill.
6. Prasanna Chandra, *Behavioral Finance*, Tata McGraw Hill, New Delhi

**FM - 404: Portfolio Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-404.1	Have a theoretical and practical understanding of the portfolio approach to investments.
FM-404.2	Understand the valuing equity and debt instruments methodology.
FM-404.3	Measure and evaluate the portfolio performances.
FM-404.4	Design and manage bond as well as equity portfolios for value generation.

**Course Contents:**

Portfolio analysis and valuation principles – meaning, objectives and diverse aspects of investment portfolio construction, portfolio analysis and evaluation, measurement of portfolio risk and return, diversification: the essence of portfolio risk mitigation and management.

Markowitz portfolio theory: mean-variance criterion, portfolio constructions and portfolio selection, Portfolio optimization: Sharpe Single index model and Modern Portfolio theory.

Asset pricing models: Capital market theory: security market line (SML) and Capital market line (CML), Capital asset pricing model (CAPM); Arbitrage pricing theory (APT), Multifactor models and risk estimation.

Valuation principles and practices: Financial statement based theoretical framework of valuation, market price based valuation, enterprise value premia, and valuation of unquoted, unlisted and alternative investments.

Portfolio performance evaluation and management – SEBI guidelines on portfolio management and asset management companies. Portfolio performance evaluation: performance measurement techniques, risk adjusted measures of performance evaluation, evaluation criteria and procedures. Portfolio revision.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of portfolio construction, management and revision being practiced for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Chandra, P., Investment Analysis and Portfolio Management, Tata McGraw-Hill.
2. Elton, E.J. and Gruber, M.J., Modern Portfolio Theory and Investment Analysis, John Wiley and Sons.
3. Fabozzi, F.J. and Markowitz, H.M., The Theory and Practice of Investment Management:
4. Asset Allocation, Valuation, Portfolio Construction, and Strategies, Wiley.
5. Fischer, Donald E. and Jordan, Ronald J., Security Analysis and Portfolio Management, Prentice Hall.

## FM - 405: Insurance and Risk Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-405.1	Understand insurance risk metrics for risk hedging.
FM-405.2	Understand dynamics of insurance contracts and provisions as the features of property-liability insurance, life and health insurance.
FM-405.3	Develop analytical skills for assessing insurance product cost and pricing, marketing, and distribution.
FM-405.4	Understand risk management in volatile ecosystem and environment for risk hedging and value generation.

### Course Contents:

Evolution, growth and organizational structure of banking in India, Salient provisions of Banking Regulation Act, 1949, Bank Nationalization, restructuring and consolidation. Debt restructuring and NPAs, Banking prudence, capitalization and Basel norms.

Organization and structure of Insurance for risk transfer and financial intermediation: Insurable interest and insurance principles for life, marine, fire insurance. Role of insurance Companies in financial stabilization, nation building and infrastructure development, Salient features of Insurance Regulation and Development Authority (IRDA) Act, 1999.

An overview of operations and performance of public, private and foreign insurance companies in India. Insurance density, penetration and affordability of generic insurance products, schemes and plans in India for life and general purpose insurance. Annuities and its roles in insurance product designing and risk mitigation.

Distribution channel in Insurance: Individual Agents-Appointment, functions, code of conduct and remuneration; Claims settlement in Life Insurance and General Insurance.

Risk and its Management, Objectives of Risk Management, Risk Identification and Measurement, Risk Pooling Arrangements and Diversifications, Process of Risk Management.

Risk Aversion and Risk Management of Individuals and Corporations, Risk Management and Shareholder's Wealth. Analytical tools used in Corporate Risk Management: DOW Index, Fault Tree, Event Tree, Hedging with Derivative Contracts, Risk Pricing. Process of Risk Control, Loss Prevention, Techniques of Risk Retention and Reduction.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of operations of banking, insurance companies and risk mitigation in India for discussion in tutorial classes during the session.

### Suggested Readings:

1. NaliniPraveTripathy, Prabir Pal, 'Insurance theory and practice' TMH 2007.
2. M.N. Mishra, Insurance, Vikas Publication.
3. Harrington and Mehaus : Risk Management and Insurance, Tata Mcgraw Hills
4. George Rejda: Principles of Risk Management and Insurance

## FM - 406: Private Equity and Wealth Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
FM-406.1	Understand the mechanism and underpinning of wealth creation.
FM-406.2	Develop company valuation methodologies in the venture capital and private equity settings.
FM-406.3	Identify alternative sources of finance and their wealth generation potential.
FM-406.4	Understand the economics of private equity and wealth management.

### Course Contents:

Overview of the Private Equity Industry: Growth and evolution of private equity, asset classes and instruments, market participants, anatomy of funds and partnership agreements for private equity, and the economics of private equity and wealth management. Principles and fundamentals of Private Equity Investing and underlying investment perspective, financing, structuring and negotiating buyout and managing the portfolio company over the life of the investment including exit or value realization.

Understanding and evaluating private equity firms functioning in financial markets, understanding and managing LP liquidity options; the rise and role of other alternative investment vehicles, notably hedge funds and sovereign wealth funds, and public traded private equity firm, impact of financial market swings, volatility and regulatory changes and challenges in emerging markets.

Personal Financial Planning and wealth management, Personal Financial Planning process, Ethical and professional financial planning – Code of ethics, Cash flow planning and personal financial statement analysis.

Wealth management metrics: Wealth cycle, financial goals, risk profiling, time horizons, investment avenues and alternatives, cash flow pattern, client data collection, estate planning, taxation and ethical consideration in wealth creation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding private equity and wealth creation for discussion in tutorial classes during the session.

### Suggested Readings:

1. Evensky, H., Horan, S. M. and Robinson, T. R. (2011) *The New Wealth Management: The Financial Advisor's Guide to Managing and Investing Client Assets*. Wiley.
2. Chorafas, D. N. (2006) *Wealth management: private banking, investment decisions, and structured financial products*. Amsterdam: Elsevier. EBSCOhost ebook collection [online].
3. Reuvid, J. (ed.) (2007) *The Handbook of personal wealth management*, 3rd ed. London: Kogan Page. MyiLibrary [online].

## SPECIALISATION: MARKETING

### SEMESTER-III

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>MM-301</b>	Advertising Management	100	70	30	5	4
<b>MM-302</b>	Marketing Research and Analytics	100	70	30	5	4
<b>MM-303</b>	Sales and Logistics Management	100	70	30	5	4
<b>MM-304</b>	Consumer Behaviour	100	70	30	5	4
<b>MM-305</b>	Strategic Brand Management	100	70	30	5	4
<b>MM-306</b>	Digital and Social Media Marketing	100	70	30	5	4

### SEMESTER-IV

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>MM-401</b>	International Marketing	100	70	30	5	4
<b>MM-402</b>	Business Marketing	100	70	30	5	4
<b>MM-403</b>	Service Marketing	100	70	30	5	4
<b>MM-404</b>	Strategic Marketing	100	70	30	5	4
<b>MM-405</b>	Rural and Agribusiness Marketing	100	70	30	5	4
<b>MM-406</b>	Retail and Mall Management	100	70	30	5	4

**MARKETING  
SEMESTER-III**

**MM - 301: Advertising Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 301.1	Comprehend the significance of advertising in acquiring and retaining customers.
MM - 301.2	Learn the techniques and processes involved in the dynamic area of advertising.
MM - 301.3	Devise an advertising plan that give a kickstart to the company in attaining its broad marketing objectives.
MM - 301.4	Learn newer and would be future activities reshaping the field of advertising.

**Course Content:**

Understanding advertising: Concept, evolution, purpose and classification. Advertising and society: ethical issues in advertising, social criticism of advertising, Laws in advertising, advertising bodies in India.

Advertising strategy and planning process, Consumer behavior and advertising research, Advertising agency; types, functions and structure of advertising agency, client-agency relationship; Building of advertising programme - message, headlines, copy, logo, illustration, appeal, and the layout.

Media planning and strategy – development of media plan, establishing media objectives, developing and implementing media strategies, evaluation and follow up of media plan; Budgeting- establishment and allocation and budgeting approaches. Measuring the effectiveness of the promotional program- Market testing, pre testing, post testing, laboratory tests and field tests.

Online advertising: objectives, importance, types and challenges of online advertising, advertising on the internet, social network platforms and measuring effectiveness of internet advertising.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Belch, George E and Belch, Michael A. : Introduction to Advertising and Promotion, 3<sup>rd</sup> ed, Chicago, Irwin, 2002.
2. Jethwaney and Jain: Advertising Management, Oxford, 2012.
3. Sandage and Fryberger : Advertising, AITBS, Delhi, 2000.
4. Batra, Rajeev, Myers, johan G. and Aaker, David A. Advertising Management, 9<sup>th</sup> ed., New Delhi, Pearson, 2013.
5. O, Guinn : Advertising & Integrated Brand Production, Vikas Publishing House, New Delhi.

## MM - 302: Marketing Research and Analytics

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 302.1	Get insights on research activities in the marketing ecosystem.
MM - 302.2	Devise a detailed marketing plan concerning any marketing situation faced by the company.
MM - 302.3	Get in-depth knowledge of tools and techniques involved in marketing research.
MM - 302.4	Get inputs on tremendous scope of Analytics in the field of marketing.

### Course Contents:

Marketing Research: concept, process and role of research in marketing. Perspectives and dynamics of Marketing Research. Market Potential Research, Image Research and Research based on (4) Ps of marketing. Consumer research: Issues and dynamics, research issue identification, consumer research ecosystem and challenges.

Marketing Research design and its applications: Exploratory Research, Descriptive Research and Experimental Research designs.

Marketing Research process: Preparation of research blueprint, survey instrument, measurement and scaling tools, data collection and sampling design. Role of analytics, big data and marketing intelligence in research.

Marketing research tools and methods: Conjoint analysis, Cluster analysis, Factor analysis, Regression analysis, Perceptual maps and text analytics.

A detailed review of Structural Equation Modeling (SEM) in marketing and consumer research.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding the dynamics of marketing research for discussion in tutorial classes during the session.

### Suggested Readings:

- Cooper, Donald R and Pamela S Schindler, Marketing Research- Concepts and Cases, Tata McGraw Hill Publishing Company Limited, New Delhi.
- Malhotra, Naresh K and S Dash, Marketing Research- An Applied Orientation, Pearson.
- Boud, Harper W, Westfall, Ralph L and Stanley F Stasch, Marketing Research- Text and Cases, RD Irwin
- Green, Paul E and Donald S Tull, Research for Marketing Decisions, PHI.
- Beri, GC, Marketing Research, Tata McGraw Hill, New Delhi.

**MM - 303 Sales and Logistics Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 303.1	Get insights on Sales Function of an Organisation.
MM - 303.2	Learn managing salesforce to the advantage of the organisation.
MM - 303.3	Gain knowledge concerning logistics and supply chain eCourse Outcomes:system of an enterprise.
MM - 303.4	Comprehend present and forecast future of an extremely important area of sales and logistics management.

**Course Contents:**

**Sales Management:** Conceptual framework, Organization of sales function and policies, role and responsibilities of field sales manager. Sales planning and budgeting, market potential estimation and sales forecasting, setting up and administration of sales territories.

Fixation of sales quota, sales and cost analysis; Organizing and managing sales force- selection, training, compensation, motivation and evaluation of sales performance.

**Logistics management:** Conceptual framework and its relationship with the supply chain management. Logistics as a source of competitive advantage.

**Warehousing:** Location and layout, alternatives and strategy. Inventory management policies. **Transportation:** modes, packaging, costs and challenges. Organic and custom hire (inorganic) logistics. Organization and administrative challenges of logistic entities.

Recent trends in logistics: e-logistics, green logistics and reverse logistics.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the logistic and supply chain for discussion in tutorial classes during the session.

**Suggested Readings:**

- Still, Richard R, Edward Cundiff and Norman Govoni, Sales Management- Decision, Strategies and Cases, Pearson Education/ Prentice Hall of India.
- Dalrymple, Douglas J, William Cron and Thomas Decarlo, Sales Management, John Wiley and Sons Asia Pvt. Ltd.
- Spiro, Stanton and Rich, Management of Sales Force, Tata McGraw Hill.
- Bowersox, D.J and David Closs, Logistical Management, Tata McGraw Hill.
- Sople, Vinod, Logistics Management, Pearson Education, India.
- Bhattacharyya, SK, Logistics Management, S Chand, India

**MM - 304: Consumer Behaviour**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 304.1	Get insight on behaviour of consumers so as to make organisations serve them better.
MM - 304.2	Understand the dynamics of consumer decision making.
MM - 304.3	Know various psychological, social, economic and other influences on consumer behaviour.
MM - 304.4	Understand various models that have tried to explain consumer behaviour dynamics.

**Course Contents:**

Consumer Behavior: Conceptual framework, nature, scope and significance for marketers. Consumer research: Role and processes. Consumer decision making process: Various stages and underlying marketing implications.

Psychological factors influencing consumer behavior: Theories and principles of perception, learning, motivation, personality & self concept and attitude with underlying marketing implications.

Group dynamics and influence of socio-economic, cultural and demographic factors consumer behavior such as family and reference groups and their marketing implications.

Communicating with Consumers: conceptual framework of opinion leadership and diffusion of innovation with underlying marketing implications.

Industrial buying behaviour, Consumer behaviour audit. Modeling consumer behavior: A brief overview of Pavlovian model, economic model, Input, process, output model, Psychological model, Howarth Sheth model, Sociological model, Family decision making model, Engel-Blackwell-Kollat model, Nicosia Model and Industrial Buying model.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of consumer behavior for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Schiffman, LG and LL Kanuk, Consumer Behaviour, Pearson Education
2. Blackwell, RD, PW Miniard and JF Angel, Consumer Behaviour, Cengage Learning India Pvt. Ltd.
3. Peter, JP and JC Olson, Consumer Behaviour and Marketing Strategy, McGraw Hill.
4. Handerson, S, Consumer Behaviour in Theory and Action, John Wiley and Sons.
5. Assel,H: Consumer Behaviour- A Strategic Approach, Houghton Mifflin.
6. Loudon and A Della, Consumer Behaviour, Tata McGraw Hill.
7. Hawkins, DL, DL Mothersbaugh and Amit Mookerjee, Consumer Behaviour: Building Marketing Strategy, Tata McGraw Hill Education Pvt. Ltd., 11<sup>th</sup> Edition.
8. Solomon, Michael R, Consumer Behaviour, Prentice Hall, 10<sup>th</sup> Edition, 2012.

**MM - 305: Strategic Brand Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 305.1	Get detailed insights on the field of branding.
MM - 305.2	Learn how to build a brand as a potent weapon in the armoury of the organisation.
MM - 305.3	Understand various terminologies in the gamut of branding.
MM - 305.4	Perceive how a successful brand differs from an unsuccessful one and how total it to success.

Customer value creation: Porter's value chain, Customer-based brand equity, managerial issues and challenges in building strong brands and creating customer value

Brand personality: Dimensions of brand personality, process of personality creation; brand protection; Brand equity and brand image- Defining brand equity, Brand image constellation and brand image dimensions; Brand extension decisions- line extension, line extension trap, brand extension causes and types, brand extendibility.

Brand Identity- Concept, levels and perspectives of brand identity, Brand identity prism; Brand positioning - Meaning, Point of parity & Point of difference, Positioning guidelines and re-launch

Managing the brands over time- Functional brands, symbolic brands, experiential brands, concept management, forces affecting brands, brands revitalization and brand elimination.

Brand Valuation- Meaning, approaches of brand valuation; cost based approach, market based approach, royalty approach, discounted cash flow approach, interbrand approach, Choosing the valuation method; Building global brands- Standardization and customization, global brand strategy, building global customer-based brand equity.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding brand value creation for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Keller, Kevin Lane, Parameswaran and Jacob : Strategic Brand Management, Pearson, 1998.
2. Harsh V Verma: Brand Management: text and cases, Excel Books, 2008.
3. S. A. Chunawalla: Compendium of Brand Management, Himalaya Publishing House 2009.
4. Kapferer, J N. : Strategic Brand Management, New York, Free Press, 2012.
5. Elliot R. and Percy L.: Strategic Brand Management, Oxford University Press, 2009.

## MM - 306: Digital and Social Media Marketing

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 306.1	Get a bird's eye view of newer technologies shaping modern day marketing.
MM - 306.2	Pin-point how the modern day marketers are empowering themselves with digitalization.
MM - 306.3	Throw light on various social media platform available for modern day marketers to showcase themselves.
MM - 306.4	Visualise future of marketing in light of emerging digital and social media platforms.

### Course Contents:

Evolution of Digital marketing from traditional to modern era. Role of Internet; current trends, Info-graphics, implications for business & society; Emergence of digital marketing as a tool; Drivers of the new marketing environment; Digital marketing strategy; P.O.E.M. framework, Digital landscape, Digital marketing plan, Digital marketing models. Search Engine Optimization; introduction, onpage and offpage optimization. Search Engine Marketing with google AdWords; PPC, Display Advertising. Social Media Marketing; introduction to social media platforms, Penetration & characteristics; Building a successful social media marketing strategy. Affiliate marketing & strategic partnerships. Email and mobile marketing; Content and strategies. Google analytics; meaning, importance and tools.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the digital and social media marketing for discussion in tutorial classes during the session.

### Suggested Readings:

1. Hanson, W and KirthiKalyanam, Internet Marketing and E-Commerce, Cengage Learning, 2015.
2. Mullen, J and D Daniels, E-Marketing- An Hour a Day, Sybex Publisher, First Edition.
3. Chaffey, Dave and Fiona Ellis Chadwick, Digital Marketing- Strategy, Implementation and Practice, Pearson Education Inc., 2012.
4. Kotler et. Al, Principles of Marketing, Pearson Education Inc., New Delhi, 13<sup>th</sup> Edition.
5. Kaufman, Era and Chris Hortan, Digital Marketing- Integrating Strategies and Tactics with Values, Routledge, 2014.
6. Ahuja, Vandana, Digital Marketing, Oxford University Press, First Edition.
7. Harvard Business Review, South Asia Edition, India today Group

## SEMESTER-IV

### MM - 401: International Marketing

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 401.1	Understand dynamics involved in marketing beyond the national boundaries.
MM - 401.2	Gain useful insights to indulge in global marketing.
MM - 401.3	Comprehend changed orientation of marketing in global arena viz-a-viz marketing within domestic boundaries.
MM - 401.4	Well understand the mantra of Think Global, Act Local.

**Course Contents:** International Marketing: Definitions, nature, scope and benefits; reasons and motivations underlying International Trade and International Business; Domestic Marketing versus International Marketing; International marketing orientation- EPRG framework; Trade Barriers- Protectionism, Tariff and non-tariff barriers; basic modes for entry; Process of International Marketing;

Market segmentation- Basis, macro and micro segmentation; Target market strategies, MBA positioning decisions. International Marketing Planning- Process and framework of market planning; Selection process and strategies; Process of marketing Control. International Marketing Mix: International product policy and planning: International product mix, Product life cycle, product standardization and adaptation, and organization of product warranties and services.

Building brands for foreign markets, labeling and packaging decisions, International pricing decisions- pricing policies, the process of price setting, pricing decisions, Terms of payment in international transactions, dumping, counter trade, transfer pricing and grey marketing. International Distribution Decisions: International Distribution Channels, International distribution policy, selecting distribution channels; Communicating with the global world- Global advertising and culture, setting global advertising budget, Advertising standardization vs. adaptation, global media decisions, other means of communication; Global marketing and internet.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding international marketing orientation and operations for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Vern Terpestra and Ravi Sarthy : International Marketing, Thosmson.
2. Cateora, Graham and Salwan : International Marketing, Tata McGraw-Hill, 2008.
3. Kotabe, M. and andHelsen, K. : Global Marketing Management, Wiley, 2011.
4. R. L. Varshney and B. Bhattacharya : International Marketing; Sultan Chand Publication, N. Delhi.
5. SakOnkvisit and John Shaw : International Marketing ( Analysis and Strategy), PHI, N. Delhi.
6. Rakesh Mohan Joshi: International Marketing, Oxford University Press.

**MM - 402: Business Marketing**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 402.1	Chalk out differences between consumer and business marketing.
MM - 402.2	Learn a different orientation desired for being a business marketer.
MM - 402.3	Learn dynamics of business to business marketing in competitive ecosystem
MM - 402.4	Understand marketing mix as it is applicable to business marketing.

**Course Contents:**

Business Marketing: Concept, Importance, Business versus Consumer Marketing, Nature of industrial demand, Reseller market; Understanding B2B Markets- Types of organizational Customers and their purchasing policies, Business products classification and marketing implications.

Organizational buying Decisions- Objectives in organizational buying, Buy-phases in purchasing decision process, Buying situations, Buygrid framework; Buying centre roles and influencers; Models of business buyer behavior- Sheth model and Webster and Wind model; Assessing business opportunities- Role of marketing research, research objectives and process in B2B markets.

Segmenting the business markets and evaluating the potential segments, Target Marketing and Product Positioning. Industrial Product Decisions- Product development strategy, Developing business products, product revitalization or elimination; Product pricing- Pricing objectives, costs in industrial pricing, pricing methods, transfer pricing, geographic pricing, leasing; Business marketing logistics and physical distribution, Designing communication strategies for business markets.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the business to business marketing for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Reader Robert R. Industrial Marketing Analysis, Planning and control Englewood Cliffs, New Jersey, Prentice Hal Inc.
2. Vitale; Business to Business Marketing; Thomson Learning, Mumbai.
3. Havalder Krishna K, Industrial Marketing, TMH, New Delhi.
4. Corey E Raymond, Industrial Marketing: Cases and concepts,. Englewood cliffs, New Jersey Prentice Hall Inc.
5. Hill, Richard Industrial Marketing. Homewood Illinois, Richard D. Irwin
6. Webster, FE. Industrial Marketing Strategy, New York John Wiley
7. Alexender S. Ralph cross – Industrial Marketing.
8. Reeder Robert R., “Industrial Marketing” PHI.
9. M.Govindarajan“ Industrial Marketing Management” Vikas Publishing House.

**MM - 403: Service Marketing**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 403.1	Get insights on service marketing ecosystem
MM - 403.2	Pin-point different orientation required in marketing of services viz-a-viz marketing of goods.
MM - 403.3	Convey challenges involved in the marketing of services and ways to overcome these through dynamism.
MM - 403.4	Understand best ways to measure service quality.

**Course Contents:**

**Services and The Economy-** The growing influence of services in the economies of the countries around the globe. Services and the Indian Economy: Contribution and Reasons for Growth of Services in India.

**Services and It's Marketing-** Unique Characteristics of Services and Problems Associated with Services Marketing on Account of these. Overcoming Challenges Associated with Services Marketing. Goods-Service Categorization. Types of Services- Core and Supplementary.

**Service Marketing Environment and Mix-** Prominent Environmental Factors Influencing Service Marketing. A Bird's Eye-View of Service Marketing Mix- Product, Price, Place, Promotion, Process, People, Physical Evidence and Productivity.

**Service Management Triangle-** An Introduction to the Concept and its Variants viz. Internal Marketing, External Marketing and Interactive Marketing.

**Service Quality, Productivity and Recovery-** Service Quality- Prominent Models. Service Productivity-Measurement and Productivity Enhancement Strategies. Relationship between Service Quality and Productivity. Service Recovery- Significance. Recovery Techniques.

**Service Value Enhancement-** Service Differentiation- Significance and Techniques. Service Positioning-Ways. Relationship Marketing- Significance and Tools.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the services marketing for discussion in tutorial classes during the session.

**Suggested Readings**

1. Zeithaml, V.A, D.D Gremler, M.J Bitner and A Pandit, Services Marketing, Tata McGraw Hill, 4<sup>th</sup> Special Indian Edition.
  2. Hoffman, K.D and JEG Bateson, Marketing of Services, Cengage Learning, Indian Edition.
  3. Lovelock, Christopher, Services Marketing, Pearson Education, 7<sup>th</sup> Edition.
  4. Woodruff, H.E, Services marketing, Longman Group.
  5. Payne, D, The Essence of Services Marketing, Prentice Hall of India.
  6. Verma, Harsh V, Services Marketing- Text and Cases, Pearson Education.
  7. Kotler, Philip and Gary Armstrong, Principles of Marketing, Prentice Hall of India.
- Journal of Services Marketing, Emerald Publications

**MM - 404: Strategic Marketing**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 404.1	Pin-point the relevance of keeping a strategic outlook for the functional area of marketing.
MM - 404.2	Understand how strategic marketing is oriented differently to basic marketing.
MM - 404.3	Grasp various terminologies, tools and techniques involved in strategic marketing.
MM - 404.4	Make it out as to how to gain sustainable competitive advantage through marketing strategically.

**Course contents:**

Strategic Marketing-Meaning, Nature and Historical Perspective, Strategic Marketing v/s Marketing Management, Process of Strategic Marketing Planning; Strategic choices and decisions at corporate level, SBU level- Generic competitive strategies- Cost Leadership Strategy, Differentiation Strategy, Focused Strategy, and functional level strategies.

Customer Analysis- Process and a Study of Key Factors Pertaining to the Analysis of Individual Customers and Organisational Customers. Competitor Analysis- Rationale and Process. Types of Competitors- Market Leaders, Market Challengers, Market Followers and Market Nichers, An Overview of the Strategic Options Available to Various Types of Competitors.

Market Analysis- Dimensions and Process; Environmental and Internal Analysis; An Overview of Alternative Strategies: Product- Market Strategies- Market Penetration Strategy, Market Development Strategy, Product Development Strategy and Diversification Strategy, Global Strategies, **and** Preemptive Moves,

Obtaining Sustainable Competitive Advantage. Role of Portfolio Analysis in Strategic Choice- BCG Matrix, GE 9 Cell Model, Shell Directional Policy Matrix; Implementing Marketing Strategies- The Role of Structure, Systems, People and Culture; Evaluation and Control of Marketing Strategy- Rationale and Techniques- Annual Plan Control, Profitability Control, Efficiency Control and Strategic Control.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of competitive ecosystem for strategic marketing decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Aaker, David A, Strategic Market Management, Wiley Publications
2. Kerin, R A and R A Peterson, Strategic Marketing Problems, Pearson Education
3. Cravens, W and Nigel F Piercy, Strategic Marketing, McGraw-Hill Publications, Indian Edition.
4. Walker, B and Mullins Larrech, Marketing Strategy, McGraw Hills Publications, Indian Edition.
5. Jain, S C, Marketing Strategy- Planning, Implementation and Control, Cengage Learning, India Edition.
6. Kotler, P and Kevin L Keller, Marketing Management, Prentice Hall India

**MM - 405: Rural and Agribusiness Marketing**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 405.1	Understand rural marketing ecosystem
MM - 405.2	Understand Agribusiness marketing ecosystem
MM - 405.3	Grasp as to how to explore rural market potential of India through innovative marketing.
MM - 405.4	Grasp as to how to explore agribusiness potential of India through innovative marketing.

**Course Contents:**

Rural Marketing- Definition, Nature and Scope. Rural Markets- characteristics, importance and challenges & potential in rural markets. Rural Marketing environment. Understanding rural consumers- buying behavior models, factors affecting consumer behavior, buying process.

Rural Markets and STP(Segmenting, Targeting and Positioning).Rural Marketing Mix: Product strategy- product concepts and classification, new product development, product life cycle, packaging and branding in rural India. Pricing strategy- objectives, factors affecting pricing, methods of pricing.

Rural and agribusiness marketing communication strategy- objectives, methods and challenges in rural communication. Rural Distribution strategy- distribution channels and organizing personal selling in rural markets. Role of IT in rural marketing(e-Choupals).

Agribusiness Marketing; concept, process and functions, types of agribusiness markets, problems of agribusiness marketing, Role of Central and State Governments Institutions and organizations in agribusiness marketing. Agribusiness marketing mix. Role of IT in agribusiness marketing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the rural and agribusiness marketing for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Balram Dogra and Karminder Ghuman: Rural Marketing-Concepts& Practices, Tata McGraw-Hill Publishing Company Ltd.
2. Awadhesh Kumar Singh and Satyaprakash Pandey: Rural Marketing-Indian Perspective, New Age International (P) limited Publishers.
3. Pradeep Kashyap and Siddhartha Raut: The Rural Marketing, Biztantra
4. C.S.G Krishnamacharyulu and Lalitha Ramkrishnan: Rural Marketing- Text & Cases, Pearson Education Asia.
5. K.S.Habeeb-Ur-Rahman: Rural Marketing In India, Himalaya Publishing House.
6. Ramkishen. Y: New Perspectives In Rural and Agricultural Marketing, Jaico Publishing House.
7. T.P.Gopaldaswamy: Rural Marketing, Vikas Publishing House Pvt. Ltd.

**MM - 406: Retail and Mall management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
MM - 406.1	Understand Retail marketing eCourse Outcomes:system of India.
MM - 406.2	Understand mall eCourse Outcomes:system and its management in India.
MM - 406.3	Foresee potential of retail and mall management in India.
MM - 406.4	Identify key success factors involved in retail and mall management.

**Course Contents:**

Retailing – Meaning, Nature and Importance of Retailing in India. Trends & Issues in organized Retailing in India. Retail Buying Behavior.

Store Location – Factors influencing Store Location and procedure of store location. Designing Store layout. Issues in Retail Pricing. Retail Promotion Strategies. Trends in retailing – CRM, Role of IT and Non-store Retailing.

Shopping Malls – Concept and trends in India. Types of Malls. Strategic Planning for Malls. Mall design. Mall operation challenges: Security, marketing, leasing and maintenance of the entire building infrastructure including services and utilities.

Strategic Financial issues and recovery Management in Malls. HR issues in Mall Management. Mall Marketing Strategies. Measuring Mall Performance: performance metrics and outcomes.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of retailing and mall management for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Roger Cox and Paul Brittain: Retailing- An Introduction, Pearson Education.
2. Barry Berman and Joel R. Evans: Retail Management- A Strategic Approach, Pearson Education.
3. Swapna Pradhan: Retailing Management- Text & Cases, The McGraw-Hill Companies.
4. Michael Levy, Barton A Weitz and Ajay Pandit: Retailing Management, The McGraw-Hill Companies.
5. Arif Sheikh and Kaneez Fatima: Retail Management, Himalaya Publishing House.
6. Chetan Bajaj, Rajnish Tuli and Nidhi Srivastava: Retail Management, Oxford University Press.
7. Abhijit Das, Mall Management with Case Studies: Taxmann's Allied Services.
8. Harvinder Singh, Sridhar R. Srinivasan: Mall Management, The Tata McGraw-Hill Companies.

**SPECIALISATION: HUMAN RESOURCE MANAGEMENT  
SEMESTER-III**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>HRM-301</b>	HRD: Systems & Strategies	100	70	30	5	4
<b>HRM-302</b>	Indian Labour Legislation	100	70	30	5	4
<b>HRM-303</b>	Management of Industrial Relations	100	70	30	5	4
<b>HRM-304</b>	Human Resource Metrics and Analytics	100	70	30	5	4
<b>HRM-305</b>	Compensation and Reward Management	100	70	30	5	4
<b>HRM-306</b>	Talent Acquisition and Performance Management	100	70	30	5	4

**SEMESTER-IV**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>HRM-401</b>	Group Dynamics and Leadership Excellence	100	70	30	5	4
<b>HRM-402</b>	Strategic Human Resource Management	100	70	30	5	4
<b>HRM-403</b>	Cross Cultural and Global HRM	100	70	30	5	4
<b>HRM-404</b>	Counselling, Mentoring and Negotiation Skills	100	70	30	5	4
<b>HRM-405</b>	Change Management & Organisational Development	100	70	30	5	4
<b>HRM-406</b>	Competency Mapping & Assessment Centres	100	70	30	5	4

**SEMESTER-III**  
**HUMAN RESOURCE MANAGEMENT**

**HRM - 301: HRD System & Strategies**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 301.1	Sensitizing towards developing employees for achieving personal and organizational goals.
HRM - 301.2	Understand the HRD Frameworks, HRD Subsystems and Designing of HRD systems.
HRM - 301.3	Explain the importance, typologies and process of developing HRD Strategies.
HRM - 301.4	Review HRD Practices in Indian Organisations .

**Course Contents:**

Human Resource Development: Concept, Goals/Objectives, Principles and Challenges, HRD Process. Changing paradigm of HRD, HRD culture and climate, HRD in global perspectives.

**HRD Frameworks:** Rao and Pareek's Intergrated framework, The strategic HR Framework Approach, The Integrative framework, Human Capital Appraisal Approach, HRD Score Card approach , P-CMM Approach.

**HRD Sub-systems-** Performance Management and Potential Appraisal, Training & Development, Career Planning, Succession Planning, Quality Circles. Quality of Work Life, Feedback , HRD Audit, OD Interventions. Contribution of sub-systems to HRD goals.

**HRD System design:** Principles and elements in designing HRD system. Structure and Organisation of HRD: Role of HRD Managers, Competencies of HRD Professionals, Challenges of future HRD professionals.

**Developing HRD strategies:** HRD for Workers, HRD for other special groups, HRD strategies to cope with Organizational Change, HRD issues in corporate M&A, Technology, innovations and the HRD.

**HRD Practices in Organizations:** HRD Practices in Government, Manufacturing, Service Sector organizations and the MNCs. Recent Trends of HRD in India.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of HRD system and strategies for discussion in tutorial classes during the session.

**Suggested readings**

1. Dayal, Ishwar: Successful Application of HRD, New concepts, New Delhi. 1996.
2. DayalIshwar: Designing HRD Systems, Concept, New Delhi, 1993.
3. Gupta Santosh & Deep Sachin Gupta: Human Resource Development, 2<sup>nd</sup> Ed. 2008, Deep and Deep Publications.
4. Kohli, Uddesh& Sinha, Dharni P.: HRD - Global Challanges& Strategies in 2000, AD ISTD, New Delhi. 1995.
5. Krishnaveni, R.: Human Resource Development: A Researcher's Perspective, Excel books, 2008
6. Kaushal H.: Human Resource Development, McMillan.

**HRM - 302: Indian Labour Legislation**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 302.1	Understand the need, importance and fundamental principles of labour legislation in India.
HRM - 302.2	Understand legal provisions of Regulative and Protective Labour Legislations.
HRM - 302.3	Develop an understanding of social security laws.
HRM - 302.4	Acquaint with Wage related legislations.

**Course Contents:**

**Introduction:** Labour Legislations: Nature, Objectives, Need, Classification/Types of Labour Legislation; Principles of Modern Labour Legislation; Factors Influencing Labour Legislations; Indian Constitution and Labour Legislation.

**Jurisprudence:** Meaning and scope of Industrial Jurisprudence, Principles of Industrial Adjudication, Challenges and problems in Labour Laws, Approaches to Labour Laws enforcement in India.

**The Regulative & Protective Labour Legislations:** The Trade Unions Act, 1926; The Industrial Disputes Act, 1947, The Industrial Employment (Standing Orders) Act, 1946, The Factories Act, 1948.

**Wage-Related Labour Legislations:** The Payment of Wages Act, 1936, The Minimum Wages Act, 1948, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976 and the Code on Wages Act, 2019.

**Social Security Labour Legislations:** The Workmen's Compensation Act, 1923, The Employees' State Insurance Act, 1948, The Employees PF and Miscellaneous Provisions Act, 1952, The Maternity Benefit Act, 1961, The Payment of Gratuity Act, 1972.

**Laws Relating to Protection of Child Labour, Contract Labour and Women at Workplace:** Major Legal Provisions of The Contract Labour (Regulation and Abolition) Act, 1970 & The Child Labour (Prohibition and Regulation) Act, 1986. Sexual Harassment at Workplace: Meaning and definition, Legal Analysis, Judicial View, International Norms, National Norms, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013;

**Contemporary Issues:** Need of Labour Law Reforms, New proposed Labour Codes; Govt , trade unions , employer and employees perspective in new framework of Labour Laws and labour reforms. Gender Justice: Constitutional Aspects, Legal Aspects.

Important Case Laws

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of Legislative Framework of Labour Laws in India for discussion in tutorial classes during the session.

**Suggested Readings:**

1. S. C. Srivastav, Industrial and Labour Laws ,Vikas Publishing Houses.
2. Malik, P.L., Industrial Law; Eastern Book Company, Lucknow.
3. Goswami, V.G., Labour and Industrial Relations Law, Central Law Agency, Allahabad.
4. Sharma, A.M., Industrial Jurisprudence, Himala Pub. House, New Delhi.
5. Mishra P.N., Labour and Industrial Laws, Central Law Publishing, Allahabad.
6. Sinha, P.R.N., Industrial Relations and Labour Legislations, Oxford and IBH Publishing Co., New Delhi.

## HRM - 303: Management of Industrial Relations

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 303.1	Understand the facets of the interactions between employers and employees. To be conversant with various emerging trends in industrial relations.
HRM - 303.2	Acquaint with various Employer organisation's origin, growth and structures.
HRM - 303.3	Understand the characteristics, roles and relevance of trade unions.
HRM - 303.4	Comprehend several forms and causes of industrial disputes and to understand the legal framework for dispute resolution.

### Course Contents:

**Introduction to IR:** Concept, Nature, Objectives, Significance & Factors of Industrial Relations and Approaches. Models of Industrial Relations- Unitarist, Pluralist, Dunlop's and Marxist perspectives of IR; Industrial Relations System in India.

**Industrial Disputes in India:** Meaning, Difference between Industrial Disputes and Industrial conflict, Forms of Industrial Disputes, Impact of Industrial Disputes, Prevention and settlement of industrial disputes: Statutory and Non-Statutory Measures, Disputes settlement Machineries stipulated in Industrial Disputes Act 1947.

**Trade Unionism, Collective Bargaining and Negotiation:** Concept, Functions of Trade Unions– Types of Trade Unions-Problems of Trade Unions in India. Trade union act 1926, **Collective Bargaining:** Concept, Principles, Forms of Collective Bargaining, Theories and practices of Collective Bargaining. Negotiation - Effective negotiation, trends, issues and practices in Negotiation in Indian Industries.

**Employee Discipline:** Concept, Aspects & Objectives, Causes of Indiscipline, Approaches to deal with Indiscipline activities: Traditional Approach, Judicial Approach, Humanistic Approach, Hot Stove Approach, HRD Approach. Essential of Good Disciplinary System.

**Employee Grievance:** Concept and Causes of Grievances, Sources of Grievance, Grievance Re-dressal Machinery, Grievance Procedure. Regulation of Industrial Relations in India Tripartite Bodies.

**Worker's Participation in Management:** Concept, Origin, Growth and Forms of Workers' Participation in India, Effective Workers' Participation in India. Industrial Democracy: Concept and scope of industrial democracy. International Labour organization (ILO) and industrial relations, Contemporary Issues and Recent Trends in Industrial Relations in India.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of varied dynamics of industrial Relations in India for discussion in tutorial classes during the session.

### Suggested Readings

1. Venkataratnam, Industrial Relations, Oxford University Press.2009
2. Sinha, P.R.N. et. Al, Industrial Relations, Trade Unions, and Labour Legislation. Pearson Education. 2009
3. Blyton, P. & Turnbull, P., The Dynamics of Employee Relations. Palgrave Macmillan. 2004
4. Ackers, P. & Wilkinson, A., Understanding Work & Employment: Industrial Relations in Transition. Oxford: Oxford University Press. 2003
5. Padhi, P.K. Labor and Industrial Laws. Prentice Hall of India.2010
6. Singh, B.D., Industrial Relations: Emerging Paradigms. Excel Books. 2009
7. Sen, R., Industrial Relations: Text and Cases. Macmillan India. 2009
8. Arun Monoppa Industrial relations &labour laws, Tata Mc Graw Hill, Delhi
9. P.N.Singh&Neeraj Kumar, Employee relations management, Pearson, Delhi

## **HRM - 304: Human Resource Metrics and Analytics**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 304.1	Develop an understanding of the concept of HR Analytics, HR Metrics, HR Scorecard, and HR Benchmarking.
HRM - 304.2	Acquaint with various applications of HR Analytics in business decisions.
HRM - 304.3	Explain the various HR analytical frameworks, HR Models, HR Data and its governance.
HRM - 304.4	Describe the usage of predictive analytical techniques in HR decision optimisations.

### **Course Contents:**

Introduction to HR Analytics: Concept, Perspectives, Evolution. Need of HR Analytics, Changing HR Dynamics. Analytic Capabilities, Analytic Value Chain, Application of HR Analytics. HR Metrics; HR Scorecard; HR Benchmarking.

Preparation for HR Analytics: Review existing HR Analytics Frameworks and HR Models, Identify the Purpose/Aims and Scope of Analytics, Devise Methodology for using it, preparing for an analytics Unit, Developing an Analytics Culture in business organizations.

Pre-requisites of HR Analytics: Engaging with Stakeholders, Coaches, Technological Know-how, Build Analytics Team, Involvement of Consultant and Coaches. Developing HR Analytics Culture: Importance of Leadership; Overcoming Resistance to HR Analytics; Communicate with Storytelling and Visualization.

Understanding HR Data: Data Quality, Data Types, Data Governance, Resolving Data Issues: Efficiency Measures, Effectiveness Measures and Business Outcome Measures. HR Analytics Execution & Reporting and determining the Key Performance Indicators;

Optimization and Predictive Analytics; Interpreting the Results, Analysis for developing Insights: Use of Trend Analysis, Regression, Correlation, Benchmarking, Workforce Modeling, Structural Equation Modeling for predictive analysis. Future of HR Analytics: New Opportunities & Challenges, Emerging Data Sources, and Evolving Technology.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of HR metrics and analytics for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Gene Pease, Boyce Byerly and Jac Fitz-enz, Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, John Wiley & Sons.
2. HR Analytics: The What, Why and How, Tracey Smith. WILEY & SAS Business)
3. HR Analytics: Understanding Theories and Applications, Dipak Kumar Bhattacharyya

## HRM - 305: Compensation & Reward Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 305.1	Promote understanding of issues related to the compensation or rewarding human resources in the corporate sector both in India as well as across the globe.
HRM - 305.2	Impart skills in designing, analysing and restructuring reward management systems, policies and strategies.
HRM - 305.3	Understand the incentive schemes and plans, fringe benefits, pensions schemes and ESOPs.
HRM - 305.4	Understand the managerial implications of various compensation related labour laws.

### Course Contents:

**Compensation Management:** Concept, Goals and the theoretical foundations of Compensation Management: Economic and behavioural theories. Internal and external equity in Compensation System. Wage Differentials: Inter and Intra industry wage differentials.

**Reward Management:** Concept, Aims, Components of Reward system: Monetary & Non-Monetary Rewards, Role of Reward in organisation, Strategic perspectives of Reward systems and strategies. Recent Development in Rewards and Recognition in business organisations.

**Understanding Compensation Packages:** Designing Pay Level, Pay Matrix/Mix and Pay Structures Compensation of Chief Executives, Senior Managers, R & D Staff, Board of Director, Sales Executives.

**Incentive Schemes/ Payment –By-Results (PBR), Performance Linked Compensation, Incentives Plans; Fringe Benefits and Supplementary Compensation:** Cafeteria Plans, Pensions Schemes and ESOPs

**India Code on Wages Act, 2019: Salient provisions. Tax Planning:** Tax Implication of Employee Compensation Package to the Employer; Strategies to deal with the Workforce Redundancy.

**International Compensation Practices:** Problems, Objectives and Elements of Expatriate's Compensation Package.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the rewards and compensation management for discussion in tutorial classes during the session.

### Suggested Readings:

1. Armstrong, Michel and Murlis, Helen: Reward Management. Kogan Page, 2010
2. Henderson, Richard I. Compensation Management: Rewarding Performance Prentice Hall of India Pvt. Ltd, 2004
3. Milkovich & Newman Compensation: Tata McGraw Hill, New Delhi, Eighth Edition. 2005
4. Henderson I. Richard Compensation management in a knowledge based world, Pearson Education, New Delhi, 9th edition
5. Singh, B.D.: Compensation and Reward Management. Excel Books, 2007
6. Gerhart, B. & Rynes, S.L.: Compensation, Evidence, and Strategic Implications. Sage Publication, 2008
7. Berger & Berger.: The Compensation Handbook: A State-of –the –Art Guide to Compensation Strategy and Design. McGraw Hill, 2008
8. Martocchio, J. Strategic Compensation: A Human Resource Perspective Approach. Pearson Education. 2004

## HRM - 306: Talent Acquisition and Performance Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 306.1	Understand the talent management process, talent management systems, and challenges in developing and retaining talent.
HRM - 306.2	Provide a comprehensive conceptual and practical insight to the entire cycle of performance appraisal and management including the ethical issues.
HRM - 306.3	Describe the concept of potential appraisal, its determinants and steps in process.
HRM - 306.4	Explain the methods of performance appraisal, and comprehend the performance related problems.

### Course Contents:

**Talent Management:** Basic foundations of Talent Management, leveraging talent, talent value chain, talent management process, Talent Management System - Components and benefits of Talent Management System and challenges in developing TMS.

**Talent Planning** - Concept, succession management process, Integrating succession planning and career planning, designing succession planning program, talent development budget, contingency plan for talent; building a reservoir of talent

**Developing and Retaining Talent** - Potential identification and development, integrating coaching, employee retention- motivation and engagement, Return on talent; making outplacement as a part of talent strategy, developing talent management information system.

Conceptual Framework of Performance Management; Approaches for defining performance. **Performance Measurement:** classification of metrics: types of metrics, characteristics of performance metrics and managing metrics , approaches to measuring organization performance : Balanced scorecard , European foundation for quality management (EFQM) model , Economic value added (EVA) model and traditional financial measures; Key Indicators for measuring Financial Performance and Non-Financial Performance analysis ; Job analysis in performance management system.

**Performance Appraisal and Potential Evaluation:** Meaning, features, methods, appraisal forms and formats, features of potential appraisal, indicators of employee potential, steps in potential appraisal.

**Performance management and Development:** Personal development plan (PDP), 360 degree feedback and BARS as development tool ; Performance management and Pay ; Performance management for teams; and performance evaluation.

**Performance problem solving:** Overview of performance problems, managing underperformers, handling problems at performance review meeting, Ethical issues and dilemmas in Performance Management, Performance Management in Multinational Corporations.

Note: In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the talent acquisition and performance management for discussion in tutorial classes during the session.

**Suggested Readings :**

1. Aguinis, H. (2008). Performance management (2nd ed.). USA: John Wiley.
2. Armstrong, M. (2007). Performance management: key strategies and practical guidelines (3rd ed.). London: Kogan
3. Niven, P. R. (2008). Balanced scorecard step-by-step: maximizing performance and maintaining results (2nd ed.). New Jersey: John Wiley.
4. Rao, T. V. (2004). Performance management and appraisal systems. New Delhi: Response.
5. Armstrong, M. and Baron ( 2012) Performance Management :A strategic and integrated approach to achieve success , JAICO publication (11th edition )
6. Somuendra Narain (2013), Performance Mnagement , Cengage learning publication (2nd edition)

## SEMESTER-IV

### HRM - 401: Group Dynamics and Leadership Excellence

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 401.1	Understand the dynamics of work groups in business entities.
HRM - 401.2	Understand the group dynamics such as Group Cohesiveness, Group Think, and Group conformity etc.
HRM - 401.3	Acquaint themselves with Team Dynamics, stages of team building and behavioural dynamics associated with teams at work.
HRM - 401.4	Understand various leadership styles, and determinants of effective leadership.

#### Course Contents:

**Nature of Groups at Work:** Definition, Types of groups, Dynamics of group formation, Group Decision making Techniques: Delphi Technique; Nominal Group Technique; Traditional Brain Storming; Electronic Brain Storming. Negative Brain Storming Workgroup Vs. Teams: Transforming Groups into Teams, Stages of Team Building and its Behavioral Dynamics.

**Interpersonal Competence & Team Effectiveness:** Measuring Interpersonal Competence FIRO-B. Context; Goals; Team Size; Team Member Roles and Diversity; Group Dynamics: Norms, Cohesiveness, conformity, polarization, obedience, group shift and group think; Transactional analysis & Johari window helping process; Team Effectiveness and influencing factors of team effectiveness. Role of Interpersonal Competence in Team Building.

**Developing Collaboration in Teams:** Functional and Dysfunctional Cooperation and Competition; Interventions to build Collaboration in Organizations; Social Loafing, Social facilitation, Synergy in Teams, Self-Managed Teams and Interpersonal Trust;

**Communication and Creativity:** Communication Process; Communication Effectiveness & Feedback; Fostering Team Creativity;

**Leadership-** Leader v/s manager- Leadership styles, Concepts, Theories and Styles: Trait, Behavioral and situational; Transactional and Transformational Leaderships, Leadership effectiveness, effective leadership communication;

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of work group dynamics for leadership excellence for discussion in tutorial classes during the session.

#### Suggested Readings :

1. Robbins, S. P. (2004). Organizational Behavior. Pearson Education.
2. Luthans, F. (2002). Organizational Behavior. McGraw-Hill International Edition.
3. Pareek, Udai. (2004). Understanding Organizational Behaviour. Oxford University Press.
4. Kolb, D. (1991) Organizational Behaviour: An Experiential Approach. 5th ed. Englewood Cliffs, New Jersey, Prentice Hall Inc.,
5. Moore, MD, (1988) Inside Organizations: Understanding the Human Dimensions London, Sage
6. Clifford T Morgan, Richard A King, John R Weiz, John Schopler (2009) Introduction to Psychology, Tata MC Graw Hill,
7. R.K.Sahu ( 2010), Group Dynamics & Team Building, Excel Books,

## HRM - 402: Strategic Human Resource Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 402.1	Understand the conceptual frameworks, models, approaches associated with strategic HR.
HRM - 402.2	Explain the strategic role of HR in modern technology centric organisations.
HRM - 402.3	Describe the types, process of HR Strategy formulation and its implementation.
HRM - 402.4	Understand the dynamics of specific HR strategies, and contemporary issues in HR.

### Course Contents:

**Strategic Human Resource Management (SHRM):** Meaning, Nature, Significance and the conceptual framework; **SHRM Approaches & Models:** Universalistic, Contingency and Configurational Approaches, Models, Best Fit and Best Practice Approach, Resource- Based view of the firm.

**The Strategic role of HR;** Need of Aligning HR with Corporate Strategy; **HRM Strategy:** Its Nature, Development of HR Strategy and implementation of HR Strategy; HRM strategies related to Organizational Capability and Organizational and Individual performance: Organization Development strategy, Human Capital Management Strategy, Knowledge Management strategy, Corporate Social Responsibility strategy, Organizational Performance strategy, Individual Performance Management strategy.

**Specific HRM strategies:** Employee engagement strategy, Resourcing strategy, Talent management strategy, Learning and development strategy, Reward strategy, Employee relations strategy. Strategic international HRM and HRM strategies.

**Contemporary Issues:** Change, Restructuring and SHRM. Corporate Ethics, Values and SHRM. Diversity & SHRM. Competencies of HR Professional in a SHRM Scenario. Approaches for evaluating and measuring the impact of Strategic HRM

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the Strategic HRM for discussion in tutorial classes during the session.

### Suggested Readings:

1. Aggarwala, Tanuja. , Strategic Human Resource Management, Oxford University Press.
2. Armstrong, M., Strategic Human Resources Management, Kogan Page, London.6<sup>th</sup> Edition
3. Greer, Charles R., Strategic Human Resource Management – A General Managerial Approach, Pearson Education (Singapore) Pte. Ltd, New Delhi.
4. Mabey, Christopher and Salaman, Graeme, Strategic Human Resource Management, Beacon, New Delhi.
5. Porter, Michael S., Competitive Advantage: Creating and Sustaining Superior Performance, Free Press, New York.

## HRM - 403: Cross Cultural and Global HRM

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 403.1	Acquaint themselves with human and cultural variables in global organisations.
HRM - 403.2	Understand the phenomenon of cultural diversity, ways and mechanisms to manage cultural diversity.
HRM - 403.3	Recognise the HR challenges in global organisations.
HRM - 403.4	Explain the role of ILO in regulating International labour standards.

### Course Contents:

Core concepts in managing human resources in the global business environment; Human and Cultural Variables in Global Organisations; Cross Cultural Differences and Managerial Implications; Cultural diversity and role of values.

Approaches to Understanding & Managing Cultural Diversity: achieve global model for cultural differences, Halls and Halls Cross cultural classification and Hofstede six key dimensions, cross cultural differences in communications.

The Contingency Matrix approach to GHRM. Global staffing and staff flow practices. Global organisation structures. Training & development of global employees. Performance management in MNCs. Global compensation practices. MNCs and industrial relations trends.

International Labour Standards. International transfer and repatriation strategies, Corporate Social Responsibility in Global Scenario. Emerging global HRM practices.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the cross cultural and global HRM for discussion in tutorial classes during the session.

### Suggested Readings

- 1 Gupta, S.C. International HRM, Macmillan India.2012.
- 2 Ray and French International HRM, University Press, 2010
- 3 Bartlett, Cand Ghoshal, S. *Transnational Management: Text, Cases and Readings in Cross Border Management*. Chicago, Irwin, 1995.
- 4 Evans, Pucik and Barsoux, *The Global Challenge- framework for international human resource management*, Tata McGraw-Hill Irwin.
- 5 Dowling, Peter J and Welch, Denice E., *International Human Resource Management-* Cengage Learning 2010
- 6 Aswathappa, K *International Human Resource Management*, McGraw Hill 2009
- 7 Tayeb, Monir H. *International Human Resource Management*, Oxford University Press – 2005
- 8 Rao, P.L. *International Human resource Management*, Excel Books, 2009

## HRM - 404: Counseling, Mentoring and Negotiation Skills

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 404.1	Understand nuances of counselling, mentoring and negotiating skill in effective implementation and functioning of HR systems and strategies.
HRM - 404.2	Understand the concept and types of counselling, ethical issues and code of conducts in counselling.
HRM - 404.3	Understand key strategies, tactics and best practices of negotiation.
HRM - 404.4	Recognise the stages of mentoring relationships.

### Course Contents:

**Counseling skills for managers:** Conceptual definitions, Approaches, Values and Goals of Counseling. Counseling Process: Initial encounter with the client, Developing relationship, Problem Identification, Goal Setting, Plan of Action and its Implementation, termination of Relationship and Follow-up, Guidelines for Effective Counseling. Referral Procedures, Role of Counselor & Client in various stages, Key Characteristics, Skills, Qualities & Values for a professional Counselor, Applications of Counseling Skills in modern Organizations.

**Performance Counseling:** Meaning, Objectives and Process. Special Employee related Problems in Counseling. Counseling Therapies: Cognitive Therapy, Behavioral Therapy, Emotive Behavior Therapy (REBT), Psychoanalytic Therapy, Person-Centered Therapy, Gestalt and Existential Therapy. Ethics in Counseling: Ethical Principles & codes of conduct for professional counselors.

**Negotiation Skills for managers:** Nature, Characteristics, Strategy and Tactics of Distributive Bargaining, Strategy and Tactics of Integrative Negotiation; Strategy and Planning for Negotiation., Best Practices in Negotiation – Fundamental Structure of negotiation and Best alternative to a negotiated agreement(BATNA)

**Mentoring Skills for managers:** Key Mentoring Skills, Stages of Formal Mentoring Relationships; Stage I: Building the Relationship, Stage II: Exchanging Information and Setting Goals, Stage III: Working towards Goals/Deepening the Engagement, Stage IV: Ending the Formal Mentoring Relationship and Planning for the future.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the counseling, negotiating and mentoring for discussion in tutorial classes during the session.

### Suggested Readings:

- 1 Singh, Kavita      Counselling Skills for Managers, Prentice Hall of India, Delhi , 2010.
- 2 Rao , S. Narayan      Counselling and Guidance, TMH, 2nd edition, 2007.
- 3 Patterson, Lewis      The Counselling Process, Cengage Learning India.2008
- 4 Burnard      Counselling Skills Training, Kogan Page India.2009
- 5 Feltham and Dryden      Brief Counselling, Mcgraw Hill Publishing.2012.
  
- 6 Kotler, Jeffrey      Counselling Theories and Practices, Cengage.2008  
UdaiPareek      Understanding Organizational Behaviour., By Oxford, Second Edition Page 410-415
- 7 SL Rao      Negotiation Made Simple, , Excel Books pp.30-35 and pp. 196-197)

## HRM - 405: Change Management & Organizational Development

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 405.1	Understand the concepts of Organisational Change, types, resistance to changes and overcoming resistance.
HRM - 405.2	Explain the various models of organisational change.
HRM - 405.3	Describe the concept of Organisational Development, its process, foundations, values assumptions and organisational ethos.
HRM - 405.4	Understand the various OD Interventions and their major types.

### Course Contents:

**Organization Change:** Introduction to Organization Change: meaning and nature of Organization Change. Forces of change, types of organizational change, Resistance to Change at individual and organizational level. Organizational problem diagnosis: The Diagnostic Cycle and the Phases of problem Diagnosis.

**Models of Organizational Change:** Lewin Model of Organization change, McKinsey 7 S Model, Kotter's Model, Burke – Litwin Model, Work Redesign Model, ADKAR Model, Bridges' Transition Model and Grief Model;

**Organization Development:** Concept, Nature and Scope of O.D.; Process of O.D.; Underlying Assumptions & Values; Foundations of OD: Action Research, Survey Feedback, Systems Theory, Participation and Empowerment.

**O.D. Interventions:** Team Interventions, Inter – group Interventions, Personal, Interpersonal and group process interventions, Structural Interventions; Assessment of O.D Implementation – conditions for failure and success in O.D. Efforts.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the organizational change and development for discussion in tutorial classes during the session.

### Suggested Readings:

- 1) Organization Development: Interventions and Strategies by T. V. Rao, T. Venkateswara Rao, T.V. Rao
- 2) Organisational Development And Change By Cummings And Worley (7th Edition)
- 3) Organisational Development By French And Bell (6th Edition)

## HRM - 406:Competency Mapping & Assessment Centre

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Objective:** The objective of this course is to enable students understand mechanism of competency mapping to improve skill sets for better organizational effectiveness.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
HRM - 406.1	Explain the major concepts associated with Competency, its types, categories and their relevance in modern organisations.
HRM - 406.2	Understand the frameworks of competency mapping, approaches and process.
HRM - 406.3	Understand the competency modelling and assessment process.
HRM - 406.4	Explain the various applications of Competency based HRM applications.

### Course Contents:

Concept and definition of competency, Characteristics of competency, Competency versus competence, Performance versus competency; skills versus competency, behavior indicators, productive recognition of competency, Types of competencies – generic/specific, threshold/performance, and differentiating and technical, managerial and human, competency culture: Context and Relevance of competencies in modern organizations.

**Competency mapping :** Framework of competency mapping, approaches of competency mapping, process of competency mapping : preparing organization for competency mapping , identifying jobs/function for competency mapping, setting performance effectiveness criteria, identification , listing, classification and arranging competencies,

**Competency modeling:** phases of competency model, classification of competency models, iceberg’s model of competency, resistance and implementation of competency model. Competency Assessment: prerequisites for competency assessment, process of competency assessment,

**Competency based HRM applications:** competency based recruitment and selection, training and development, compensation, performance management and career and succession planning system, mapping challenges of competency based HRM, Advantages of competency based HRM.

**Assessment centre:** Requirement of assessment centre, Assessment centre Vs development centre, problems and challenges of assessment centre, Techniques used in assessment centre: MAP, MBTI, FIRO-B, SPIRO-M profile, 360 degree feedback.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of competency mapping and assessment for discussion in tutorial classes during the session.

**Suggested Readings:**

- 1 The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, Sanghi Seema. Sage Publications Pvt. Ltd -2007
- 2 Competency based HRM Sherman, Ganesh. Tata Mc Graw Hill – 2004
- 3 360 degree feedback, competency mapping & assessment centers, Sharma, Radha R. , Tata Mc Graw Hill – 2003
- 4 Competency based Human resource management, Srinivas R. Kandula , PHI publications.

**SPECIALISATION: INTERNATIONAL BUSINESS  
SEMESTER-III**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>IB-301</b>	International Accounting	100	70	30	5	4
<b>IB-302</b>	Foreign Exchange Management	100	70	30	5	4
<b>IB-303</b>	Export-Import Procedures and Documentation	100	70	30	5	4
<b>IB-304</b>	India's Foreign Trade and Policy	100	70	30	5	4
<b>IB-305</b>	International Business Environment	100	70	30	5	4
<b>IB-306</b>	International Logistics	100	70	30	5	4

**SEMESTER-IV**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>IB-401</b>	International Financial Markets	100	70	30	5	4
<b>IB-402</b>	International Marketing	100	70	30	5	4
<b>IB-403</b>	International Financial Management	100	70	30	5	4
<b>IB-404</b>	International Strategic Management	100	70	30	5	4
<b>IB-405</b>	Cross-cultural and Global Management	100	70	30	5	4
<b>IB-406</b>	Regional Economic Blocks	100	70	30	5	4

**SEMESTER-III**  
**INTERNATIONAL BUSINESS**

**IB - 301: International Accounting**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

- IB - 301.1 Understand the concept of international accounting and role of various accounting institutions involved in developing accounting standards at national and international level.
- IB - 301.2 Learn the framework for presentation of accounting information including first time adoption of IFRS.
- IB - 301.3 Harmonize domestic and international accounting information reporting.
- IB - 301.4 Understand the concept and methods of transfer pricing.

**Course Contents:**

International dimensions of Accounting; Conceptual framework and the comparative developments, International Accounting Standards: Concept and Mechanism of setting International Accounting Standards, disclosure requirements of International Accounting Standards, and International Audit Environment.

Dimensions of Financial Reporting: Concept and Development of International Financial Reporting Standards (IFRS), Dimensions of IFRS. Types of Foreign Currency Transactions, Managing International Information system, Accounting for Inflationary Trends.

Analyzing Foreign Financial Statements: Accounting and reporting of Foreign Currency Translation, Accounting for Environmental Protection Measures. Harmonizing in domestic and International accounting information reporting.

Transfer Pricing: Concept and methods: Comparable Uncontrolled method (CUP) method, Resale Price method, Cost Plus Method, Transactional net margin method and Transactional Profit Split methods.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the international accounting practices and reporting for discussion in tutorial classes during the session.

**Suggested Readings**

1. V. Sharan : International Financial Management, New Delhi, Prentice Hall of India.
2. Hennie Van Greuning, World Bank : International Accounting Standards: A Practical Guide.
3. Lee H. Radebaugh, Sidney J. Gray, Ervin L. Black International accounting and multinational enterprises.
4. ShirinRathore: International Accounts, PHI.

**IB - 302: Foreign Exchange Management**  
(Common with FM 302)

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 302.1	Understand the fundamentals of foreign exchange management, parties involved in FOREX market.
IB - 302.2	Acquaint theories and practice of exchange rate determination and exchange rate management systems.
IB - 302.3	Understand the currency derivatives, types and functioning of these derivatives.
IB - 302.4	Develop the understanding of currency risk and exposure and parameters and constraints of exposure management.

**Course Contents:**

International Monetary Systems: Bretton Woods institutions and forex market structure and participants. Foreign exchange quotations: Direct and indirect. Convertibility of Rupee, current account convertibility and capital account convertibility.

Exchange rate: meaning, Spread, official and free market rates, cross currency rates, forward rates. Exchange rates determination theories, factors affecting exchange rate determination, flexible vs. fixed exchange rates, Liberalized Exchange Rate Management System (LERMS). Liquidity and exchange rate stabilization policies, Relation between the interest rate, inflation and exchange rates: Fisher effect.

Currency Forwards, Currency Futures and Currency Options, Currency Swaps. Currency Forwards vs. Currency Futures Contracts. Trade settlements in the currency spot and currency futures and forward markets.

Foreign Exchange Risk and Exposure: Techniques for the Measurement and Management of Currency Risk and Exposure, parameters and constraints of Exposure Management. Forecasting Exchange Rates: Techniques of forecasting Exchange Rates.

Tax treatment of Foreign Exchange gains and losses. Foreign Exchange Control in India, RBI guidelines, Salient features of FEMA.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of forex management for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Bhorali, D. and Sikidar, S.: International Financial Institution and Monetary Management.
2. Chaudhary, B.K.: Financing of Foreign Trade and Foreign Exchange.
3. Shapiro, Alan C.: Multinational Financial Management, P.H.I., New Delhi.
4. Henning, Pigott & Scott: International Financial Management.
5. Keith Pilbeam : International Finance, MacMillan India Ltd., New Delhi.
6. Apte P.G.: International Financial Management, TMH, New Delhi.
7. Chatterjee, A.K.: Principle of Foreign Exchange.
8. Saran (V): International Financial Management, PHI. New Delhi

## IB - 303: Export-Import Procedures and Documentation

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

- IB - 303.1 Understand the trade procedure, documentation and ITC (HS) classification system. To learn the role of ICC, INCOTERMS.
- IB - 303.2 Understand the usage of main types of documents in smooth conduct of international trade.
- IB - 303.3 Learn different methods of making payment in international trade and pre-shipment and post-shipment finance options.
- IB - 303.4 Understand the importance of export promotion, schemes, legal aspects and the institutions involved in the promotion.

### Course Contents:

Significance of Procedures and Documentation in International Trade, procedure and documentation as Trade Barriers. WTO Provisions. Aligned Document System (ADS), Official machinery for Trade Procedure and Documentation; ITC (HS) classification system; Role of ICC, INCOTERMS; Nature of Export / Trading Houses, EDI and Documentation.

Main Export and Import Documents; Export Order Processing; export contract; Export Price Quotations; Shipping and Custom Clearance of Export and Import Cargo; Central Excise clearance; Role of Forwarding agents; Cargo Insurance and Claim Procedure.

Methods of Payments in International Trade; Documentary Collection of Export Bills; UCPDC Guidelines; Realisation of Export Proceeds- Provisions of RBI's Exchange Control Manual, FEMA- Objectives, Main Provision of FEMA. Pre Shipment and Post Shipment Finance. Role of EXIM Bank and ECGC in India.

Major Export Promotion Schemes in India- EPCG, Duty Exemption Scheme; DEPB Scheme SIL; Facility for Deemed Exports; Export Promoting Institutions (EOU's/ EPZs/ SEZ's) – Role of Export Promotion Councils, Commodity Boards and ITPO.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Paras Ram: Export: What Where and How, Delhi, Anupam Publication.
2. Ministry of Commerce, Handbook of Procedures, Government of India, New Delhi.
3. Ministry of Commerce, Import Export Policy, Government of India, New Delhi.
4. Custom and Excise Law, Various Issues.
5. Nabhi's Exporters Manual and Documentation.
6. Nabhi's New Import Export policy procedures.
7. Pervin Wadia: Export Markets and Foreign Trade Management, Manishka Publication, New Delhi.
8. M.D. Jitendra: Export Procedures and Documentations, Rajat Publications, Delhi

## **IB - 304: India's Foreign Trade Policy**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 304.1	Understand the status, composition and trends of India's foreign trade.
IB - 304.2	Know the foreign trade policies and institutional support for foreign trade.
IB - 304.3	Understand the role of EXIM bank of India and ECGC in foreign trade.
IB - 304.4	Understand the impact of WTO on India's trade policy.

### **Course Contents:**

India's Foreign trade in the Global context, structure and Equilibrium of India's Balance of Payments, Recent trends in India's foreign trade, Directional Pattern: Major export commodities- thrust area commodities- their trend, problems and prospects, Major import commodity Groups, Trade Regulation in India, Foreign trade (Development and Regulation) Act, Foreign Exchange Management, Present Export-Import Policy, Export Promotion Policies, EPCG, DEPB, Duty Draw Back Scheme, Export incentives, Financial and Fiscal, the Role of EXIM Bank of India, ECGC, Infrastructure support for Export promotion, Export Promotion Councils, Commodity Boards/Product Export Development Authorities, Specific Service Institutions, Role of State Trading Organizations, Export Processing Zones, Special Economic Zones, Agriculture Export Zones, Clusters, Export Oriented Units and Export Trading House Schemes, Impact of WTO on India's Trade Policy.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Bhalla , V.K. International Business Environment and Management, 8<sup>th</sup>ed, Delhi, Anmol, 2001.
2. Jain, S.K.: Export performance and Export Marketing Strategies, Commanwealth Pub., Delhi, 1988.
3. Export- Import Policy ,Naleh Publications.
4. Paras Ram: Export: What Where and How, Delhi, Anupam Publication.
5. Bhattacharya B. : International Marketing Management, Subhash Chand & Sons.

## **IB - 305: International Business Environment**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

- IB - 305.1 Understand the concept of various constituents of international business environment and their impact on business.
- IB - 305.2 Know different theories related to international business environment and their impact on economic welfare.
- IB - 305.3 Thoroughly understand the role of international economic institutions like UNCTAD, IMF and world bank in regulating business.
- IB - 305.4 Know the evolution and working of regional economic corporations in expansion of international business.

### **Course Contents:**

Concept of IB : Nature & importance of International Business, forces of globalization, Modes of International Business. Cultural, Economic , Legal & Political environment faced by International Business. Theories: Adam Smith, Ricardo and Ohlin & Heckler theory, Leontif paradox, PLC. Government Influence on trade, Tarrif& Non-Tarrif barriers, Free trade zones. Bilateral and Multilateral Trade Laws – General Agreement on Trade and Tariffs, (GATT), World Trade Organization – IPR, TRIPS, TRIMS, GATS – Ministerial Conferences. Regional Economic Integrations: NAFTA, EU. International Business Strategies : Geographical, Collaborative & Control strategies, Foreign Exchange Basics: Purchasing Power Parity, Foreign Exchange Exposures ( in Brief).External and Internal Sources of finance in International Business.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Sundram& Black: International Business Environment.
2. Francis Charulienum: International Business, Himalya Publishing House.
3. Daneil&Radobough: International Business, Pearson Publications.
4. S.ShivaRamu: International Business.
5. Taggart&Modermitt: International Business.
6. Ashwathappa, International Business Environment, Himalya Publishing House.

## IB - 306: International Logistics

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

- IB - 306.1 Develop an understanding of the key concepts applied in global logistics and supply chain management.
- IB - 306.2 Elucidate the use of IT, inventory management systems, to improve the efficiency of supply chain management.
- IB - 306.3 Learn about shipping, multimodal transportation and CONCOR and role of intermediaries in international logistics system.
- IB - 306.4 Understand the inventory controls methods and logistics calculation methods.

### Course Contents:

Marketing Logistics: Concept, Objective and Scope, System Elements - Relevance of logistics in International Marketing, International supply chain management and Logistics. Role of IT in logistics Transportation activity- Internal transportation, Inter state goods movement. Concept of customer service.

General Structure of Shipping, Characteristics, Linear and Tramp Operations, Code of Conduct for Linear Conference, Freight Structure and Practices, Chartering Principles and Practices

Developments in Ocean Transportation- Containerization, CFS and ICD, Dry Ports, Multi-Modal Transportation and CONCOR, Role of Intermediaries Including Freight Booking, Shipping Agents, C & F Agents, Ship Owner and Ship Consultation Arrangements, International Air transport: International Set up for Air Transport, Freight Rates, India's Export and Import by Air- Problems and Prospects, Port System and Sub-System: Port Organization and Management, Responsibilities of Port Trust: Growth and Status of Ports in India, Carriage of Goods-Legal Aspect.

Inventory Control and Warehousing: Inventory Management- Concepts and Application to International Marketing, Significance and Types of Warehousing Facilities, Total Cost Approach to Logistics

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Annual reports of CONCOR.
2. Khanna, K.K., Physical Distribution, Himalaya Publishing, Delhi
3. Lambert, D et al, Strategic logistics Management, Tata Mc Graw Hill, New Delhi
4. Desai, H.P., Indian Shipping Perspectives, Anupam Publication, Delhi.  
Annual Reports INSA.

## SEMESTER-IV

### IB - 401: International Financial Markets

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 401.1	Understand the conceptual framework of international financial system.
IB - 401.2	Understand the main instruments of regulation of currency and credit relations.
IB - 401.3	Know the role, functions, issues and challenges of international financial institutions.
IB - 401.4	Understand the currency market for lending and investment and to understand the global market for hedging, arbitrage and speculations.

#### Course Contents:

Introduction to international financial system: Bretton wood Conference and afterwards.

Creation of European Monetary System: creation of Euro-dollar, Euro-banking and Euro-currency Centers, syndicated Euro-Credits. Role of IMF, IBRD, IFC, BIS and International Centre for Settlement of Investment Disputes and Regional Developments Banks.

Introduction to International Financial Markets: International Capital Market Instruments and Institutions: International Equities, Euro-Bonds, Euro-Loans, GDR's, ADR's, IDR's  
International Money Market Instruments and Institutions: Euro-Notes, Euro-Commercial Papers, Participatory

Notes: Issues and Challenges.

Currency Market for lending and Investment: Currency Risk and Exposure, International Banking and Portfolio. Use of Global Markets for Hedging, Arbitrage and Speculations

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings :

1. Shapiro, Alan C : Multinational Financial Management, New Delhi, Prentice Hall of India
2. V. Sharan : International Financial Management, New Delhi, Prentice Hall of India
3. MadhuVig : : International Financial Management
4. Maurice D. Levi : International Finance, Tata Mcgraw Hill
5. David & Eiteman ,Arthru J Stonehill:,Michael H. Moffett: Multinational Business Finance, Pearson Education.

## **IB - 402: International Marketing**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 402.1	Understand the benefits, reasons and motivations underlying International Marketing.
IB - 402.2	Understand international PESTLE environment and adapt the marketing strategies to suit them.
IB - 402.3	Thoroughly understand the international product policy and the various qualitative and quantitative factors used in the assessment of global opportunities.
IB - 402.4	Know the distribution network, methods and strategies of price setting and promotion in overseas markets.

### **Course Contents:**

International Marketing: Nature, scope and benefits; Reasons and Motivations underlying International Trade and International Business; Basic Modes for Entry; Process of International Marketing; Domestic Marketing versus International Marketing.

International Marketing Environment, WTO Framework and International Marketing; Factors Influencing International Market Selection and Segmentation, Selection Strategies. International Marketing Planning and Control.

International Marketing Mix: International product policy and planning International product mix, Branding, labeling, packaging and organization of product warranties and services. International pricing policies strategies, the process of price setting, pricing decisions, information for pricing decisions.

International Advertising: International Advertising Strategy, Elements of Advertising Strategy, Media Strategy. International Distribution Management: International Distribution Channels, International Distribution Policy, Selecting Distribution Channels.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Reading:**

1. Vern Terpstra and Ravi Sarthy : International Marketing, Thomson.
2. Simon Majaro : International Marketing.
3. John, Fayerweather : International Marketing.
4. R. L. Varshney and B. Bhattacharya : International Marketing; Sultan Chand Publication, N. Delhi.
5. SakOnkvisit and John Shaw : International Marketing ( Analysis and Strategy), PHI, New Delhi.

## **IB - 403: International Financial Management**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 403.1	Understand international capital and foreign exchange market.
IB - 403.2	Understand foreign direct investment and international acquisition opportunities.
IB - 403.3	Identify political risk and exchange rate fluctuations and develop strategies to deal with it.
IB - 403.4	Know the international taxation and financing foreign trade.

### **Course Contents:**

Concept of International Financial Management, International flow of funds, Overview of Foreign Exchange Markets, International Investment Decisions – Foreign Direct Investment, International Portfolio Investment, International Capital Budgeting, Evaluation and Management of Political Risk. International Financing Decisions : Financial Choices for an MNC, Capital and Money Market Instruments. Multilateral Development Banks : World bank ,IFC, Asian Development Bank. Cost and Risk of financing. Management of Short form Funds: International Working Capital Management, Financing Foreign Trade, International Taxation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. A.C Shapiro: Multinational financial Management, Prentice- Hall, New Delhi.
2. V.Sharan : International Financial Management,
3. P.G Apte: International financial management, Tata McGraw –Hill.
4. Buckley: Multinational finance, Prentice- Hall of India , New Delhi.
5. Maurice D.Levi: International Finance, McGraw Hill, NY

## IB - 404: International Strategic Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 404.1	Get the knowledge of international strategic management process and develop analytical ability to make environmental and organizational appraisal.
IB - 404.2	Understand various levels of strategy along-with alternatives available for entering into foreign market.
IB - 404.3	Learn the approaches to strategic formulation and strategic choice making process.
IB - 404.4	Understand the various issues and decisions involved in strategy implementation along-with the process and techniques of strategic evaluation and control.

### Course Contents:

Nature and Dimensions of Inter National Strategic Management. Domestic versus International Strategic Management, Functions of International Strategic Planning. Pre requisites and Complexities of International Strategy.

Strategies for Foreign Market Entry and Penetration, Growth Strategy, International Business Integration, Strategy for Risk and Stability, Revival Strategies, Restructuring and Divestment.

Approach to Strategic Formulation: The Traditional approach, Modern Approaches-Gap analysis, Capital Investment Theory, ANSOFF, Adaptive Search Approach, Portfolio Approaches- Boston's Model, GE-McKinsey Model, Hofer's Model and Shell's Directional Policy Model, Comparative Strategy vis-à-vis Domestic Firms.

Strategy Implementation : Resource Allocation. Projects and Procedural Issues. Organisation Structure and Systems in Strategy Implementation, Leadership and Corporate Culture, Values. Ethics and Social Responsibility. Operational and Derived functional plans to implement strategy. Integration of Functional Plans. Organisational Systems and Techniques of Strategic Evaluation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Dunning J. H (1988); Explaining International Production, Harper Collins, London;
2. Garpand, J & Farmer, R.N; International Permissions of Business Policy & Strategy, Kent Publishing Company, Boston ,Massachusetts
3. Ansoff, H.I; Corporate Strategy, McGraw Hill, London
4. Porter, M.E; Competitive Strategy, Free Press, NY.

**IB - 405: Cross Cultural and Global Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 405.1	Understand the major peculiarities of cross-cultural management process and development of skills based on cross-cultural differences.
IB - 405.2	Understand differences in cross cultural leadership styles and adaptability to cultural contexts.
IB - 405.3	Understand the effective managerial process of human resource in a global context.
IB - 405.4	Know the cultural intelligence, ethical issues in global business and Western and Eastern management thoughts.

**Course Contents:**

Human and Cultural Variables in Global Organisations; Cross Cultural Differences and Managerial Implications; Cross Cultural Research Methodologies and Hofstede's Hermes Study; Structural Evolution of Global Organisations; Cross Cultural Leadership and Decision Making; Cross Cultural Communication and Negotiation; Human Resource Management in Global Organisations; Selection, Source, Selection Criteria for International Assignment; Compensation and Appraisal in Global Perspective, MNG and Compensation System. Ethics in International Business; Western and Eastern Management Thoughts in the Indian context.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Adler, NJ. International Dimensions of Organizational Behaviour. Boston, Kent Publishing, 1991.
2. Bartlett, Cand Ghoshal, S. Transnational Management: Text, Cases and Readings in Cross Border Management. Chicago, Irwin, 1995.
3. Dowling, P J. etc. International Dimensions of Human Resource Management 2nd ed. California, Wadsworth, 1994.
4. Hofstede, G. Cultures Consequence: International Differences in Work Related Values. London, Sage, 1984.
5. Marcic, D and Puffer, S M. Management International: Cases, Exercise and Readings. St. Paul, West Publishing, 1994.
6. Mead, R. International Management: Cross Cultural dimensions. BlackWell, Camb., Mass., 1994.
7. Mendenhall, M. etc., Global Management. Cambridge Massachusetts., Blackwell, 1995.

**IB - 406: Regional Economic Blocks**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IB - 406.1	Understand the levels of regional economic integration and endogenous growth.
IB - 406.2	Assess the working of selected regional blocks such as EU, NAFTA, ASEAN, SAARC.
IB - 406.3	Understand the reasons for formation and functioning of economic blocks and their role in promoting regional trade.
IB – 406.4	Explore new and ongoing issues and challenges related to regional economic integration.

**Course Contents:**

Theory of Economic Integration, Economic Integration and endogenous Growth, Selected Regional Blocks – NAFTA, EU, ASEAN, SAARC, Globalisation Vs. Regionalization; Regional Blocks, Building Blocks or Stumbling Blocks: Ongoing Challenges- Environment Volatility. Rise of Global Mania; Regional Alternatives; Regional Competition; New Organizational Challenges.

**Suggested Readings:**

1. Balassa, Bela: Theory of Economic Integration, London, George Allen & Unwin ltd, 1961.
2. Bhalla, V.K.: World economy in, 90s: A Portfolio Approach, Delhi, Anmol Pub. Pvt. Ltd.
3. Dreze, Jean and Sen, Aamrtya: Indian Development: Selected Regional Perspective, Delhi, Oxford University Press.
4. Jackson, J.: The World Trading system, Cambridge, Mass : MIT Press, 1994.
5. Krugman, Paul R. and Obstfeld, M.: International Economics, USA, Harper Collins Pub.
6. Machlup, F. A.: History of Thought on Economic Integration, London, Macmillan.

## SPECIALISATION: INFORMATION TECHNOLOGY

### SEMESTER-III

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>IT-301</b>	Business Intelligence and Analytics	100	70	30	5	4
<b>IT-302</b>	Enterprise Resource Planning	100	70	30	5	4
<b>IT-303</b>	Relational Database Management System	100	70	30	5	4
<b>IT-304</b>	E-Customer Relationship Management	100	70	30	5	4
<b>IT-305</b>	System Analysis and Design	100	70	30	5	4
<b>IT-306</b>	Knowledge Management Systems	100	70	30	5	4

### SEMESTER-IV

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>IT-401</b>	Data Mining for Business Decisions	100	70	30	5	4
<b>IT-402</b>	Software Engineering	100	70	30	5	4
<b>IT-403</b>	E-Business Financial Modeling	100	70	30	5	4
<b>IT-404</b>	Internet and Web Designing	100	70	30	5	4
<b>IT-405</b>	E-Commerce	100	70	30	5	4
<b>IT-406</b>	Information Security and Cyber Laws	100	70	30	5	4

**SEMESTER-III**  
**INFORMATION TECHNOLOGY**

**IT - 301: Business Intelligence and Analytics**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT - 301.1	Identify, design models and solve decision problems in different work settings.
IT - 301.2	Enable all participants to recognize, understand and apply the language, theory and models of the field of business analytics.
IT - 301.3	Statistically analyze data and convert it into a presentable form.
IT - 301.4	Work with Business Intelligence tools.

**Course Contents:**

Business Intelligence: Definition, concept and need for Business Intelligence, Data, information and knowledge.

Business Analytics at strategic level: Strategy and Business Analytics, Link between Corporate Strategy and Business Analytics, Business Analytics supporting strategy at functional levels, dialogue between strategy and BA functions, information as strategic resource.

Statistical data analytics: descriptive statistical analytics, summary measures, lists, reports, automated reports, hypothesis driven methods, data mining with target variables. Cluster analysis, Discriminate analysis, logistic regression, Principal component analysis.

Business Intelligence Architectures: Cycle of Business Intelligence Analysis, Development of Business Intelligence System, spread sheets, concept of dashboard, OLAP, SOA, decision engineering.

Business intelligence tools: Concept of dashboard. Business intelligence applications in different domains-CRM, HR, Production and finance.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Decision Support and Business Intelligence Systems, Turban, Sharda, Delen, Pearson.
2. Business Intelligence Success Factors Tools for aligning your business in the global economy by Olivia Parr Rud, John Wiley and sons, 2009
3. The Profit impact of Business Intelligence by Steve Williams and Nancy Williams, Morgan Kauffman Publishers, Elsevier, 2007
4. Business Intelligence: Practices, Technologies, and Management- Rajiv Sabherwal, Irma Becerra-Fernandez.
5. Business Analytics for Managers: Taking Business Intelligence beyond reporting by GERT H.N. Laursen, Jesper Thorlund, Wiley and SAS Business Series, 2010

## IT - 302: Enterprise Resource Planning

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 302.1	Describe basic concepts of ERP systems for manufacturing or service companies.
IT – 302.2	Make basic use of Enterprise software and its role in integrating business functions.
IT – 302.3	Understand and be able to articulate the life cycle stages of any ERP implementation.
IT – 302.4	Understand ERP modules in plant management, finance, quality and inventory management.

### Course Contents:

Introduction: Basic issues, evolution of ERP, advantages and limitations, Overview of an enterprise; ERP and related technologies.

Evolution of ERP: Business process reengineering, management information system, decision support system, executive information system, supply chain management.

ERP implementation in the manufacturing: Issues and challenges viz., CAD/CAM, material requirement planning, bill of material, manufacturing resource planning, distribution requirement planning, JIT approach.

ERP Modules: Introduction to ERP modules in the Finance, Plant maintenance, quality management, materials management, store and warehouses.

ERP Implementation: ERP lifecycle, vendors, consultants and users, ERP market, future directions and developments in ERP.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Leon A., *Enterprise Resource Planning*, Tata McGraw Hill.
2. Ellen Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Cengage Learning.
3. Motiwalla, Thompson, *Enterprise Systems for Management*, Pearson Education.
4. Wallace and Kremzar, *ERP: Making it Happen – The Implementers' Guide to Success with Enterprise Resource Planning*, John Wiley & Sons, Inc.
5. Sadagopan, S., *ERP: A Managerial perspective*. Tata McGraw Hill.
6. Garg, V. K. and Venket Krishna N. K., *ERP Concepts and Practice*, PHI Publication.

## IT - 303: Relational Database Management System

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 303.1	Understand database architecture and models.
IT – 303.2	Analyze and Select storage and recovery techniques of the database system.
IT – 303.3	Work with Sequential query languages.
IT – 303.4	Analyze and design a real database application.

### Course Contents:

RDBMS: Introduction – Database and DBMS Software, Three Layered Architecture, Evolution of Data Modeling-Object Oriented and Record Based models, E-R Model and E-R diagram.

Hierarchical Model, Network Model and Relational Model; Normalisation techniques-First Normal Form, Second Normal Form and the Third normal Form. E.F. Codd's 12 Rules for a relational Database.

Database concepts-Transaction Management, Commit and Rollback, Concurrency, Locking, Access Control, Data Integrity, Integrity Constraints, Auditing, Backup and Recovery; Data Dictionary-System Catalogue Distributed Database and Distributed Data Access.

Introduction to Client-Server and ODBC connectivity, SQL: SQL Language-DML commands-Selection, Insert, Update, Delete retrieving data, summarizing data, adding data to the database, updating data to the database and deleting data.

Simple queries to demonstrate use of WHERE, Arithmetic comparison and logical operators, ORDER BY, GROUP BY and Group Functions. Multi table queries, Sub-queries. Views DDL Commands-Table and View, Create, Alter, Drop Integrity Constraints; Transaction Processing-Commit, Rollback, Savepoint, LAB: SQL and MS Access.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Coleman, Pat and Peter Dyson, *Intemets*BSP Publications.
2. Keen, Pter and Mark McDonal, *The e-Process Edge*, Tata McGraw-Hill.
3. Oberoi, Sundeep, *E-Security and You*,Tata McGraw Hill.
4. Richart,Alberto*Manual and Stephen Asbury Active Server Pages 3*, IDG Books.
5. Rich Jason R.,*Starting an E-Commerce Business* IDG Books.
6. Samantha Shurety, *E-business with Net Commerce Addition* ,Wesley.
7. Schneider Robert D&J.R.Garbus, *Optimizing SQL Server 7*, Prentice-Hall

## IT- 304: E-Customer Relationship Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

### Course Outcomes:

After completing this course, the students will be able to:

- IT – 304.1 Apply the concept of CRM, the benefits delivered by CRM, the contexts in which it is used, the technologies that are deployed and how it can be implemented.
- IT – 304.2 Disseminate knowledge regarding the concept of e-CRM and e-CRM technologies.
- IT – 304.3 Learn basics of analytical Customer relationship management.
- IT – 304.4 Understand basics of operational Customer relationship management.

### Course Contents:

The New Digital Landscape, Getting Down to e-Business, Customer Relationship Management, E-business and CRM. The New Economy and new dynamics. Understanding E-business: CRM and KM. The New Digital Landscape, Getting down to e-business, Customer Relationship Management, Knowledge Management, Knowledge-Enabled Customer Relationship Management.

The Knowledge-Enabled Customer Relationship Management, Roadmap Phase I: Evaluation and Strategic Alignment, Phase II: Infrastructural Development and Development, Phase III: Leadership, Change Management, Measurement and Refinement Aligning Strategy and Technology Choices: Getting Past the Innovator's Dilemma.

The KCRM Strategic Framework. Analyzing the Business Environment. Understanding the Context Strategic Technology, Documenting Customer Knowledge Assets Using the Audit Results to Drive KCRM. The Customer Lifecycle, Customer Knowledge Management: Technology Framework. The KCRM Architecture, Integration and long-term considerations.

Building an Implementation Team: Tasks and Expertise, Team Composition, Leadership, Risk Assessment and Common Pitfalls. Blueprinting the Technology Infrastructure: Design Challenges. Results-Driven Development and Deployment: Hidden Costs and other Surprises. An overview of Big-Bang, Systems Development Methods. Looking Beyond the Waterfall. Results driven Incremental.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Alex Berson, Stephen Smith, Kurt Threaring; *Building Data Mining Applications for CRM*, Tata McGraw Hill
2. Michael J.A.Berry, *Data Mining Techniques: For Marketing, Sales and Customer Support* Gordon Linoff.
3. Michael J.A.Berry and Gordon Linoff, *Mastering Data Mining: The Art and Science of Customer Relationship Management*, John Wiley

## IT - 305: System Analysis and Design

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 305.1	Understand the business system concepts and methodologies.
IT – 305.2	Understand the system design concept.
IT – 305.3	Evaluate & Summarize the project and people performance while exploiting project management concepts.
IT – 305.4	Understand the software development planning process.

### Course Contents:

Business Systems Concept; Information System Building Blocks; Systems Development Life Cycle; Project Selection; Feasibility Study. Tools for analysis and design of business systems, Methodologies available; Need for structured techniques; structured techniques available and their relevance for SDLC.

Systems Planning; Preliminary Investigations; System Requirement Specification and Analysis; Evaluating Alternative Strategies of System Requirement Analysis, Data Flow Diagrams; Data Dictionaries; Process Organization and Intersections.

Decision Analysis; Decision Trees and Tables; Expansion and Explosion. Design of databases and Normalization. Rapid Application Development. Flow Charting, Data and

Process Modeling Tools, Systems Design, Object Oriented Design; Output Design, Input Design; File and Database Design, Normalization. System Implementation -Installation and Evaluation. Managing Software Projects. Project Communication, tracking and reporting.

Software Project Planning. Software Risk Management; System Control and Quality Assurance. Documentation Tools. Software Testing Techniques. Performance and Acceptance testing criteria. Capability Maturity Model.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Bennett, S., Mcrobb, S., & Farmer, R. (2006). *Object-Oriented systems analysis and design using UML* ( 3rd ed.). Boston: McGraw Hill.
2. Hoffer, J. A., & George, J. F. (2006). *Modern system analysis and design*. (4th ed.). New Delhi: Pearson Education.
3. Hughes, Bob. (2006). *Software project management*. 4th ed.). New Delhi:Tata McGraw Hill Education.
4. Kendall, K. E., & Kendall, J. E. (2009). *Systems analysis and design* (8<sup>th</sup> ed.). New Delhi: Prentice-Hall.
5. Pressman, Roger S. (2009). *Software engineering: A practitioner's approach* (7th ed.). Boston: McGraw Hill.
6. Shelly, G. B., Cashman, T. J., & Rosenblatt, H. J. (2009). *Systemsanalysis and design* ( 8<sup>th</sup> ed.). Singapore: Thomson Learning.
7. Whitten, J. L. & Bentley, L. D. (2009). *Systems analysis & design methods*(7th ed.). New Delhi: Tata McGraw Hill.
8. Yourdon, E. L. (1979). *Constantine: Structured design*. New Delhi: Prentice-Hall.

## IT - 306: Knowledge Management Systems

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 306.1	Describe how valuable individual, group and organizational knowledge is managed throughout the knowledge management cycle.
IT – 306.2	Understanding concepts and methods to create knowledge base.
IT – 306.3	Apply knowledge management models and technologies to business situations.
IT – 306.4	Managing the quality with the help of different tools and techniques.

### Course Contents:

Basic concept of knowledge, intelligence and experience; information and knowledge, types of knowledge, implications of knowledge management, knowledge management life cycle.

Knowledge creation; capturing tacit information, expert evaluation, fuzzy reasoning, interviews, onsite observations, brainstorming, protocol analysis, consensus decision making, Nominal Group Technique, Delphi method, concept mapping, black boarding, Knowledge codification.

Quality Assurance; knowledge testing, Logical testing, User acceptance testing; knowledge system deployment; post implementation review.

Knowledge transfer: prerequisites, methods and strategies; Role of internet in Knowledge transfer, knowledge management portals, Ethical, legal and managerial issues in knowledge management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Irma Becerra-Fernandez, Avelino Gonzalez, Rajiv Sabherwal (2004). *Knowledge Management Challenges, Solutions, and Technologies*. Prentice Hall. ISBN: 0-13-109931-0.
2. Elias M. Awad, Hassan M. Ghaziri (2004) Knowledge Management. Prentice Hall. ISBN: 0-13-034820-1.
3. Donald Hislop, Knowledge Management in Organizations, Oxford 2nd Edition.
4. Ian Watson (2002). Applying Knowledge Management: Techniques for Building Corporate Memories. Morgan Kaufmann.
5. Madanmohan Rao (2004). Knowledge Management Tools and Techniques: Practitioners and Experts Evaluate KM Solutions. Butterworth-Heinemann. ISBN: 0750678186.
6. Stuart Barnes (Ed.) (2002). Knowledge Management Systems Theory and Practice. Thomson Learning.
7. KimizDalkir, Knowledge Management in Theory and Practice,
8. Elsevier, Butterworth Hinemann. SheldaDebowski, Knowledge Management, Wiley India Edition.

## SEMESTER-IV

### IT - 401: Data Mining for Business Decisions

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 401.1	Understand data mining concept and their application.
IT – 401.2	Design and deployment of Database.
IT – 401.3	Perform Data cleaning, data reduction operations.
IT – 401.4	Learn the decision-making constituencies in a business with the help of Data Mining.

#### Course Contents:

Introduction to data mining (DM): Kind of data, DM Functionalities, Classification of DM Systems, Issues in DM. Business Analytics at Data Warehouse Level, designing physical database, Deploying and supporting DW/BI system

Multidimensional data model: Data cubes, Stars, snowflakes and fact constellations, Defining schemas, concept hierarchies, OLAP, Types of OLAP servers: ROLAP versus MOLAP versus HOLAP, Steps for design and construction, Three-tier Data

Data Preprocessing, Why to preprocess data? Data cleaning: Missing values, Noisy data, Data Integration and transformation, Data Reduction: Data cube aggregation, Dimensionality reduction, Data Compression, Numerosity, Reduction Discretization and concept hierarchy Generation.

Data Mining Primitives, Languages and System Architectures: Task relevant data, Kind of Knowledge to be mined, DM Query languages: Syntax, Designing GUI, Architectures of DM Systems, Concept of Cluster Analysis. , Application and trends in Data mining, Data Mining for Financial data analysis, Data Mining for retail industry, Data mining for telecommunication industry

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Barry Devlin: Data Ware House: From Architecture to Implementation, AddisonWesley.
2. Alex Berson, Stephen Smith, Kurt Threaring; Building Data Mining Applications for CRM Tata McGraw Hill.
3. Alex Berson, Stephen Smith; Data Warehousing, Data Mining and OLAP, Tata McGraw Hill.
4. Michael J.A. Berry, Data Mining Techniques for marketing sales and Customer Support, Gordon Linoff.
5. Han, Jiawei; Data mining: Concepts and techniques, Harcourt.
6. Pujari, Arun K, Data, Mining Techniques, Hyderabad University Press.

## IT - 402: Software Engineering

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 402.1	Understand software development process and software model.
IT – 402.2	Estimating coding and non-coding tasks.
IT – 402.3	Identify the real problem for different categories of software.
IT – 402.4	Understanding Software testing procedures and identifying software quality.

### Course Contents:

Exposure to software development process – Software Lifecycles such as Waterfall, Spiral, Prototyping, Rational Unified Process, Agile Methodologies – Various phases in each Lifecycle model, and the pros and cons of these approaches to software development

Analysis and Design of Information systems, assessing the Feasibility of a system, Gathering detailed requirement , Use of Structured methods such as Data flow, Entity Relationship diagrams etc , Use of Object Analysis and Design ,Use Cases and visualization of the IT based solution, Design of Inputs , Outputs and other interfaces

Documenting Software requirements - various documents used at different stages of software development process – User Requirement Specifications

Software Estimation – challenges in Estimation of software – methods of software estimation such as Line of Code, Function Point, COCOMO, Use Case Point Method etc – Estimating a Coding Task versus non-coding activities such as Documentation etc

Software Quality and Testing – Need for testing, Quality assurance of software at each phase in the lifecycle, Various types of tests such as Black box v/s White box, Functional

test, code reviews , Stress tests, load tests etc Use of Use Cases for functional testing, Preparing Test Data and Test Cases, overview of Automated methods for testing Review of Student Presentations on exercise which requires them to analyse a business process, document the requirements, Analysis and Conceptual design of the system, estimation of the software size

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Systems Analysis and Design by James Senn
2. Software Engineering by OOAD – Buch and Rambaugh
3. UML by Wrox Publication
4. OOAD & UML by Rambaugh
5. Software Metrics
6. Nasscom Reports and Nasscom website for Industry Perspective
7. Structured systems analysis and design: concise study Ed: 1 :Kelkar SA.

## IT - 403: E-Business Financial Modeling

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 403.1	Understand the relevance of financial models for various corporate finance purposes.
IT – 403.2	Build financial models for various finance applications.
IT – 403.3	Solve basic corporate finance problems in Excel.
IT – 403.4	Understand valuation and its techniques.

### Course Contents:

Introduction to Excel and Financial Modeling :Introduction to Excel, Overview of Financial Modeling, Types and Purpose of financial models, Navigate Worksheets and Workbooks, Name Manager Exploring Excel as a Tool for Financial Modeling : Excel Functions, Mathematical Functions, Statistical Functions, Financial Functions, Logical Functions, Lookups & Reference Functions, Text Functions, Date & Information Functions.

Advanced analysis techniques :Working named ranges, Working with Charts, Data Validation, Hyperlink, Conditional Formatting, Pivot Tables, Auto & Advance Filter, Grouping & Ungrouping, Sheet Protection, What if Analysis, Financial Statement Analysis

Understanding the Financial Statements and its interlinking: Income Statement, Balance Sheet, Cash Flow Statement, Ratio Analysis, Basic and Diluted EPS,ROE and DUPONT Analysis.

Introduction to Valuation: Need to value companies, Difference between price and value,

Different terms of value: Market value/Intrinsic value, Valuation Techniques :Absolute

Valuation Free Cash flow to Firm (FCFF)/Free Cash flow to Equity (FCFE)/Cost of Equity (Ke) /Cost of Debt (Kd) /Cost of Capital (WACC)/,Relative Valuation :Equity based Multiples: P/E, P/BV, P/S & PEG/Firm based Multiples: EV/EBITDA, EV/EBIT & EV/Sales.

**Project Finance Modeling:** Types of funding: Equity funding sources – cost, pros and cons/Debt funding sources – cost, pros and cons, Characteristics of project finance, Risks & Mitigants, Contractual arrangements to mitigate risk, Developing a fully integrated project finance modeling spreadsheet, Interest during construction, Escrow arrangement, Cash flow Feasibility Analysis, Scenario Building, Project IRR, Equity IRR, NPV Profiling.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Simon Benninga, (2014). Financial Modelling,4th Edition, MIT Press ltd.
2. Tom Y. Sawyer, (2014). Financial Modeling For Business Owners & Enterpreneuers,1<sup>st</sup> Edition, Apress  
Yemi Onigbode, (2011). Oracle E-business suite 12 financials cookbook,
3. Simon Benninga, (2010). Principles of Finance with Excel,2nd Edition, OUP USA.
4. Tom Y. Sawyer, (2000). Pro Excel Financial Modelling,1st Edition,Apress.
5. Danielle Stein Fairhurst, (2012). Using Excel For business Analysis,: A Guide to financial modeling Fundamentals,1st Edition, Wiley Publications

## IT - 404: Internet and Web Designing

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 404.1	Understand Internet and websites working.
IT – 404.2	Use web publishing technologies with the help of various tools.
IT – 404.3	Make web pages in HTML.
IT – 404.4	Setup and work with PHP, PERL and JAVA.

### Course Contents:

Introduction to WWW: Evolution and basic features of WWW, the concept of web-site and browsers, introduction to WWW servers.

File Transfer Protocol: Introduction to FTP, Business Applications of FTP, public domain software, types of FTP servers (including anonymous) FTP clients, common FTP commands. Web-Browsers: Basic features, bookmarks, history progress indicators, customizing browsers, saving and printing web-pages and forms, saving web pages; Searching and downloading information from web-sites; Netscape communicator; Internet Explorer.

Introduction to Web-Publishing technologies, Components of a web-site, applications of each components in business, features of a smart web site, process of planning for development of an effective web-site, Domain name selection; selecting host for web-site, maintaining a web-site, web-publishing tools.

Internet: ISP, Search Engine, URL, DNS, Security, E-Mail, HTTP, HTML, Building a simple HTML document, Tables, Frames, Links, adding Multi Media documents, Home Page, introduction to PHP,PERL, Java etc.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Douglas E. Comer, *Computer Network and Internet*, Pearson Education.
2. Corner, Douglas: *The Internet Book*, Prentice Hall.
3. Leon, Alexis and Mathews Leon: *Internet for Everyone-Leon*, TECH World.
4. Xavier: *World Wide Web Design with HTML*, Prentice Hall.
5. Molly, *Using HTML 4*, PHI Learning.

**IT - 405:****E-Commerce**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 405.1	Understand E-commerce and its technological aspects
IT – 405.2	Perform customer-oriented analysis.
IT – 405.3	Understand concepts of electronic payment systems and order fulfilment.
IT – 405.4	Regulator environment of E-Commerce.

**Course Contents:**

Introduction to E-commerce: Meaning, nature and scope; Channels of e-commerce; Business applications of e-commerce; Global trading environment and adoption of e-commerce, Business models of E-commerce and Infrastructure; B2B, B2C, B2G and others; Application of E-commerce to Supply Chain Management; product and service digitization; Remote service procurement and online marketing and advertising.

Business to consumer E-commerce Applications: Cataloging; Order planning and order generation; Cost estimation and pricing; order receipt and accounting; Order selection and prioritization: order scheduling, fulfilling and delivery, order billing and payment management; post sales services.

Business to Business E-commerce: Need and alternative models of B2B e-commerce, Using Public and private computer networks for B2b trading; EDI and paperless trading: characteristics, feature of EDI service arrangement; Internet based EDI; EDI architecture and standards; VANs; Costs of EDI infrastructure; Reasons for slow acceptability of EDI for trading; E-marketing

Electronic Payment Systems and order fulfillment: types-e-cash and currency servers, e- cheques, credit cards, smart cards, electronic wallets and debit cards; operational, credit and legal risks of e-payment, Risk management options.

Security issues in e-commerce: types and sources of threats; protecting e-commerce assets and intellectual property

Regulatory environment of electronic commerce

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Kalakota and Whinston, *Electronic Commerce: A Manager's Guide*, Pearson Education.
2. Greenstien and Vasarhelyi, *Electronic Commerce: Security, Risk Management and Control*, Tata McGraw Hill.
3. Joseph, *E-Commerce: An Indian Perspective*, Prentice Hall of India.
4. Turbon, et. al., *Electronic Commerce: A Managerial Perspective*, Pearson Education.

## IT - 406: Information Security and Cyber Laws

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
IT – 406.1	Understand the concept of security in cyberspace.
IT – 406.2	Understand various security methods such as authentication cryptography, intrusion and malware detection etc.
IT – 406.3	Understand Government rules and regulations in cyberspace and the protection of the cyber consumer.
IT – 406.4	Understand cybersquatting, copyright protection and e-commerce taxation.

### Course Contents:

Overview of basic concepts of security, confidentiality, integrity and availability, security threats, Information Security principles, operational and human issues in information and network security, Security policies: types, development and management.

Authentication, Access control mechanisms, Physical security control, operations security, cryptography: basic concepts, Symmetric and asymmetric cryptography, key management, firewalls, intrusion detection, malware detections.

Legal Issues in Information communication Technology, Cyber Crime and IT Act 2000, Legal resources against hacking, Cyber Fraud, defamation and abuse and other IT offences; contracts in Cyber world and jurisdiction

Cybersquatting, legal and other innovative moves against cybersquatting, copyright and protection of contents; software piracy; E-commerce taxation, protection of cyber consumers in India

### Suggested Readings:

1. Mark merkow and James Breithaupt, Information security: Principles and Practices, Pearson Education, New Delhi.
2. VivekSood, cyber Law Simplified, Tata McGraw Hill, New Delhi.
3. Matt Bishop, Introduction to computer Security, 1/e, Pearson Education, New Delhi.

## SPECIALISATION: PRODUCTION AND OPERATIONS MANAGEMENT

### SEMESTER-III

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>POM-301</b>	Purchasing and Materials Management	100	70	30	5	4
<b>POM-302</b>	Total Quality Management	100	70	30	5	4
<b>POM-303</b>	Production Planning and Control	100	70	30	5	4
<b>POM-304</b>	Logistics Management	100	70	30	5	4
<b>POM-305</b>	Service Operations Management	100	70	30	5	4
<b>POM-306</b>	Technology Acquisition and Diffusion	100	70	30	5	4

### SEMESTER-IV

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>POM-401</b>	Applied Operations Research	100	70	30	5	4
<b>POM-402</b>	Goal Programming in Management	100	70	30	5	4
<b>POM-403</b>	Transportation Management	100	70	30	5	4
<b>POM-404</b>	Technology Forecasting	100	70	30	5	4
<b>POM-405</b>	R&D Management	100	70	30	5	4
<b>POM-406</b>	Programme Management	100	70	30	5	4

**SEMESTER-III**  
**PRODUCTION AND OPERATIONS MANAGEMENT**

**POM - 301: Purchasing and Materials Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 301.1	Identify the scope for integrating materials management functions over the logistics and supply chain operations.
POM – 301.2	Integrate the organization wide materials requirement to develop an overall plan (MRP).
POM – 301.3	Apply various purchasing method and inventory controlling techniques into practice.
POM – 301.4	Analyze the materials in storage, handling, packaging, shipping distributing and standardizing.

**Course Contents:**

Role of purchasing and Materials Management - Objectives, Organisation and Inter-relationships, Determination and Description of Material Quantity, Material Planning in Push and Pull System, MRP and JIT; Determination and Description of Material Quality - Receiving and Incoming Quality Inspection, Acceptance Sampling Plans, Vendor-Process Capability; Cost- Reduction Techniques - Standardization, Simplification & Variety Reduction; Value Analysis and Engineering, Make or Buy Decisions, Purchasing Research, Source of Supply, Price Determination and Negotiation, Vendor Rating, Selection and Development, Legal Aspects of Purchasing, Public Purchasing and Tendering; International Purchasing - Procedures and Documentation; Purchasing of Capital Equipment - Appraisal Methods, Evaluating Suppliers' Efficiency, Stores Layout, Classification and Codification; Material Logistics - Warehousing Management, Material Handling, Traffic and Transportation, disposal of Scrap, Surplus and Obsolete Materials, Inventory Control of Spare Parts, Materials Information System.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Ansari, A. and Murdemess B: JIT Purchasing, New York, Free Press, 1990.
2. Baily P. etc.: Purchasing Principles and Management, London. Pitman, 1994.
3. Burt, David N.: Proactive Procurement, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994.
4. Dobler, D. W. etc.: Purchasing and Materials Management, New York, McGraw Hill, 1990.
5. Dutta, A. K.: Integrated Materials Management, New Delhi, PHI, 1986.
6. Farringtoc, B. and Waters, Derek W. : Managing Purchasing, London, Chapman & Hall, 1994.
7. Gopalakrishnan, P and Sundarshan, M. Handbook of Materials Management, New Delhi, Prentice Hall of India, 1994.

The list of cases and specific references including recent articles will be announced in the class.

## POM - 302: Total Quality Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 302.1	Realize the importance of significance of quality.
POM – 302.2	Manage quality improvement teams.
POM – 302.3	Identify requirements of quality improvement programs.
POM – 302.4	Develop research skills that will allow them to keep abreast of changes in the field of Total Quality Management.

### Course Contents:

Quality Philosophies Concept of Quality, Quality as the basis of market competition, Historical review, Quality philosophy of Deming, Juran, Crosby etc., Obstacles, Integrating productivity and Quality.

Organization of Quality, Quality council, Total Quality Culture, Quality leadership, Quality awards, Total employee involvement, Quality circles, Attitude of top management, executives and workers, Operators responsibility of Quality, causes of operator's errors, Motivation.

Introduction to TQM, Models for TQM. TQM implementation, Advantages of TQM, Obstacles to TQM, TQM in service sector.

Concepts of Quality function deployment, cause and effect diagram, SWOT analysis, Continuous improvement, PDCA cycle, Supplier partnership, Supplier certification, Pareto diagram, Scatter diagram, Benchmarking, Taguchi's Quality Engineering, Failure mode and effect analysis, Total productive maintenance, Quality management, SQC, SPC, DPR, Kaizen, Six sigma concept.

**Quality Systems:** Introduction to ISO 9000 series of standards, other quality systems, Implementation, Documentation, Internal audits, Registration, Closing Comments. Beyond ISO 9000 horizon, Introduction to ISO 14000, Series standards, Concepts of ISO 14001, EMS Benefits, ISO 10011/10014, Quality Audit.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Total Quality Management: by Bosterfield et al. Pearson Education India, 2001.
2. The Essence of Total Quality Management by Johan Bank, Prentice Hall of India 2000.
3. Managing for Total Quality: by Logothelis Prentice Hall of India, 2000.
4. Total Quality Management: by Sundra Raju, Tata McGraw Hills Publishing Company, 1997.

**POM - 303:****Production Planning and Control**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 303.1	Recognize the objectives, functions, applications of PPC and forecasting techniques.
POM – 303.2	Explain different Inventory control techniques.
POM – 303.3	Solve routing and scheduling problems.
POM – 303.4	Describe way of integrating different departments to execute PPC functions.

**Course Contents:**

Production Planning and Control Function; Material Requirement Planning; Production-Inventory Systems; Forecasting for Inventory and Production Control; Aggregate Planning; Job Shop Planning; Scheduling and Control; Just-in- Time Production; Line Balancing; Planning for High Volume Standardized Products; Procedures and Documentation in Production Planning and Control; Application of Computers; ERP

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Burbidge, John L. : Principles of Production Control, London, Donald and Evans, 1981.
2. CaubangTegC. : Readings on Production Planning and Control, Geneva, ILO.
3. Greene, James H. : Production and Inventory Control Handbook, New York, McGraw Hill, 1987.
4. Mc Leavey, Dennis W and Narasimhan, S.L. : Production and Inventory Control, Boston, Allyn and Bacon, 1985.
5. Peterson, R and Silver, E. A. : Decision Systems for Inventory Management and Production Planning, New York, John Wiley, 1979.
6. Vollmann, T. E. etc. : Manufacturing Planning and Control, Homewood, Illinois. Richard D. Irwin, 1988.

## POM - 304 : Logistics Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 304.1	Analyze how logistical decisions (e.g., facilities, inventory, and transportation) impact the performance of the firm as well as the entire supply chain.
POM – 304.2	Develop the strategies that can be taken to find the best paths to route vehicles to deliver and collect goods at multiple stops.
POM – 304.3	Know basic characterises and costs of warehousing and materials handling activities.
POM – 304.4	Use computing software to solve various logistics decision-making problems, including inventory policies and vehicle routing.

### Course Contents:

Logistics Management: Logistics as part of SCM, Logistics costs, different models, logistics sub-system, inbound and outbound logistics, bullwhip effect in logistics, Distribution and warehousing management.

Vendor Rating, Use of mathematical model for vendor rating / evaluation, single vendor concept, management of stores, accounting for materials.

Inventory Management: Concept, various costs associated with inventory, various EOQ models, buffer stock (trade off between stock out / working capital cost), lead time reduction, re-order point / re-order level fixation, exercises -numerical problem solving , ABC, SDE / VED Analysis, Just-In-Time & Kanban System of Inventory management.

Recent Issues in SCM : Role of Computer / IT in Supply Chain Management, CRM Vs SCM, Benchmarking-concept, Features and Implementation, Outsourcing-basic concept, Value Addition in SCM-concept of demand chain management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1<sup>st</sup> Ed.)
2. Krishnan Dr. Gopal - Material Management, (Pearson, New Delhi, 5<sup>th</sup> Ed.)
3. Agarwal D.K. - A Text Book of Logistics and Supply chain management (Macmillan, 1<sup>st</sup> Ed.).
4. Sahay B.S. - Supply Chain Management (Macmillan, 1<sup>st</sup> Ed.)
5. Chopra Sunil and Peter Meindl - Supply chain management (Pearson, 3<sup>rd</sup> Ed.)

## POM - 305: Service Operations Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 305.1	Develop an understanding of the terminology and responsibilities that relate to Service Operations Management.
POM – 305.2	Describe the function of the Service Operations Management discipline in various sectors of the economy through case study.
POM – 305.3	Interpret basic tools and skills used in solving problems traditionally associated with operating the service operations system.
POM – 305.4	Propose solutions with which a service organisation can improve its operations and achieve sustainable competitive advantage.

### Course Contents:

Matrix of Service Characteristics; Challenges in Operations Management of Services; Aggregate Capacity Planning for Services; Facility Location and layout for Services; Job Design - Safety and Physical Environment: Effect of Automation; Operations Standards and Work Measurement; Measurement and Control of Quality of Services; Dynamics of Service Delivery System; Scheduling for Services Personnel and Vehicles; Waiting - Line Analysis; Distribution of Services; Product- Support Services; Maintenance of Services; Inventory Control for Services; Case Studies on Professional Services.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Bowman David E. etc. : Service Management Effectiveness: Balancing Strategy, Organization and Human Resources, Operations and Marketing, San Francisco. Jossey Bass, 1990.
2. Collier, David A. : Service Management Operating Decisions, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1987.
3. Fitzsimmons, James A. and Sullivan, Robert S. : Service Operations Management New York, McGraw Hill, 1982.
4. Heskett, James L. etc. : Service Breakthroughs - Changing the Rules of the Game, New York, Free Press, 1990.
5. Murdiek, R. G. etc. : Service Operations Management, Boston, Allyn and Bacon, 1990.
6. Sharma, J. K. : Service Operations Management, Delhi, Anmol, 2001.
7. Voss, C etc.: Operations Management in Service Industries and the Public Sector, Chichester, Wiley, 1985

## **POM - 306: Technology Acquisition and Diffusion**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 306.1	Understand Indian industrial and technological scenario and trends in industrial R&D, and technological dependence.
POM – 306.2	Understand management of technology absorption and Government initiatives.
POM – 306.3	Understand the need and importance of TA and TE at the enterprise level.
POM – 306.4	Understand the different perspectives on the innovation-diffusion process.

### **Course Contents:**

Technological Indicators; Make vs. Buy Decisions; Techno- market Survey; Assessment & Evaluation of Technology (TA & TE); Methodology of TA; TA Imperatives; Organisation & Management of TA; TE Parameters; Financing the Technology : Government Funding : CSIR, IDBI, ICICI, CII and UNDP, etc.; Venture Capital; Identification of Core Competence; Technology' Absorption and Diffusion; Terminology and Concepts: Constraints in Technology Absorptions; Technology Absorption Efforts-Case Studies DRDO; Management of Technology Absorption; Benefits of Technology absorption; Future Thrust for Technology Absorption; Importance of Diffusion; Diffusion | Strategies; Case Studies-Indian Experiences; Technology Marketing Issues, Strategies - Internal Transfers, Export etc.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Coates, V.T. : A Handbook of Technology Assessment, U.S. Department of Energy, Washington, D C. 1978.
2. Howthorne, Edward P : Management of Technology, London, McGraw-Hill, 1978. I
3. Fransman, Matrin & Kenneth King Technological Capabilities in the Third World, Macmillan, 1984
4. Jain, Ashok, S. Pruthi, K.C. Garg, S. Anabi : Indicators of Indian Science & Technology, Segment Books Pub., 1996.
5. Twiss, Brain & Goodridge : Managing Technology for Competitive Advantage, Pitman, 1989.

## SEMESTER-IV

### POM - 401: Applied Operation Research

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 401.1	Provide a formal quantitative approach to problem-solving and intuition about situations where such an approach is appropriate.
POM – 401.2	Apply various models in decision-making situations.
POM – 401.3	Understand Nonlinear optimization techniques.
POM – 401.4	Develop replacement and reliability models.

#### Course Contents

Parametric and Sensitivity Analysis; Inventory Control Models Under Uncertainty; Applied Queuing Models; Networks Models; Non-linear optimization Techniques-Quadratic Programming Portfolio Management Problem; Replacement Models and Policies; Dynamic Programming; Reliability Models.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Ahuja, A K. etc. : Network Flows, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1993.
2. Gould, F. J. etc. : Introduction to Management Science; Englewood Cliffs, New Jersey, Prentice Hall Inc., 1993.
3. Gupta, M. P. and Sharma J. K. : Operations Research fa- Management, New Delhi, National, 1997.
4. Taha Hamby A. : Operations Research : An Introductions, MacMillan, New York, 1992.
5. Mathur, K and Solow D. : Management Science, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994.
6. Sharma, S. J. K. Operations Research : Theory and Applications, New Delhi, Macmillan India, 2001.
7. Srinath, L S. : Operations Research for Executive, New Delhi, Affiliated East West Press, 1994.

**POM - 402:****Goal Programming in Management**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 402.1	Understand concept method and model formulation of goal programming.
POM – 402.2	Determine the required resources to achieve a desired set of objectives.
POM – 402.3	Determine the degree of attainment of the goals with the available resources.
POM – 402.4	Use application software such as QSB, Micro-Manager and LIGO.

**Course Contents:**

Goal Programming - Basic Concept Model Formulation, Graphical and Simplex Method; Integer Goal Programming Post-Optimal Sensitivity Analysis; Parametric Goal Programming; Goal Programming under Uncertainty, Application of Goal Programming in Functional Areas of Management; Implementation of Goal Programming. Introduction to some Application Software such as - QSB, Micro Manager and LIGO.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Cook, Thomas M and Russell, Robert A. : Introduction to Management Science, 3<sup>rd</sup> ed., Englewood Cliffs, New Jersey, Prentice Hall Inc., 1985.
2. Eppen, G D etc. : Quantitative Concepts for Management, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994.
3. Ignizio, J P. : Goal Programming and Extensions, Lexington, Lexington Books, 1976.
4. Lier, Y. : Management Goals and Accounting for Control, Amsterdam, North Holland. 1965.

## POM - 403: Transportation Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 403.1	Understand the dynamic Transportation Management issues that affect basic transportation systems.
POM – 403.2	Know the basic principles, skills, and tools of transportation management.
POM – 403.3	Identify challenges, limitations and future demand.
POM – 403.4	Aware of the motor vehicle act 1985 and its impact on transport system along with Emission norms.

### Course Contents:

Growth of Urbanisation and Problems of Transportation; Transport-Challenges and Limitations; Government Activities in Transportation; Transportation Systems - Planning, Operation and Management; Trip Generation and Distribution; Load Planning; Transportation Modes and their Selection; Sequential Travel Demand Forecasting Models; Future Developments in Transportation; Motor Vehicle Act 1985 and its Impact on Urban Transport System; Emission Norms.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings :

1. Baerwal, J. E : Transportation and Traffic Engineering Handbook, ~Englewood Cliffs, New Jersey, Prentice Hall Inc., 1976.
2. Bell, G. etc. : The Business of Transport, Plymouth, McDonald and Evans, 1984.
3. Dickey J. W. : Metropolitan Transportation Planning, New Delhi, Tata McGrawHill, 1980.
4. Grey, G E. and Hole, L. A. : Public Transportation Planning; Operations and Management; Englewood Cliffs, New Jersey, Prentice Hall Inc., 1979
5. Gupta, M. P. : Metropolitan Transportation System, New Delhi, National, 1983.
6. Papacostas, C. S. : Fundamentals of Transportation Engineering, Englewood Cliffs, New Jersey, Prentice Hall Inc., 1987.

## POM - 404: Technology Forecasting

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
POM – 404.1	Understand forecasting systems and step-by-step implementation of forecasting procedures.
POM – 404.2	Understand popular forecasting techniques, assumptions, limitations, interpretations, as well as implementations.
POM – 404.3	Understand basic marketing instruments and their use in demand modelling.
POM – 404.4	Understand to quantify the forecast with the help of various forecasting techniques.

### Course Contents:

Exploratory Methods of TF; Delphi Technique; Cross Impact Matrix; Curve Fitting; Morphological Methods. Trends Extrapolation; Regression Analysis; Econometric Models; Normative Methods of TF; OR Models and Simulation; Networks Techniques; Relevance Trees; System Dynamics : Qualitative Methods; Futurology; Activities of TIF AC - Case Studies

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Ayres, Robert U: Technology Forecasting and Long Range Planning.
2. Bowonder, B and Miyake, T., 1990 : Technological Forecasting: Methodologies and Case Studies (Report III) TIF AC, New Delhi, 1990.
3. Bright, James R, Schoeman, Milton, EF., 1973: A Guide to Practical Technological Forecasting, Prentice Hall.
4. Jones, H and Twiss, B.C., 1979 : Forecasting Technology for Planning Decisions, MacMilan, London.
5. Makridakis, Spyros Gand *et. al.* : Forecasting, Methods and Applications, Wiley, 1983.
6. Makridakis Sprogs G. : Forecasting Planning and Strategy for the 21<sup>st</sup> Century, N.Y., Free Press, 1990.
7. Martino, Joseph Paul: Technological Forecasting for Decision-Making, N.Y., McGraw-Hill, 1993.

## POM - 405: R&D Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Objective:** To develop middle level scientists in the modern concepts of R&D management with a view to make them effective project managers and to enhance their human and behaviour skills to make them effective member of a large multi-disciplinary projects.

**Course Outcomes:** After completing this course, the students will be able to:

POM – 405.1 Scan the environment and identify emerging technologies.

POM – 405.2 Identify high-value instrument tests and workshops.

POM – 405.3 Develop various policies about Material management, procurement procedure and vendor.

POM – 405.4 Use design tools for manufacturing.

### Course Contents:

Survey of Emerging Technologies; Environment Analysis; Project Proposals; R&D Management : Management of knowledge workers, R&D environment; Management of High value Instruments Test Facilities, Workshops etc., Identification of partners/contractors for R&D Projects; R&D Budget; Technology Scanning : Procurement Procedure; Material Management Policy; Discard Policies and Procedure; Contract Management; Vendor Development; Procurement and Utilization of Capital Equipment; Test Equipment; Test Facilities; Sharing of resources with other Institution - Sponsored Resources; Development Tools; Design Methodologies; CAD/CAM/CIM; Design for Manufacturing; Design for Maintenance

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Cetron, Marvin J and Goldhar, Joel D (ed.) : The Science of Managing Organised Technology, N.Y.. Gordon & Research Science Pub., 1970.
2. Jain, R. K. and Tiaindis, H. C. : Management of Research and Development Organisations, Managing the Unmanageable, N.Y., Wiley, 1990.
3. McLeod, Tom : The Management of Research, Development and Design in Industry, England, Gower, 1988.
4. Meredith, Jack R and Mantel, Samuel, J : Project Management a Managerial Approach, N.Y., Wiley, 1985.
5. NTIS : The Management of Government R&D Projects ; The effects of The Contractual Requirement to Use Specific

The list of cases and specific references including recent articles will be announced in the class.

## **POM - 406: Programme Management**

<b>Max. Marks</b>	<b>External</b>	<b>Internal</b>	<b>Time</b>	<b>Credits</b>
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Objective:** To train the scientist and managers in the practical application and modern tools and techniques of planning, scheduling, monitoring and control of multiple projects.

**Course Outcomes:** After completing this course, the students will be able to:

- POM – 406.1 study the feasibility of the program using management concepts and models such as ADA IGMDP etc.
- POM – 406.2 Decide project select and project appraisal with the help of analysis techniques.
- POM – 406.3 Understand application use of various network models.
- POM – 406.4 Identify major projects in various public and private organizations.

### **Course Contents:**

Project Feasibility Study; Programme Management Concepts - Society Model ADA, IGMDP Model. Deemed University Model, MOUs etc. PMBOK ISO standards; Project Appraisal; Project Selection; Networks Models and their applications - PERT, CPM, GERT, Precedence Network; Resource Allocation and Scheduling; Project Costing-Zero-base Budgeting, Budgetary Control, CAG Report; Project Monitoring and Control - CASM (DRDL Model): Time and Cost Over Run; Concurrent Engineering; Project Closure-Cube Model; IEEE Models; Proeject Management Software; Major Projects in DRDO/DAE/CSIR/HAL etc. SARVATRA; IGMDP; MBT; FALCON; SAMYUKTA; INSAS; LCA.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### **Suggested Readings:**

1. Chaoudhury, S<sup>^</sup>dhan: Project Scheduling and Monitoring in Practice, Delhi, South Asian Pub., 1986.
2. Harrison, F. L. : Advanced Project Management, London, Gower, 1985.
3. Lockyer, K G. : An Introduction to Critical Path Analysis. London, Pitman Books, 1992.
4. Martino, R.L. : Project Management and Control; Finding the Critical Path; Applied Operational Planning : Allocating and Scheduling Resources; N.Y., American Management Association, 1965.
5. Meredith, Jack R and Mantel, Samuel, J : Project Management: A Managerial Apporach, N.Y., Wiley, 1985.
5. Srinath, L.S. : PERT and CPM; Principles and Applications, Delhi, East-West Press, 1975.
6. United Nations Industrial Development Organisation: Guide to Practical Project Appraisal; Social Benefit -Cost Analysis in Developing Countries, Delhi, Oxford and IBH Pub. Co., 1978.

**SPECIALISATION: ENTREPRENEURSHIP DEVELOPMENT****SEMESTER-III**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>ED-301</b>	Fundamentals of Entrepreneurship Development	100	70	30	5	4
<b>ED-302</b>	Creativity and New Venture Creation	100	70	30	5	4
<b>ED-303</b>	Institutional support to Entrepreneur & MSMEs	100	70	30	5	4
<b>ED-304</b>	Family Business Management	100	70	30	5	4
<b>ED-305</b>	Legal Framework for New Age Businesses	100	70	30	5	4
<b>ED-306</b>	Social Entrepreneurship	100	70	30	5	4

**SEMESTER-IV**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>ED-401</b>	Enterprise Planning, Appraisal and Financing	100	70	30	5	4
<b>ED-402</b>	Financial Innovation and Entrepreneurship	100	70	30	5	4
<b>ED-403</b>	Marketing Management in New Age Businesses	100	70	30	5	4
<b>ED-404</b>	New Enterprises Human Resource Management	100	70	30	5	4
<b>ED-405</b>	MSMEs Policy Framework	100	70	30	5	4
<b>ED-406</b>	Contemporary Environment in MSMEs	100	70	30	5	4

**Semester-III**  
**ENTREPRENEURSHIP DEVELOPMENT**

**ED - 301: Fundamentals of Entrepreneurship Development**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 301.1	Become aware and assess entrepreneurial opportunities available for an entrepreneur.
ED - 301.2	Develop and cultivate endurance, create value and mobilize people and resources.
ED - 301.3	Create and design business plan in order to setup their venture in future.
ED - 301.4	Get an overview regarding the schemes and support provided by government.

**Course Contents:**

Entrepreneur: Concept, ecosystem, functions of Entrepreneur, entrepreneur & Entrepreneurship, Classification of entrepreneurs, Distinction between Entrepreneur and Manager, Intrapreneur and Entrepreneur, Theories of Entrepreneurship: Schumpeter, McLelland and Drucker, Stages in entrepreneurial process, Micro, Small and Medium Business: Definition, Role in the economy and significance, Factors affecting success of a new Business. Environment assessment (PESTEL): political, economic, social, Technological, ecological and legal environment. Developing an effective business plan: components and procedure to prepare a business plan. Entrepreneurial Venture Initiation: Assessment of business opportunities. Business creation: Methods and Procedures to start and expand one's own business. Managing growth: using external parties to help grow a business, franchising, advantages and limitations; Joint ventures- types; role of government and various institutions in developing entrepreneurship in India; women entrepreneurship.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Kumar, Arya (2012); Entrepreneurship, Pearson, New Delhi.
2. Greene, Cynthia L (2006), Entrepreneurship, Cengage Learning, New Delhi
3. Timmons, Jeffry A and Spinelli, Stephen(2007), New Venture Creation, McGrawHill, seventh edition, New Delhi
4. Wickham, Phillip A (1998); Strategic Entrepreneurship, Pitman, UK.
5. Shukla, MB, (2011), Entrepreneurship and Small Business Management, Kitab Mahal, Allahabad
6. Zenas Block and Ian C Macmillan, Corporate Venturing, Harvard Business School Press, Boston
7. Sahay A., A. Nirjar (2006), Entrepreneurship: Education, Theory and Practice, Excel Books, New Delhi.

## ED - 302: Creativity and New Venture Creation

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 302.1	Get basic understanding regarding the concept of creativity and innovation.
ED - 302.2	Promote idea generation by learning the sources and techniques of ideas.
ED - 302.3	Recognize Opportunity and map idea with opportunity.
ED - 302.4	Get an insight regarding innovative strategies for business creation.

### Course Contents:

Entrepreneurship Development in emerging markets: types of start-ups, entrepreneur as a career option, International entrepreneurship, role of educational institutions, Entrepreneurial leadership: leader Vs manager; principle centered leaders, entrepreneurial leadership and components, Creativity: concept, creativity and entrepreneurship, blocks to creativity, Unblocking Creative Potential ,characteristics of creative people, Creativity Techniques (Brainstorming; lateral Thinking; Forced Relationship; Morphological Analysis; Attribute Listing, etc.), Managing Creativity in Organization. Innovation: opportunity, creating, shaping, recognizing and seizing. Idea generation: sources & techniques of ideas. Idea to opportunity mapping: meaning, process, recognition, sources of opportunity; business opportunities with specific reference to Indian economy; Assessing business potential of an idea; steps involved in tapping opportunity, Strategies for Innovation. Creativity in start-ups: case studies and Business plan presentation.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Kumar, Arya (2012). Entrepreneurship: Creating and Leading an entrepreneurial Organization. Pearson, India.
2. Timmons, Jeffry A and Spinelli, Stephen (2007), New Venture Creation: Entrepreneur for the 21<sup>st</sup> century, McGrawHill, seventh edition, New Delhi
3. Sahay A., A. Nirjar (2006), Entrepreneurship: Education, Theory and Practice, Excel Books, New Delhi.
4. Zenas Block and Ian C Macmillan, Corporate Venturing, Harvard Business School Press, Boston

## ED - 303: Institutional Support to Entrepreneur & MSMEs

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 303.1	Understand the Contribution of MSME Sector in Indian Economy.
ED - 303.2	Understand the institutional support system available to MSME's.
ED - 303.3	Gain an insight regarding support by Commercial and development banks.
ED - 303.4	Role of RBI in institutional support.

### Course Contents:

Institutional Support Mechanism: SIDO, SIDBI, NSIC, SISI, Commodity Boards, State Directorate of Industries, SIDC'S, SFC, District Industries Centre. MUDRA Bank. Institutional Support Mechanism: Testing Laboratories, Product and Process Development Centres, NISEBUD, National Service and Technology Entrepreneurship Development Board. Institutional Support Schemes: Role of RBI, RBI Guidelines to commercial banks, lending by Commercial and Development Banks, Equity Fund Scheme, Credit Guarantee Scheme, Institutional Support Schemes: Interest Subsidy, Seed/Margin Money, DRI, Refinance Scheme, Composite Loan Scheme, Single Window Scheme, National Equity Fund Scheme, Bills Rediscounting Scheme. Assistance from MSME: Marketing Assistance, Research Development and Training Facilities, Export Assistance to MSMEs, Technology Up gradation, Assistance to Ancillary Industries, Incentives for MSMEs in Backward Areas and contemporary ED programmes.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings & Websites:

1. Krishnamurthi, S. Guide to Micro, Small and Medium Enterprises Policy, Rules and Regulations (3rd Ed.). Orient Publishing Company.
2. [www.msme.gov.in](http://www.msme.gov.in),
3. [www.laghu-udyog.com](http://www.laghu-udyog.com),
4. [www.dcmsme.gov.in](http://www.dcmsme.gov.in),
5. [www.coirboard.gov.in](http://www.coirboard.gov.in),
6. [www.nimsme.org](http://www.nimsme.org),
7. [www.niesbud.nic.in](http://www.niesbud.nic.in),
8. [www.kssidc.kar.nic.in/dic.in](http://www.kssidc.kar.nic.in/dic.in)

## ED - 304: Family Business Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 304.1	Understand various concepts relating to family business.
ED - 304.2	Role of trust and commitment in family business.
ED - 304.3	Understand the factors contributing to sustainable family businesses.
ED - 304.4	Governance and conduct of family businesses.

### Course Contents:

Family Business: nature, importance and uniqueness of family business; families in business: building trust and commitment (through case discussion); ownership of an enterprise build to last including assessment of different forms of business organizations: Sole Proprietorship, Partnership, LLP, Joint Stock Companies, HUF and OPC. Leadership imperatives for family and business: succession and continuity power. Best practices for the management and governance of family business: creating the strategy; planning the estate. Financial considerations and valuation of family business; family business governance: Advisory boards and board of directors. Family communication: family meetings, family councils and family offices; change, adaptation and innovation: the future of family business.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Poza, Ernesto J (2009); family-owned Business, Cengage learning
2. Wickham, Phillip A (1998); Strategic Entrepreneurship, Pitman, UK.
3. Shukla, MB, (2011), Entrepreneurship and Small Business Management, Kitab Mahal, Allahabad
4. Hill, Michal A., Inland Durama R et al; Strategic Entrepreneurship: Creating a New Mindset, Blackwell Publishers, Oxford.

## ED - 305: Legal Framework for New Age Businesses

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 305.1	Develop an insight regarding legal framework for startup businesses.
ED - 305.2	Know the importance of brands and goodwill generation.
ED - 305.3	Know the importance of IPR for startups.
ED - 305.4	Know about the various compliances for startups.

### Course Contents:

Incorporation of a company: Meaning, types of companies, character documents, legal formalities for incorporation of company, key managerial personnel. Companies Act, 2013: Various provisions relevant for new ventures, compliances under the Act. An Introduction to Legal aspects for startups: IT Laws, Accounting and Tax Laws, SEBI Regulations, Business Finance, Contract Laws, Trade Marks: Concept of trademarks, Importance of brands and the generation of “goodwill” , Trademark as a marketing tool , Trademark registration procedure ,Infringement of trademarks and Remedies available, Assignment and Licensing of Trademarks ,Trademarks and domain names, Concept of Geographical Indication; Patents (Amendments) Act, 2005: Introduction to Patents ,Procedure for obtaining a Patent , Licensing and Assignment of Patents , Infringement of Patents; The Indian Copyrights (Amendments) Act, 2012: Concept of Copyright Right, Assignment of Copyrights, Registration procedure of Copyrights, Infringement (piracy) of Copyrights and Remedies; Industrial Designs Act, 2002: Concept of Industrial Designs, Registration of Designs , Piracy of registered designs and remedies IP Management , Concept of IP Management :Intellectual Property and Marketing and protection of trade secrets.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Bhandari, M.K. Law Relating To Intellectual Property Rights. Central Law Publications.
2. Satyawrat Ponkse. (1991). The Management of Intellectual Property.

**ED- 306: Social Entrepreneurship**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 306.1	Role of Social Entrepreneurs in the creation of a better society.
ED - 306.2	Distinguish between an Social entrepreneurship, Corporate entrepreneur and philanthropy.
ED - 306.3	Sources of funding for social ventures.
ED - 306.4	Management and sustainability of social enterprises.

**Course Contents:**

Introduction to Social Entrepreneurship: meaning, Social Entrepreneurs, social entrepreneur vis-a vis corporate entrepreneur; relationship with traditional nonprofits and government services; legal structure of social enterprises ;social impact investor; difference among venture philanthropists, traditional venture capital and market investors Social Venture Opportunity Identification; Social Venture Plan ; Social Impact Theory; The Process of Social Entrepreneurship: Creating Opportunities ; Disruptive Innovations for Social Change ; Social Venture Strategy and Plan; Social Ventures funding; impact and effectiveness of social enterprises.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Schwartz, Beverly. Rippling: How Social Entrepreneurs Spread Innovation Throughout the World. (Jossey Bass, 2012, ISBN 978-1-118-13859-5).
2. Grayson, David, McLaren, Melody, Spitzeck, Heiko. "Social Intrapreneurs-An Extra Force for Sustainability."
3. Drucker, Peter, E. Innovation and Entrepreneurship.
4. Social Enterprise Alliance, Succeeding at Social Enterprise: Hard-Won Lessons for Nonprofits and Social Entrepreneurs. (Jossey Bass, 2010, ISBN 978-0-470-40532-1).
5. The Social Intrapreneur: A Field Guide for Corporate Changemakers, <http://www.sustainability.com>  
Social Impact Exchange website: <http://www.socialimpactexchange.org>

## SEMESTER-IV

### ED - 401: Enterprise Planning, Appraisal and Financing

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 401.1	Understand the systematic management of projects starting from identification till completion.
ED - 401.2	Understand the importance of feasibility study in a project.
ED - 401.3	Escalate the skill of students in executing projects.
ED - 401.4	Give know how regarding conflict management in projects.

#### Course Contents:

An Overview and Key Concepts of Project Management, Project Feasibility Studies: Project Identification, Market and Demand Analysis, Technical Analysis. Project Cost Estimate: Financial Appraisal of Single Projects and Financial Appraisal of Multiple Projects. Human Aspects in Project Management: Project Organization, Project Leadership, Motivation in Project Management, Communication in the Project Environment, Conflict in Project Management. Project Scheduling with PERT/CPM. Time-Cost Trade-Off and Crashing of Projects, Project Cost Control (PERT/Cost). Resource Scheduling and Resource Levelling, Risk Analysis in Project Management, Project Audit and Project Termination, Project Control

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Prasana Chandra: *Projects-Planning Analysis, Selection, Implementation & Review*, Project Management, Tata McGraw Hill, New Delhi eighth edition.
2. P. Gopalakrishnan & V.E. Ramamoorthy (2008), *Project Management*, Macmillan.
3. Anderson, E.S., Grude, K., Haug, T. and Turner, J.R. (1990) *Goal directed project management*, London, Kogan Page.
4. Anthony, R.N., and Young, D.W. (1999) *Management Control in Non-profit Organizations*, 6th edn, Boston, MA, Irwin/McGraw-Hill.
5. Elbeik, S. and Thomas, M. (1998) *Project Skills*, Oxford, Butterworth-Heinemann.
6. Lock, D. (1993) 'Project management' in *Handbook of Management*, 3rd edn, Aldershot, Gower Publishing Company Limited.
7. Maylor, H. (1996) *Project Management*, London, Pitman Publishing.
8. Young, T.L. (1998) *The Handbook of Project Management*, London, Kogan Page.

## ED - 402: Financial Innovation and Entrepreneurship

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED - 402.1	Familiarize the students with financial management concepts for MSME's.
ED - 402.2	Understand the importance of financial planning for startups and established enterprises.
ED - 402.3	Give an insight regarding innovative sources of finance.
ED - 402.4	Understand financial risks in startups and mitigation strategies.

### Course Contents:

Meaning, objectives and significance of Financial Management, Project Appraisal Technique- Payback Period, NPV, IRR, PI. Cost of capital and capital structure. Sources of Finance, Working Capital Management: Concept, Importance, Cash Management, Inventory Management, Management of Accounts Receivables. Budgeting Control: Meaning, Importance, Limitation, Types of Budgets, Fixed vs Flexible Budget. Financial Planning, Estimation of Financial Requirements, Sources of Finance : Internal sources and External sources of Financing including Term Loans and Financial Accommodation from Financial Institutions, Venture Capital, Profitability Analysis: Factors Affecting Profits, Profit Planning: characteristics, advantages and limitation, Break Even Analysis, Profitability Ratios, Cash Flow Statement. Concept of Risk, Types of Risk, Risk mitigation Strategies

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Singh, Surender and Kaur, Rajeev. Basic Financial Management Mayur Paperbacks, New Delhi
2. S.N. Maheshwari, Management Accounting & Financial Analysis S. Chand & Sons
3. S.C. Kuchhal, Financial Management, Vikas Publishing House
4. Steward C. Myers, Richard A. Brealey Principles of Corporate Finance (International Edition)
5. M.Y. Khan & R.K. Jain "Financial Management Text & Problems" Tata McGraw

## ED - 403: Marketing Management in New Age Businesses

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED – 403.1	Give Understanding of marketing management in new age business.
ED – 403.2	Understand pricing and revenue management for startups.
ED – 403.3	Understand Promotional techniques for Intangible products.
ED – 403.4	Understand recent trends in new age marketing viz. digital marketing, CRM.

### Course Contents:

Business Marketing: Concept of Marketing, Scope of Marketing, Assessment of Demand, Market Segmentation, Marketing Mix, Product Mix, Processing of Products and Processing Strategies. Product Life Cycle – Introduction Stage Strategies, Growth Stage Strategies, Maturity Stage Strategies, Decline Stage Strategies. Introduction to Pricing and revenue management: History of Pricing and Revenue Optimization (PRO) Techniques; Traditional Pricing Techniques; factors driving PRO and the workings of a PRO system; Microeconomics of Pricing; Review of Pricing Theory : Recap of the monopoly price theory; Price Discrimination and role of Consumer Surplus; Concept of Price Waterfall ; Behavioral Theory of Pricing; Value Creation and Capturing; Market Segmentation and Pricing : Market Segmentation with Differential Pricing: Concept of different reservation prices; focusing on customer needs and segmentation. Value Based Pricing; Pricing and CRM. Channels of Distribution: Concept, Objectives & Importance of Channels of Distribution, Types of Channels of Distribution, Factors Affecting Choice Of Distribution Channels. Role of Middlemen, Distribution Strategies, Franchising – Concepts and Benefits. Logistics: Meaning, Importance, Objectives, Marketing Logistics Task, Approaches Of Logistics.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Kotler, Keller, Koshy and Jha, Marketing Management, 13th Edition Pearson
2. Ramaswamy Vs. Namakumari, Marketing Management, 4th, Macmillan
3. Shukla A.K., Marketing Management, 1st Edition, Vaibhav Laxmi Prakashan
4. Lamb Charless W. et. Al; Principals of Marketing; South Western Publishing
5. Cravens David Wet al;, Marketing Management Richard D. Irwin
6. Kotler Philip and Armstrong Gary, Principles of Marketing, Pearson
7. Bushkirk, Richard H: Principles of Marketing; Dryden Pren, Illinois

## ED - 404: New Enterprise Human Resource Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED – 404.1	Understand the significance of HRD in MSME’s VIZ. Manpower planning, recruitment and selection.
ED – 404.2	Understand the Various laws/compliances/acts governing MSME.
ED – 404.3	Give understanding of the holistic training programs for HR professionals of new age enterprises.
ED – 404.4	Understand the significance of EDP’s for strategic decision makers.

### Course Contents:

Role of HRD in MSMEs: Manpower Planning in MSMEs, Hiring Process – Recruitment and Selection, Training and Evaluation of Performances, Wage and Salary Administration in MSMEs, Employment Motivation Management of Industrial Relation: Causes of Industrial Dispute, Methods of Resolution of Disputes, Procedure and Role of Arbitration and Conciliation, Strikes, lockout Relevant Regulations for MSMEs: Factories Act 1948, Industrial Employment ( Standing Orders) Act 1946, Minimum Wages Act 1936, Employment Provident Fund and Miscellaneous Provisions Act 1952, Relevant Regulations for MSMEs: Trade Union Act 1926, Bonus Act, Industrial dispute Act 1947 Executive Development Programme: Meaning, Need, Relevance, Holistic Training Model, Evaluation of EDPs, Techniques for enhancing effectiveness of EDPs.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Dessler Garry & Biju Varkky, “Human Resource Management” 10th edition, Pearson education.
2. Dessler Garry & Biju Varkky, “Fundamental of HRM” Pearson education
3. Ivancevich M John”HRM” 10th Edition, The McGraw Hill company
4. Prasad LM “HRM” Sultan Chand & Sons.
5. Gupta CB “HRM” Sultan Chand & Sons.
6. Wilson P John ”Human Resource Development ” Kogan Page 2nd Edition.

**ED - 405: MSMEs Policy Framework**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED – 405.1	Give understanding of policy environment for Micro small and medium enterprises.
ED – 405.2	Understand the dynamics of industrial policy with specific reference to MSME's.
ED – 405.3	Understanding the prevention measures and revival strategies for MSME's.
ED – 405.4	Understand the tax benefits available to MSME's.

**Course Contents:**

Policy Environment for Small Scale Sector, Pre and Post 1991 Industrial Policy, New Policy Measures, Reports of various Working Groups on SSIs: Kothari Committee 2,000, Ganguly Committee 2004. Policy Support Mechanism: Reservation of Items for Small Scale Industries, Rationale, Procedures, Criticism, De-reservation, Removal of Quantity Restrictions, Government's Purchase Preferences Policy for Small Industries Products, Price Preference Policy for SSI products. Policy of Priority Credit, Equity Participation, Equity issues by small enterprises through OCTEI, Policy of Technology Up gradation in small enterprises, Technology Bureau for Small Enterprises. Taxation Benefit to SSI: Need for tax benefits, Tax Holiday, Rehabilitation Allowances, Expenditure on Scientific Research, Amortization of certain Preliminary Expenses, Tax concession to SSI in rural and backward areas, Expenditure on acquisition of Patents and Copyrights. Policy on Handling Sickness in Small Industries: Causes and consequences of Sickness, Measures to prevent sickness in small units Measures for Export Promotion: Export Processing Zones (EPZs), Special Economic Zones (SEZ), Measures for Export Promotion, Organizational support for Export Promotion.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Personal Finance by Jack R. Kapoor, Les R. Dlabay and Robert J. Hughes, Tata McGraw Hill Publishing Company Ltd. New Delhi.
2. Personal Finance columns in The Economic Times, The Business Line and Financial
3. Express Daily News Papers
4. Kothari Committee Report
5. SSI Policy
6. Sick Industries Companies Act'
7. www.iasb.org
8. Internet Sources- BSE, NSE, SEBI, RBI, IRDA, AMFI etc

**ED - 406: Contemporary Environment in MSMEs**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ED – 406.1	Impact of Global business practices for MSME's.
ED – 406.2	Understand Entrepreneurial entry strategies into international business.
ED – 406.3	Give an understanding regarding opportunities in rural business area.
ED – 406.4	Women entrepreneurship: Challenges, strategies and institutional support.

**Course Contents:**

Changing scenario of MSMEs in the era of Liberalisation & Globalisation, Competitiveness, Quality control and Branding, Need for professionalism in management of small business in India, social responsibilities of small business owners. Micro, Small and Medium Enterprises Development Act (MSMEDA) 2006, Objective, Definition, Provisions pertaining to promotion and development of MSMEs. Rural Entrepreneurship: Concept, Need, Problems, Methods of Developing Rural Entrepreneurship. Women Entrepreneurship: Concept, Challenges, Strategies, Institutional Support to Women Entrepreneurs, Self Help Groups (SHG) International Entrepreneurship: Concept and Nature, International versus Domestic Entrepreneurship—Political, Legal, Cultural and Technological Environment; Strategic Issues in International Entrepreneurship; Barriers to International Trade- Protectionism, Trade Blocs; GATT: Entrepreneurial entry into International Business-Exporting, Licensing, Turnkey Projects, Joint Ventures, Management Contracts.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings**

1. Hisrich, Robert D., Michael P Peters, Entrepreneurship: Starting, Developing and Managing a New Enterprise, Irwin, London
2. Shukla, MB, (2013), Entrepreneurship and Small Business Management, KitabMahal, Allahabad
3. Baporikar, Neeta, Entrepreneurship Development and Project Management: Text & Cases, Himalaya Publishing, Mumbai.
4. Charantimath, Poornima M, (2009), Entrepreneurship Development Small Business Enterprise, Dorling Kindersley India Pvt Ltd. (Pearson), Delhi

**SPECIALISATION: BUSINESS ANALYTICS****SEMESTER-III**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>BA-301</b>	Business Analysis using Excel	100	70	30	5	4
<b>BA-302</b>	Econometrics for Business Forecasting	100	70	30	5	4
<b>BA-303</b>	Business Data Mining	100	70	30	5	4
<b>BA-304</b>	Decision Modeling and Data Analysis	100	70	30	5	4
<b>BA-305</b>	Data Analytics using R	100	70	30	5	4
<b>BA-306</b>	Social Media Analytics	100	70	30	5	4

**SEMESTER-IV**

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>BA-401</b>	Time Series Data Analysis	100	70	30	5	4
<b>BA-402</b>	Applied Multi Variant Analysis	100	70	30	5	4
<b>BA-403</b>	Financial Modeling	100	70	30	5	4
<b>BA-404</b>	Predictive Analysis for Business Decision	100	70	30	5	4
<b>BA-405</b>	Data Analysis using Python	100	70	30	5	4
<b>BA-406</b>	IOT and Big Data	100	70	30	5	4

## BUSINESS ANALYTICS SEMESTER-III

### BA - 301: Business Analysis using Excel

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 301.1	Turn the Numbers into Better Business Decisions.
BA - 301.2	Know the Professional Tools available for Business Analysts.
BA - 301.3	Learn the Winning Charts for Business Communication.
BA - 301.4	Compare the different Business Scenarios.

#### Course Contents:

Introduction- Turning Numbers into Better Business Decisions, The Business Analyst's Excel Toolbox:- Essential Excel for Business Analysis, Professional Tools for Business Analysts, Collecting and Managing Business Data: Importing and Exporting Data, Power Functions for Managing Business Data, Communicating Your Message: Your Stakeholders and Their Needs, Data Presentation Formats That Work, Winning Charts for Business Communication: Professional Charting, Dynamic Charts, Looking Inside Your Data (Analysis):Analysing Data with Pivot Tables, Comparing Business Scenarios, Looking Outside Your Data (Forecasting): Time Series and Forecasting, Regression.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Manohar Hansa Lysander, Data Analysis and Business Modelling Using Microsoft Excel, PHI.
2. Whigham David, Business Data Analysis Using Excel, Oxford.
3. Winston Wayne, Microsoft Excel 2013 Data Analysis and Business Modelling, PHI
4. Fairhurst Danielle Stein, Using Excel for Business Analysis- A guide to Financial Modelling, Wiley.
5. Enders W. Applied Econometric Time Series. John Wiley & Sons, Inc., 1995
6. Brooks Cheri, Introductory Econometrics for Finance, Cambridge.
7. Day Alastair L. Mastering Financial Modeling in Microsoft Excel, Pearson, 2<sup>nd</sup> Edition
8. Hanke John E., Dean W. Wichern, Arthur G. Reitsch, Business Forecasting.

## BA - 302: Econometrics for Business Forecasting

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 302.1	Know the econometrics available for analysis.
BA - 302.2	Analyze the available trends.
BA - 302.3	Learn the Econometric modeling.
BA - 302.4	Understand the forecasting process through various models.

### Course Contents:

Introduction to correlation and regression Meaning and definition ; correlation co-efficient: Pearson's  $r$ , rank correlation coefficient, regression technique, Simple linear regression simple linear regression, Least squares method, Accuracy of results, coefficient of determination, high  $R^2$ , relevance and significance of estimated coefficients, presentation of estimation results; Trend Analysis Changes in trend and slope, gradual changes in trend: estimation of non-linear trends, polynomial forms, higher order polynomials, log-transformed forms, inverse forms, Multiple regression models Multiple independent variables, the problem of irrelevant independent variables: adjusted  $R^2$ , significance of coefficients taken together: F test, choosing the correct functional form; Econometric modeling and problems Problems of Multicollinearity, heteroskedasticity and autocorrelation; cross-section and time-series regression analysis, Stationary and non-stationary time series, Lagged dependent variables/autoregressive models, dummy variable regression, qualitative/categorical dependent variable regression, logit, probit and binomial regression models. Overview of Forecasting Process- Exploratory Data Analysis-Regression Analysis- Logistic Regression-Time Series Forecasting-Lifetime Value Models-Credit Scoring Models-Loss Forecasting Models

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. D.N.Gujarati, G.C. Porter, S. Gunasekar, Basic Econometrics, TMH publication, New Delhi,
2. J.M.Woolridge, Introductory Econometrics: A modern approach, 4th edn, Cengage learning
3. Levin and Rubin, Statistics for Management, TMH publication.
4. B.H. Baltagi, Econometrics, Springer,
5. Barreto and Howland, Introductory Econometrics, Cambridge University Press
6. H.R. Seddighi, Introductory Econometrics: A practical approach, Routledge
7. Deepak K. Gupta, Analyzing public policy; concepts, tools and techniques, CQpress,

## BA - 303 Business Data Mining

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 303.1	Understand the concept of data warehousing.
BA - 303.2	Learn the process of data mining.
BA - 303.3	Integrate the Data Mining System with a Data Warehouse.
BA - 303.4	Know about the various data mining methods.

### Course Contents:

Data warehousing Components –Building a Data warehouse - Mapping the Data Warehouse to a Multiprocessor Architecture – DBMS Schemas for Decision Support – Data Extraction, Cleanup, and Transformation Tools –Metadata.

DATA MINING: Introduction – Data – Types of Data – Data Mining Functionalities – Interestingness of Patterns –Classification of Data Mining Systems – Data Mining Task Primitives – Integration of a Data Mining System with a Data Warehouse – Issues –Data Pre processing.Mining Frequent Patterns, Associations and Correlations – Mining Methods – Mining various Kinds of Association Rules – Correlation Analysis – Constraint Based Association Mining – Classification and Prediction – Basic Concepts – Decision Tree Induction – Bayesian Classification – Rule Based Classification

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Pang-Ning Tan, Michael Steinbach and Vipin Kumar, “Introduction to Data Mining”, Person Education,2007.
2. K.P. Soman, Shyam Diwakar and V. Aja, “Insight into Data Mining Theory and Practice”, Eastern Economy Edition, Prentice Hall of India, 2006.
3. G. K. Gupta, “Introduction to Data Mining with Case Studies”, Eastern Economy Edition, Prentice Hall of India, 2006.
4. Daniel T.Larose, “Data Mining Methods and Models”, Wiley-Inderscience, 2006.

## BA - 304 Decision Modeling and Data Analysis

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 304.1	Analyze the sensitivity for decision making.
BA - 304.2	Know the Value of Information in Decision Trees.
BA - 304.3	Learn the simulation techniques.
BA - 304.4	Learn the Models available for data analysis.

### Course Contents:

Decision Analysis: Introduction to Decision Modeling, Sensitivity Analysis Using Excel, Sensitivity Analysis, Introduction to Monte Carlo Simulation, Introduction to Decision Trees, Strategies in Decision Trees, Sensitivity Analysis for Decision Trees, Decision Trees with Multi attribute Outcomes, Value of Information in Decision Trees.

Data Analysis: Introduction to Data Analysis, Univariate Numerical Data, Simple Linear Regression, Multiple Regression, Regression Models for Cross-Sectional Data, Time Series Data and Forecasts, Autocorrelation and Autoregression, Time Series Smoothing, Time Series Seasonality, Regression Models for Time Series Data.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Enders W. Applied Econometric Time Series. John Wiley & Sons, Inc., 1995
2. Brooks Chervis, Introductory Econometrics for Finance, Cambridge Press.
3. Mills, T.C. The Econometric Modelling of Financial Time Series. Cambridge University Press 1999.
4. Chawla Deepak and Neena Sondhi, Research Methodology: Concepts and Cases, Vikas Publishing House.

## BA - 305 Data Analytics using R

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 305.1	Understand the basics of R.
BA - 305.2	Explore the data in R.
BA - 305.3	perform clustering operation on data.
BA - 305.4	Know the parallel computing with R.

### Course Contents:

- Introduction to R
- Getting Started with R
- Loading and Handling Data in R
- Exploring Data in R
- Linear Regression using R
- Logistic Regression
- Decision Tree
- Time Series in R
- Clustering
- Association Rules
- Text Mining
- Parallel Computing with R

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Seema Acharya.: Data Analytics Using R. McGraw Hill Education
2. Maindonald & Braun : Data Analysis and Graphics Using R,Cambridge University Press
3. Michael Milton: Head First Data Analysis, O'Reilly Media.
4. Rakshit-R Programming for Beginners(McGraw hill education)

## BA - 306 Social Media Analytics

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 306.1	Understand the basics of social media analytics.
BA - 306.2	Know about the information diffusion.
BA - 306.3	Learn the Geospatial social data mining.
BA - 306.4	Predict the future with social media.

### Course Contents:

Phenomenology of social media; Analysis Basics; Sentiment Analysis; Network Analysis Basics; Influence and Centrality in Social Networks; Information diffusion; Social ties and information diffusion; Social ties and link prediction; Social Spam and Malicious Behavior; Geospatial social data mining; Privacy in a Networked World; Predicting the future with social media; Emotional contagion; Social tagging and folksonomies.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Marshall Sponder, Social Media Analytics, McGraw Hill Publication.
2. Siddhartha Chatterjee & Michal Krystyanczuk, Python Social Media Analytics.
3. Matthew Gains, Now Available: Social Media Analytics (techniques and insights for extracting value out of Social Media).

## Semester-IV

### BA - 401: Time Series Data Analysis

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 401.1	Understand the Stochastic process.
BA - 401.2	Learn the Autoregressive-moving average models (ARMA).
BA - 401.3	Learn the methodology to identification of stationary time series models.
BA - 401.4	Know about the available forecasting models.

#### Course Contents:

Stochastic process and its main characteristics Stochastic process. Time series as a discrete stochastic process. Stationarity. Main characteristics of stochastic processes (means, auto covariation and autocorrelation functions). Stationary stochastic processes. Stationarity as the main characteristic of stochastic component of time series. Wold decomposition. Lag operator. Autoregressive-moving average models ARMA (p,q) Moving average models MA(q). Condition of invertibility. Autoregressive models AR(p). Yull-Worker equations. Stationarity conditions. Autoregressive-moving average models ARMA (p,q). Coefficient estimation in ARMA (p,q) processes. Box-Jenkins' approach

Coefficients estimation in autoregressive models. Coefficient estimation in ARMA (p) processes. Quality of adjustment of time series models. AIC information criterion. BIC information criterion. "Portmonto"-statistics. Box-Jenkins methodology to identification of stationary time series models. Forecasting in the framework of Box-Jenkins model Forecasting, trend and seasonality in Box-Jenkins model. Non-stationary time series Non-stationary time series. Time series with non-stationary variance. Non-stationary mean. ARIMA (p,d,q) models. The use of Box-Jenkins methodology to determination of order of integration.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. Enders W. Applied Econometric Time Series. John Wiley & Sons, Inc., 1995
2. Mills, T.C. The Econometric Modelling of Financial Time Series. CambridgeUniversity Press, 1999
3. Andrew C. Harvey. Time Series Models. Harvester wheatsheaf, 1993.
4. Andrew C. Harvey. The Econometric Analysis of Time Series. Philip Allan, 1990.
5. Econometric Views 4.0 User's Guide. Quantitative Micro Software, LLC.
6. Banerjee, A., J.J. Dolado, and D.V. Hendry. Co-Integration, Error Correction, and Econometric Analysis of Non-Stationary Data. OxfordUniversity Press, 1993
7. Maddala, G.S. And Kim In-Moo. Unit Roots, Cointegration, and Structural Change. CambridgeUniversity Press, 1998
8. P. J. Brockwell, R. A. Davis, Introduction to Time Series and Forecasting. Springer, 1996
- 9 J. Johnston, J. DiNardo. Econometric Methods. McGraw-Hill, 1997.

## BA - 402: Applied Multivariate Analysis

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 402.1	Understand the Basic concepts of multivariate distributions.
BA - 402.2	Learn the application of multidimensional scaling.
BA - 402.3	Learn the various types of multivariate models.
BA - 402.4	Understand the applicability of Confirmatory Factor analysis and structural equation modeling.

### Course Contents:

Basic concepts of multivariate distributions, Multinomial and multivariate normal distributions, Principal component analysis and other multivariate data visualization techniques, Profile analysis, Multivariate analysis of variance (MANOVA), Multiple correlation coefficient, Multidimensional Scaling, Exploratory Factor Analysis Cluster analysis, Discriminant analysis and classification, Confirmatory Factor analysis and structural equation modeling.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Chawla Deepak and NeenaSondhi, Research Methodology: Concepts and Cases, Vikas Publishing House.
2. Alvin C. Rencher, Methods of Multivariate Analysis, Wiley.
3. Hair, Anderson, Talham and Black, Multivariate Data Analysis.
4. C. Chatfield, Introduction to multivariate Analysis, Springer.

## BA - 403: Financial Modeling

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 403.1	Enhance the skills in Financial Statements Spreadsheet.
BA - 403.2	Perform vertical analysis of financial statements.
BA - 403.3	Use the financial ratios to benchmark a company's performance against competitors.
BA - 403.4	Adjust the regression models for changes in trends.

### Course Contents:

Corporate Financial Statements Spreadsheet skills: Organizing and creating spreadsheets; entering and formatting data values; entering expressions for calculating values; linking worksheets; splitting screens to facilitate working between several worksheets. Financial management skills: Understanding the three key financial statements (i.e., a company's income statement, balance sheet, and cash flow statement) and the relationships between the various items on them.

Analysis of Financial Statements Spreadsheet skills: Using logical IF statements; using conditional formatting to call attention to conditions that need correcting; pasting an Excel document into a Word document. Financial management skills: Analyzing the year-to-year changes in financial statements and various financial ratios; performing vertical analysis of financial statements; using financial ratios to benchmark a company's performance against competitors; inserting spreadsheet results into company reports.

Forecasting Annual Revenues Spreadsheet skills: Creating, validating, and using linear, quadratic, cubic, and exponential regression models to fit the trends of historical data; creating various types of charts (e.g., scatter diagrams, forecast charts, error patterns, and downside risk curves); estimating the accuracy of forecasts; expressing forecast accuracy in terms of confidence limits and downside risk curves. Financial management skills: Making forecasts; recognizing the difference between valid and invalid forecasting models; handling the risks inherent in forecasts; adjusting regression models for changes in trends.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Day Alastair L. Mastering Financial Modelling in Microsoft Excel, Pearson 2<sup>nd</sup> edition
2. Benninga Simon, Financial Modelling.
3. Pignataro Paul, Financial Modelling and Valuation: A Practical Guide to Investment Banking And Private Equity.
4. Rees Michael, Financial Modelling in Practice.

## BA - 404: Predictive Analysis for Business Decision

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 404.1	Understand the Supervised Learning and Unsupervised Learning.
BA - 404.2	Learn the process of Data Exploration.
BA - 404.3	Learn the Machine Learning Algorithms.
BA - 404.4	Learn the Statistical Graphics for Comparing and Assessing Models Implementing Predictive Models.

### Course Contents:

Supervised Learning and Unsupervised Learning - Preparing Data for predictive modeling - Data Exploration - Decision Trees - Cultivating Decision Trees Optimizing the Complexity of Decision Trees - Interpreting Decision Trees - Logistic Regression. Simple and Multiple Logistic Regression - Selecting Regression Inputs Optimizing.

Regression Complexity - Interpreting Regression Models - Transforming Inputs - Categorical Inputs Treatment - Categorical Input Consolidation Data Reduction/Selection Strategy - Introduction to Machine Learning Algorithms - Model Assessment - Model Fit Statistics - Statistical Graphics for Comparing and Assessing Models Implementing Predictive Models-Ensemble Models-Clustering and Segmentation Analysis K-Means Clustering-Profiling and Interpreting Clusters.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Larsoe and Larose, Data Mining and Predictive Analysis, Willey Publishing
2. Seymour Geisser, Predicative Inference: An Introduction, Spring
3. Ralph Writers, Practical Predictive Analysis, Packet
4. Dean Abbott, Applied Predictive Analytic, Willey Publishing

## BA - 405: Data Analysis using Python

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 405.1	Understand the Basics of Python Programming.
BA - 405.2	Know the functions of python.
BA - 405.3	Learn the Object-oriented Programming.
BA - 405.4	Learn the File Handling in Python.

### Course Contents:

#### PYTHON:

- Introduction to Computer and Python Programming
- Basics of Python Programming
- Variables, Expressions and Statements
- Decision Statements
- Conditional and Looping Construct
- Functions
- Strings
- Lists
- List Processing: Searching and Sorting
- Object-oriented Programming: Class, Objects and Inheritance
- Tuples, Sets and Dictionaries
- Graphics Programming: Drawing with Turtle Graphics
- File Handling

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Kamthane-Programming and Problem Solving with Python(Mcgraw Hill Education)
2. Brown:Python : The Complete Reference(Mcgraw hill education)
3. R. Nageswara Rao-Core Python ProgrammingDreamtech Press, 2016
4. John Paul Mueller-Beginning Programming with Python For Dummies,Wiley, 2014
5. Paul Barry-Head First Python: A Brain-Friendly GuideShroff, O'Reilly, 2016

## BA - 406: IOT and Big Data

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
BA - 406.1	Understand the Internet Connectivity Principles.
BA - 406.2	Learn the process of Data Acquiring, Organizing and Analytics in IOT.
BA - 406.3	Learn the Prototyping the Embedded Devices for IOT.
BA - 406.4	Know about the various Business Models.

### Course Contents:

#### INTERNET OF THINGS:

- The Internet of Things: An Overview
- Design Principles for Connected Devices
- Design Principles for the Web Connectivity for connected-Devices
- Internet Connectivity Principles
- Data Acquiring, Organizing and Analytics in IoT/M2M Applications/ Services/Business Processes
- Data Collection, Storage and Computing Using a Cloud Platform for IoT/M2M Applications/Services
- Sensors, Actuators, Radio Frequency Identification, Wireless Sensor Networks and Participatory Sensing Technology
- Prototyping the Embedded Devices for IoTs
- Prototyping Devices, Gateways, Internet and Web/Cloud Services Software Components
- Internet of Things Privacy, Security and Governance
- Business Models
- IoT Project Case Studies

#### BIG DATA:

Wholeness of Big Data, Big Data Sources and Applications, Big Data Architectures, Distributed Computing using Hadoop, Parallel Processing with MapReduce, No SQL Databases, Stream Processing with Spark, Ingesting Data, Cloud Computing, Web Log Analyzer Application Case Study, Data Mining Primer, Big Data Programming Primer

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings

1. Raj Kamal: Internet of Things, McGraw Hill Education
2. Anil Maheshwari : Big Data, McGraw Hill Education
3. Arshdeep Bahga & Vijay Madisetti: Internet of Things -A Hands-on Approach (University press)

## SPECIALISATION: AGRI-BUSINESS MANAGEMENT

### SEMESTER-III

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>ABM-301</b>	Agri-Business Management	100	70	30	5	4
<b>ABM-302</b>	Agricultural Economics	100	70	30	5	4
<b>ABM-303</b>	Agricultural Marketing Management	100	70	30	5	4
<b>ABM-304</b>	Agri- Entrepreneurship	100	70	30	5	4
<b>ABM-305</b>	Agri-Business Finance	100	70	30	5	4

### SEMESTER-IV

<b>Paper Code</b>	<b><i>Title of Course</i></b>	<b><i>Total Marks</i></b>	<b><i>Ext. Marks</i></b>	<b><i>Int. Marks</i></b>	<b><i>Hrs.</i></b>	<b><i>Credits</i></b>
<b>ABM-401</b>	Changing Paradigm of Agri-Business	100	70	30	5	4
<b>ABM-402</b>	Agri Supply Chain and Logistics Management	100	70	30	5	4
<b>ABM-403</b>	Food Processing Management	100	70	30	5	4
<b>ABM-404</b>	International Trade in Agri-Business	100	70	30	5	4
<b>ABM-405</b>	Marketing of Agri-Inputs	100	70	30	5	4

## AGRI-BUSINESS MANAGEMENT SEMESTER-III

### ABM - 301: Agri-Business Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 301.1	Understand the conceptual framework of agribusiness and opportunities related to agribusiness.
ABM - 301.2	Learn the activities involved in the agribusiness.
ABM - 301.3	Know about the rules and regulations related to agribusiness in India.
ABM - 301.4	Learn the credit financing to agribusiness.

#### Course Contents:

**Introduction to ABM:** Meaning, definition, history, Importance and scope of agribusiness, Changing dimension of agricultural business, Agribusiness Management-distinctive features, nature and components, Classification of Agricultural Products with Particular Reference to Seasonability; **Cooperative management-** nature, functions and purpose of cooperatives- procurement, storage, processing, marketing, process of cooperative formation; **Overview of agribusiness cooperative** – credit cooperatives, cooperative marketing, dairy cooperative; financing agribusiness cooperative; **Control** : Price Quotations, Evolution of Agricultural Price Policy, Regulatory Measures by the Government, Market Reports Classification and Grading, Quality Control and Standardization, Storage and Warehousing, Government Policy on Storage and Warehousing **Issues:** Marketing and Financial Management Issues in Co-operative, Micro Credit Financing Concept, Procurement & Distribution Management in Co-operatives, Legislative Framework of Cooperative.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings

1. Marketing Agricultural products , R.L. Kohls, Printice Hall
2. Agricultural Marketing in India, S.S Acharya & N.L Agrawal, Oxford & IBH
3. New dimensions of cooperative management , G.S Kamat, Himalaya Publishing House
4. Marketing in agricultural products ,Prabhakar Rao, Himalaya Publishing House
5. Akmat JS. 1978. New Dimensions of Cooperative Management. Himalaya Publ. House.
6. Ansari AA. 1990. Cooperative Management Patterns. Anmol Publ.
7. Sah AK. 1984. Professional Management for the Cooperatives. Vikas Publ. House.
8. Srivastava, U.K. Vathsala. Agro-processing Strategy for Acceleration and Exports Oxford University Press, YMCA, Library Building, Jai Singh Road, New Delhi – 110001.
9. Rajagopal. Organizing Rural Business Policy Planning and Management. Sage Publication, New Delhi.
10. Pandey, Mukesh and Deepak Tiwari. Rural and Agricultural Marketing International Book Distribution Co. New Delhi.

**ABM - 302: Agricultural Economics**

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 302.1	Learn the structure and dynamics of Indian Agricultural System.
ABM - 302.2	Know the agricultural policies and reforms in India.
ABM - 302.3	Understand the role of green revolution in development of agriculture in India.
ABM - 302.4	Learn the role of various agencies such as NABARD etc. in agricultural development.

**Course Contents:**

**Introduction to Agricultural Economics,** Meaning, concepts, definitions, scope and importance of Agricultural, **Structure & Dynamics of Indian Agricultural:** Place of agriculture in National economy, Special characteristics of agriculture in Indian economy, Pattern of agricultural holdings, Agricultural productivity: Trends, causes and consequences of low productivity in India, Green revolution: Strategy in development of Indian agriculture

**Indian Agricultural Policy & Reforms:** Meaning, types and importance, Evolution of agricultural policy, Famine Commission Report, Royal Commission on Agriculture: Recommendations, Land Reform Policy, Nature and objectives of land reforms, Major agricultural input policies including seed, fertilizer, pesticides, credit and irrigation, National Rural Employment Assurance Programme & other recent Agricultural Development Programs Role of NABARD & Other agricultural credit societies, Current Agricultural Export Policies for different commodities, Role of APEDA, National Rural Employment Assurance Programme & other recent Agricultural Development Programs.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

**Suggested Readings:**

1. Agrawal, A.N. - Indian Agriculture: Problems, Progress and Prospects. Vikas Publishing House Pvt. Ltd., Delhi.
2. Mamoria, C.B. - Agricultural Problems of India.-Kitab Mahal, Allahabad
3. Owen Oliver, - Natural Resources Conservation and Ecological Approach.- MacMillan Co.866, Third Avenue, New York-10022.
4. Mamoria, C.B. - Agricultural Problems of India.-Kitab Mahal, Allahabad.
5. Bansil, P.C. - Agricultural Problems of India- Vikas Publishing House Pvt. Ltd., Delhi.
6. Jain, S.C. - Agricultural Policy in India.- Allied Publishers Pvt.Ltd. Mumbai, Kolkatta, New Delhi.
7. James P.G.- Agricultural Policy in wealthy Countries.- Ague and Robertson Publishers, Sydeny.
8. Karla, O.P.- Agricultural Policy in India.- Bombay Popular Prakashan, Mumbai.
9. Datta, K.K. and K.P.M. Sundaram. - Indian Economy.- Latest Edition, S. Chand and Co., Ltd., 7361, Ram Nagar, Qutab Road, New Delhi-110055.
10. Banerjee, G.C.- Text Book of Animal Husbandry.- Oxford and IBH Publishers, New Delhi.
11. Mahanta, K.C. - Animal Husbandry in India.
12. Patnkar, S.V.- Financial Management.- Everest Publishing House Everest, Parshuram

## ABM – 303: Agricultural Marketing Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 303.1	Understand the agricultural produce marketing structure.
ABM - 303.2	Know about the marketing mix of agribusiness.
ABM - 303.3	Learn the role of Retail Institutions and Cooperative Agencies in agribusiness marketing in India.
ABM - 303.4	Apply the IT in marketing of agribusiness.

### Course Contents:

**Introduction to Agricultural Marketing-** Meaning, Nature, Scope and Problems. Similarities and Differences between Consumer and Agricultural Marketing. Agriculture Market Structure.

**Agricultural Marketing Environment-** Prominent Environmental factors influencing Agricultural Marketing. STP Approach with Respect to Agricultural Marketing.

### Agricultural Marketing Mix-

Concept and Types of Agri Products. The Concepts of New Product Development and Product Life Cycle as Applicable in Agri Products; Pricing Policies and Practices for Agribusiness; Agri Distribution Management; Basic Concepts of Promotion as Applicable in Agribusiness.

**Role of Retail Institutions and Cooperative Agencies in Agribusiness Marketing in India-** A Reference to Organisations Like FCI, NAFED, STC, Reliance Fresh and Easy Day etc. Role of IT and Telecommunications in Agribusiness Marketing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Acharya, S S and N.L Agarwal, Agricultural Marketing in India, Oxford Publications
2. Gupta, A P, Marketing of Agricultural Produce in India, Vora and Company Publishers.
3. Kotler et. Al, Principles of Marketing, Pearson Education Inc., New Delhi, 13<sup>th</sup> Edition.
4. Pandey M and D Tiwari, Rural and Agricultural Marketing, International Book Distribution Co.

## ABM - 304: Agri- Entrepreneurship

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 304.1	Understand the entrepreneurial opportunities in agribusiness.
ABM - 304.2	Initiate entrepreneurial venture in agribusiness.
ABM - 304.3	Manage the growth of agribusiness by using various measures.
ABM - 304.4	Know the various assistances provided by Govt. to entrepreneur of agribusiness in India.

### Course Contents:

Agribusiness Entrepreneurship - Key Concepts in entrepreneurship, entrepreneur in economic theory – Types of entrepreneurs and the entrepreneurial process; Business planning process; Factors affecting success of a new business; Environment assessment (PESTEL): political, economic, social, Technological, ecological and legal environment. Developing an effective business plan: components and procedure to prepare a business plan. Entrepreneurial Venture Initiation: Assessment of business opportunities.

Business creation: Methods and Procedures to start and expand one's own business. Managing growth: using external parties to help grow a business, franchising, advantages and limitations; case studies of progressive farmers and successful Agri-business enterprises. Institutions supporting entrepreneurs; Assistance from MSME to Agri entrepreneurs: Marketing Assistance, Research Development and Training Facilities, Export Assistance, Technology Up gradation, Assistance to Ancillary Industries, Incentives for MSMEs in Backward Areas and contemporary ED programs.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Kumar, Arya (2012); Entrepreneurship, Pearson, New Delhi.
2. Greene, Cynthia L (2006), Entrepreneurship, Cengage Learning, New Delhi
3. Timmons, Jeffrey A and Spinelli, Stephen(2007), New Venture Creation, McGrawHill, seventh edition, New Delhi
4. Wickham, Phillip A (1998); Strategic Entrepreneurship, Pitman, UK.
5. Krishnamurthi, S. Guide to Micro, Small and Medium Enterprises Policy, Rules and Regulations (3rd Ed.). Orient Publishing Company.  
[www.msme.gov.in](http://www.msme.gov.in)

## ABM - 305: Agri-Business Finance

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 305.1	Understand the financial forecasting and develop financial plans.
ABM - 305.2	Know the financing opportunities available to agribusiness in India.
ABM - 305.3	Learn the specific requirements of financial statements and harmonization of reports.
ABM - 305.4	Learn the capital expenditure and risk analysis for better decision making.

### Course Contents:

Introduction to Agribusiness Finance: Agribusiness Finance; Agribusiness producers; Flow of fund in the economy; Importance of finance to agribusiness; Domestic trends in agribusiness finance; International trends. Agribusiness loans: Legal issues, terms, interest rates; Promisory Note; Parties to loan Transactions; Security Agreement; Mortgages versus deeds of trust; other loan terminology; life cycle of loan; default and foreclosure; determinants of interest rates.

Time value of money, loan calculations and analysis; compound interest; the process of discounting; annuities; present value of an annuity; basic loan calculations; building an amortization schedule; loan balance; refinance analysis; cash budgeting.

Capital budgeting and leasing; cost of capital; capital budgeting techniques other considerations regarding capital budgeting; lease and leasing.

Financial statements; Generally accepted accounting principles and the farm financial standard council; the income statement; owner's equity; the balance sheet; accrual adjusted income statement; statement of cash flows.

Financial statement analysis; ratios analysis; common-size statement and horizontal analysis; risk in agribusiness; sources of business risk in agriculture; risk management in agriculture.

Agriculture lending industry: commercial banks and farm credit system; other agribusiness lenders; venders/ trade credit; life insurance financing.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Battles Ralph W. Robert C. Thompson, Fundamental of agribusiness finance, Wiley

## SEMESTER IV

### ABM - 401: Changing Paradigm of Agri-Business

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 401.1	Understand the different models in E-agribusiness.
ABM - 401.2	Learn the various techniques available for agricultural production.
ABM - 401.3	Know the concept of Agro-tourism.
ABM - 401.4	Apply the IT in Agri supply chain management.

#### Course Contents:

**Concept of E-agribusiness:** Need & importance of E-agribusiness, Different models in E-agribusiness, Microfinance with special reference to SHGs.

**Green house / Polyhouse techniques** Basic concept of Green house / Polyhouse, Constructing Green House / Polyhouse, Different commercially important horticultural and other plants grown in Green House / Polyhouse, Importance & future scope of the technique.

**Agro-tourism:** Concept of agro tourism, Agro-tourism as a new potential business, **Information Technology and telecommunication in marketing of agricultural commodities** :Market research-Market information service - electronic auctions (e-bay), e-Chaupals, Agri market and Domestic and Export market Intelligence Cell (DEMIC) – Market extension, role of IT in Agri. Supply Chain Management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

#### Suggested Readings:

1. “Commercial Agri-enterprises-Strategy Achievement and Future prospects”, S. N. Misra, Deep & Deep Publications, New Delhi.
2. Indian Agriculture & Agri-business management, Dr. Smita Diwse, Krishi Resource Management Network
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 Graw Hills Publication, New Delhi
5. Food biotechnology, S N Tripathy, Dominant Publishers and Distributors, New Delhi

## ABM - 402: Agri Supply Chain and Logistics Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 402.1	Learn the demand planning and forecasting in agro supply chain.
ABM - 402.2	Know the purchasing cycle, type of purchases and contract/corporate farming.
ABM - 402.3	Understand the logistics management in agribusiness.
ABM - 402.4	Apply the information technology in logistics management.

### Course Contents:

**Supply Chain-** Concept, Evolution and Significance. Role and Models of Supply Chain as Applicable to Agribusiness. Traditional v/s Modern Agri Supply Chain Management.

Demand Planning and Forecasting in Agri Supply Chain. Operations and Manufacturing Management in Agri Supply Chain.

**Procurement Management in Agri Supply Chain:** Purchasing Cycle, Type of Purchases and Contract/Corporate Farming. Performance Measurement and Controls in Agri Supply Chain Management.

**Logistics Management in Agribusiness-** Elements of Logistics as Applicable to Agribusiness. Distribution Strategies and Pool Distribution in Agribusiness. Transportation Management in Agribusiness. Warehousing, Packaging and Third-Party logistics in Agribusiness. Role of Information Technology in Logistics Management.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Altekar R V, Supply Chain Management: Concepts and Cases, Prentice Hall of India.
2. Satish C. Ailawadi, Rakesh Singh: Logistics Management, Prentice Hall of India, 1<sup>st</sup>Edition, 2005
3. Janat Shah: Supply Chain Management-Text and Cases, Pearson Education India. 20091<sup>st</sup>edition.
4. Tapan K. Panda, Sunil Sahadev: Sales and Distribution Management, Oxford University Press, 2008.
5. S.A.Chunawala: Sales and Distribution Management, Himalaya Publishing House, 2<sup>nd</sup>Edition, 2008.

## ABM- 403: Food Processing Management

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 403.1	Understand the concept of Organization of a food processing unit.
ABM - 403.2	Know the Management of Agro Processing Industry.
ABM - 403.3	Learn the Waste management in food processing.
ABM - 403.4	Learn the different research institutions and corporations involved in food processing sector.

### Course Contents:

**Managerial aspects in Food Processing Industry:** Organization of a food processing unit: Different department involved in a food processing company and importance of coordination in those departments' etc., Food processing planning, Scheduling and control, Importance of production, marketing & distribution aspects in food processing sector.

**Management of Agro Processing Industry:** Factors to be considered while establishing food processing plant including government norms & requirements, Actual processing of Agri-produce into final products, Waste management in food processing, Utilization of byproducts in agro-processing industry, Food quality management systems.

**Market study of processed food products:** Introduction to different research institutions and corporations involved in food processing sector.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. "Commercial Agri-enterprises-Strategy Achievement and Future prospects", S. N. Misra, Deep & Deep Publications, New Delhi.
2. Indian Agriculture & Agri-business management, Dr. Smita Diwse, Krishi Resource Management Network
3. Dairy Technology, By Sukumar De, Tata MC Graw Hills Publication, New Delhi
4. Food biotechnology, S N Tripathy, Dominant Publishers and Distributors, New Delhi

## ABM - 404: International Trade in Agri-Business

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

<b>Course Outcomes:</b>	After completing this course, the students will be able to:
ABM - 404.1	Know the scenario of international trade in agricultural commodities in India.
ABM - 404.2	Understand the implications of WTO provisions on Indian Agriculture-reduction commitments for India.
ABM - 404.3	Learn the Indian agricultural trade.
ABM - 404.4	Know the Competitiveness of Indian Agriculture.

### Course Contents:

International Trade – Basic concepts and importance of international trade, gains from trade, trade policies-instruments of trade policy- tariffs, subsidies, quotas, Case for protectionism and for free trade; Importance of Agriculture in development, trade and agriculture, globalization and agriculture, emerging scenario of international trade in agricultural commodities.

WTO-Agreement on agriculture -main provisions - market access, domestic support, export subsidies and other provisions, issues for further negotiations, implications of WTO provisions on Indian Agriculture-reduction commitments for India, Foreign Trade of India, trade policy, Indian agricultural trade, trends in exports and imports, changing structure and pattern of agricultural trade, export potential of various agro-commodities, export and import procedures and documentations.

Competitiveness of Indian Agriculture, measures of competitiveness, competitiveness of various crops, measures for improvement

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings:

1. Datta Samar K. and Satish Y. Deodhar (2001), Implications of WTO Agreements for Indian Agriculture, Oxford and IBH Pub Co., New Delhi
2. Chadha G. K. (2003), WTO and Indian Economy. Deep and Deep Publications
3. Hooda and Gulati (2007), WTO Negotiations on Agriculture and Developing Countries, Oxford University Press, New Delhi
4. Gulati, Ashok and Tim Kelley (1999), Trade liberalization and Indian Agriculture: Cropping Pattern Changes and Efficiency Gains in Semi-Arid Tropics, Oxford University Press in New Delhi, New York
5. Vashisht A. K. and Singh Alka (2003), WTO and New International Trade Regime- Implication for Indian Agriculture. Advance Publishing Concept.

## ABM - 405: Marketing of Agri-Inputs

Max. Marks	External	Internal	Time	Credits
100	70	30	3 Hours	4

**Note:** The examiner will set nine questions in all. Question No. 1, comprising of five short answer type questions of 4 marks each, shall be compulsory. From the remaining 8 questions of 10 marks each, a student is required to attempt five questions.

**Course Outcomes:** After completing this course, the students will be able to:

- ABM - 405.1 Understand the concept of agricultural input marketing.
- ABM - 405.2 Know about the chemical fertilizers available in India.
- ABM - 405.3 Learn the various plant protection chemicals.
- ABM - 405.4 Know about the availability of farm machineries.

### Course Contents:

**Agricultural input marketing** – meaning and importance; Management of distribution channels for agricultural input marketing; Agricultural Inputs and their types – farm and non-farm, role of cooperative, public and private sectors in agri input marketing.

**Seed-** Importance of seed input; Types of seeds- hybrid, high yielding and quality seeds; Demand and supply of seeds; Seed marketing channels, pricing, export-import of seeds; Role of NSC and State Seed Corporation.

**Chemical Fertilizers-** Production, export-import, supply of chemical fertilizers, Demand/consumption, Prices and pricing policy; subsidy on fertilizers; marketing system – marketing channels, problems in distribution; Role of IFFCO and KRIBCO in fertilizer marketing.

**Plant Protection Chemicals-** Production, export/import, consumption, marketing system – marketing channels; Electricity/Diesel Oil- marketing and distribution system; pricing of electricity for agriculture use; subsidy on electricity.

**Farm Machinery-** Production, supply, demand, Marketing and distribution channels of farm machines; Agro-industries Corporation and marketing of farm machines / implements/Equipment.

**Note:** In addition, teacher conducting the course will announce 8-10 case studies at the commencement of session for deeper understanding of the constrained optimization for managerial decision making for discussion in tutorial classes during the session.

### Suggested Readings

1. Acharya SS & Agarwal NL. 2004. *Agricultural Marketing in India*. 4th Ed. Oxford & IBH.
2. Broadway AC & Broadway Arif A. 2003. *A Text Book of Agri-Business Management*. Kalyani.
3. Singh AK & Pandey S. 2005. *Rural Marketing*. New Age.
4. Singh Sukhpal 2004. *Rural Marketing- Focus on Agricultural Inputs*. Vikas Publ. House.