

SYLLABI FOR

**MBA (FULL-TIME) & MBA (PART-TIME)
PROGRAMMES
(With effect from the Academic Year 2020-21)**

**According to Outcome Based Education
with Choice Based Credit System**

**SCHOOL OF MANAGEMENT STUDIES
COCHIN UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

CONTENTS

Sl. No.	Titles	Page No.
1	Preamble	3
2	MBA Programme Objective	3
3	Programme Educational Objective	4 - 5
4	Programme Outcomes	5 - 6
5	Programme Specific Outcomes	6 - 7
6	Course Outcomes	7 - 8
7	Mapping of Programme Outcomes and Course Outcomes	8
8	Programme Administration	9
9	Programme Structure	10 - 13
9.1	MBA (Full-Time) Programme Structure	10 - 11
9.2	MBA (Part-Time) Programme Structure	12 - 13
10	Evaluation	14
10.1	Continuous Evaluation System (CES)	14
10.2	End Semester Examination (ESE) – Pattern of Question Paper	14
11	Syllabi of MBA (Full-Time & Part-Time) Degree Programmes	15 - 239
11.1	Syllabi of Core Courses	15 - 68
11.2	Syllabi of Elective Courses	69 - 239
11.2.1	Electives in Functional Areas of Management	69
11.2.2	List of Elective Courses in Finance Area	70
11.2.3	List of Elective Courses in Marketing Area	70
11.2.4	List of Elective Courses in Human Resource Management Area	71
11.2.5	List of Elective Courses in Production and Operations Management Area	71
11.2.6	List of Elective Courses in Information Technology Area	72
11.2.7	List of Elective Courses in International Business Area	72
11.2.8	List of Elective Courses in General Management Area	73
11.2.9	Syllabi of Elective Courses in Finance Area	74 - 98
11.2.10	Syllabi of Elective Courses in Marketing Area	99 - 126
11.2.11	Syllabi of Elective Courses in Human Resource Management Area	127 - 148
11.2.12	Syllabi of Elective Courses in Production and Operations Management Area	149 - 179
11.2.13	Syllabi of Elective Courses in Information Technology Area	180 - 209
11.2.14	Syllabi of Elective Courses in International Business Area	210 - 229
11.2.15	Syllabi of Elective Courses in General Management Area	230 - 239

SCHOOL OF MANAGEMENT STUDIES COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Preamble

The Master of Business Administration (MBA) is a professional Post-graduate Degree Programme offered by the School of Management Studies, Cochin University of Science and Technology. The Programme is designed in such a way to mould future managers thoroughly conversant with the application of tools and techniques of modern management practices in order to align with the Government of India's National Skills Qualification Framework (NSQF) and requirements of Industry 4.0. The current revised curriculum takes the MBA programme to the higher level with a view to implementing the Outcome Based Education (OBE) System along with the Choice Based Credit System (CBCS) and Grading System. This newly adopted curriculum and the training imparted will help management programme aspirants to get fully trained in accordance with NSQF's National Occupational Standards (NOS) developed by Sector Skills Councils (SSC) and requirements of Industry 4.0 so as to enhance the employability for our graduates as per the industry's current human resources requirements. The revised curriculum and syllabi for two years MBA Full-time and three years MBA Part-time Programmes come into effect from the academic year 2020-21 onwards.

2. MBA Programme Objective

The objective of the MBA programme is to educate and prepare a diverse group of individuals with the right blend of knowledge, perspectives, analytical ability, decision-making and management skills needed to provide leadership to organisations competing in a world increasingly characterised by diverse workforce, rapid technological change, and a fiercely competitive global marketplace. The CUSAT MBA programme is designed to equip students for careers in management and leadership in both the private and public sectors worldwide. Students acquire a comprehensive foundation in the fundamentals of business and management theory, the global environment in which they will function, and selection and application of appropriate tools and techniques for judicious intelligent decision-making required for solving complex business and managerial problems in the rapidly changing environment.

3. Programme Educational Objectives (PEOs)

The Programme Educational Objectives (PEOs) are broad statements that describe the career and professional achievements that the programme is preparing the graduates to achieve within the first few years after graduation.

PEO1: Skill Acquisition

Students will establish themselves as effective professionals by solving real life complex managerial problems by integrating management theories and practices to perform strategic analysis with attention to team work, effective communication, critical thinking, decision-making and problem solving skills in an increasingly global, technology oriented, diverse and changing business environment. The course will also develop valuable life skills of students and transform them to a holistic personality so that they are enabled to think independently, argue critically, solve problems and communicate effectively at a level which reflects their competency.

PEO2: Entrepreneurship

Students will nurture entrepreneurial capabilities to be effective change agents. Management graduates desirous of self employment should be able to start their own business ventures or demonstrate their entrepreneurial capabilities for their employer organisation and drive the businesses through multifaceted skills.

PEO3: Innovation and Creativity

Students will be motivated to bring out the best in them and foster creativity, innovation and effective team building and promote team spirit so that they can work effectively in a team in practical field.

PEO4: Employability

Students will develop professional and innovation skills that qualify them for immediate employment and life-long learning in advanced areas of management and related fields. The course also equips the youngsters with conceptual and interpersonal skills and social purpose for managerial decision-making and its execution in real situations.

PEO5: Higher Studies, Academics and Research

Students will demonstrate their ability to adapt to a rapidly changing environment through learning and application of new skills and added competencies and become socially responsible and value driven citizens committed to sustainable development. Management graduates with academic interest and aptitude should be actively pursuing advanced studies and engaged in research, teaching-learning or consultancy assignments.

PEO6: Well informed, Ethical and Committed Professionals

Students will be provided with an educational foundation that prepares them for excellence in leadership roles to explore and develop social, legal and ethical responsibilities for a successful career in society, business and industry. Management graduates will become well informed, ethical and committed corporate citizens contributing to the management profession and the community in an effective manner.

4. Programme Outcomes (POs)

Programme outcomes are narrower statements that describe what students are expected to be able to do by the time of completion of MBA Programme.

PO1 Cross-Disciplinary Integration and Strategic Perspective: Students should be able to conceptualise, organise, and resolve complex business problems or issues by using the resources available under their discretion.

PO2 Critical Thinking and Problem Solving: Students should be able to apply the perspective of their chosen concentrated area of study to develop fully-reasoned opinions on such contemporary issues as the need for innovation, integrity, leading and managing change, globalization, and technology management.

PO3 Teamwork: Students should be able to determine the effectiveness with which goals are defined and achieved in team environments, to assess the contributions made by themselves as well as by their peers within those environments, and to identify and resolve conflicts. Students should also, able to function effectively as an individual, as a member or leader in diverse teams, and in multidisciplinary settings.

PO4 Communication and Presentation Skills: Students should be able to demonstrate the ability to listen and read attentively, and to express ideas with clarity in both oral and written communications as well as effective presentations.

PO5 Leadership Skills: Students should be able to document their participation in, and contribution to, student organisations, business or consulting projects, internship opportunities, or other MBA sanctioned initiatives.

PO6 The Manager and Society: Students should be able to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, ethical and cultural issues and the consequent social responsibilities relevant to the professional managerial practices.

PO7 Modern Tool Usage: Students should be able to create, select, and apply appropriate techniques, resources, analytical tools, modern management and ICT

tools including prediction and modelling to complex management activities with an understanding of the limitations. Apply technology to enhance organisational efficiency and create innovative business solutions in the present Industry 4.0 environment.

PO8 Environment and Sustainability: Students should be able to understand the impact of the professional management solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO9 Ethics: Students should be able to apply ethical principles and commit to professional ethics and responsibilities and norms of the management practice for making judicious managerial decisions.

PO10 Life-long Learning: Students should be able to recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the industry.

PO11 Entrepreneurial Perspective: Students should be able to identify, assess and shape entrepreneurial opportunities and to evaluate their potential for business success. Graduating students are able to synthesise the knowledge, skills, and tools acquired in the programme within a real business which they must be able to design themselves.

PO12 Global Perspective: Students should be able to demonstrate their ability to assess and evaluate the dynamic internal and external elements of the competitive global business environment.

5. Programme Specific Outcomes (PSOs)

The MBA programme specific outcomes are given below.

PSO1: Able to formulate and integrate business projects and problems through the application of multifunctional knowledge comprising of Marketing, Finance, Operations, Systems and HR.

PSO2: Able to create business processes embedded with values and social commitment. Helped to create synergies amongst the most diverse set of variables and the ability to continuously learn, improvise, adapt, energize, excel and grow.

PSO3: Able to demonstrate the effective leadership and change management skills in global perspective in a given organisational context.

PSO4: Able to acquire analytical skills both qualitative and quantitative methods for applying business analysis, interpretation and decision-making skills, critical-thinking

and diagnostic problem-solving skills to formulate and use the appropriate managerial techniques to support management data based decision-making both individually and as part of teams.

PSO5: Able to develop value based leadership and team membership skills needed for implementing and coordinating organisational activities and managing change.

PSO6: Able to use the destructive digital technologies and knowledge effectively: scanning and organising business data, synthesising and analysing them in order to abstract meaning from information, and to share knowledge.

PSO7: Able to acquire the ability to integrate business knowledge and management techniques to aid planning and control of the business processes and practices in changing global competitive environments.

PSO8: Able to develop competent management professionals with strong ethical values, capable of assuming a pivotal role in various sectors of the Indian economy and society, aligned with the national priorities.

PSO9: Able to inculcate an ability to develop proactive thinking so as to perform effectively in the dynamic socio-economic and business ecosystem by identifying the business opportunities, design and implement innovations in work space.

PSO10: Able to demonstrate a critical awareness of current issues with respect to cross culture and diversity, social responsibility, sustainability, innovation, knowledge management, etc.

PSO11: Able to excel in their chosen career paths, by learning on how to live, adapt and manage business environmental change.

PSO12: Able to synthesise the knowledge, skills, and tools acquired in the programme within a real business they must be able to design themselves.

6. Course Outcomes (COs):

Course Outcomes are a set of specific statements that describe the complex performances a student should be capable of doing as a result of learning experiences within a course. The learning outcomes at the unit level are the sub-outcomes of the course outcomes in align with the MBA Programme outcomes. If a student achieves the learning outcomes at unit level, the student is well trained to achieve the course outcomes subsequently. On successful completion of the course the student will be able to achieve the following cognitive abilities:

CO1 Remembering: This is the lowest level of mastery of the subject. At this level the student will get the ability to remember, recognise, describe and retrieve the relevant concepts, principles and theoretical knowledge of management theories and related disciplines.

CO2 Understanding: At this level the student will get an understanding of the context in which the various management theories and tools are to be used.

CO3 Applying: This is the level in which the student will be able to select and apply appropriate tools and techniques for decision making required for solving complex managerial problems.

CO4 Analysing: At this level the student should have strong analytical ability in key functional areas of management and should be able to analyse the problems and situations from different perspectives. They will be able to use data for analysing and understanding the peculiarities of the case at hand.

CO5 Evaluating: The student will be able to set parameters for evaluation (or use standards) and evaluate different alternative course of actions, designs, models, procedures, ideas, and judge which one is superior to others.

CO6 Creating: The student will develop the ability to generate new ideas for solving managerial problems, design organisations, business processes, business models and implement innovations in work space.

7. Mapping of Programme Outcomes and Course Outcomes

Programme Outcomes (POs)	Course Outcomes (COs)					
	CO1	CO2	CO3	CO4	CO5	CO6
PO1	✓		✓	✓		
PO2	✓	✓	✓	✓		
PO3	✓	✓				
PO4	✓		✓	✓		
PO5	✓	✓	✓	✓	✓	
PO6		✓		✓		✓
PO7		✓	✓	✓	✓	✓
PO8		✓	✓			✓
PO9		✓	✓	✓		✓
PO10				✓	✓	✓
PO11			✓	✓	✓	✓
PO12					✓	✓

8. Programme Administration

8.1 The School of Management Studies offers two MBA Programmes viz. MBA programme conducted during day time called MBA Full-Time and MBA programme conducted during evening time called MBA Part-Time. The duration of MBA Full-time Programme is two years with four semesters and the duration of MBA Part-time programme is three years with six semesters.

8.2 In order to complete the MBA programme, a student is required to obtain a total of 91 credits consisting of 70 credits for core courses and 21 credits for elective courses. All courses except summer project work carry 3 credits. The summer project work carries 4 credits. The credits distribution of the programme is given in the following table.

Sl. No.	Courses	CC/EC	No. of Courses	Credit Per Course	Total Credit
1	Core Courses	CC	21	3	63
2	Summer Project Work	CC	1	4	4
	Comprehensive Viva-voce	CC	1	3	3
	Total Credit for Core Courses		23		70
3	Elective Courses		7	3	21
	Total		30		91

8.3 Since the programme is a CBCS, all students in MBA Full-time programme should opt at least one elective course offered by the allied Schools/Departments in CUSAT as inter-department elective course.

8.4 In addition to the core and elective courses, students of MBA Full-time programme should attend and satisfactorily complete the Managerial Skill Development activities during the first and second semesters as a non-credit course. Students should satisfactorily complete this course, as certified by the teacher handling it. The teaching work of handling the Managerial Skill Development may be considered when calculating the workload of teachers.

8.5 Students of both MBA (Full-time) and MBA (Part-time) programmes should carry out a Summer Project Work in a company after the completion of second semester for a period of six to eight weeks. The work shall be carried out during the summer break after the second semester examination under the supervision of a guide assigned by the School. The report of the summer project must be submitted during the third semester.

9. Programme Structure

9.1. MBA (Full-time) Programme Structure

**MBA DEGREE
FULL-TIME PROGRAMME STRUCTURE
FIRST SEMESTER**

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMS2101	Management Concepts and Organisational Behaviour	CC	3	50	50	100
SMS2102	Statistics for Managers	CC	3	50	50	100
SMS2103	Managerial Economics	CC	3	50	50	100
SMS2104	Business Communication	CC	3	50	50	100
SMS2105	Financial Accounting	CC	3	50	50	100
SMS2106	Business Environment	CC	3	50	50	100
SMS2107	Indian Ethos and Business Ethics	CC	3	50	50	100
SMS2108	IT for Business and Management	CC	3	50	50	100
	Managerial Skill Development	NC	Nil			

CC – Core Course

EC- Elective Course

NC – Non Credit

CES – Continuous Evaluation System

ESE – End Semester Examination

SECOND SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMS2201	Financial Management	CC	3	50	50	100
SMS2202	Marketing Management	CC	3	50	50	100
SMS2203	Operations Management	CC	3	50	50	100
SMS2204	Human Resource Management	CC	3	50	50	100
SMS2205	Management Accounting	CC	3	50	50	100
SMS2206	Business Research Methods	CC	3	50	50	100
SMS2207	Legal Aspects of Business	CC	3	50	50	100
SMS2208	Innovation and Entrepreneurship	CC	3	50	50	100
	Managerial Skill Development	NC	Nil			

THIRD SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMS2301	Management Science	CC	3	50	50	100
SMS2302	Organisational Structure, Design and Change	CC	3	50	50	100
SMS2303	Business Analytics	CC	3	50	50	100
SMS2304	Summer Project Work*	CC	4	50	50	100
SMS2305	Elective – 1	EC	3	50	50	100
SMS2306	Elective – 2	EC	3	50	50	100
SMS2307	Elective – 3	EC	3	50	50	100
SMS2308	Elective – 4	EC	3	50	50	100

FOURTH SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMS2401	Corporate Governance and Strategic Management	CC	3	50	50	100
SMS2402	Environment Management	CC	3	50	50	100
SMS2403	Elective – 5	EC	3	50	50	100
SMS2404	Elective – 6	EC	3	50	50	100
SMS2405	Elective – 7	EC	3	50	50	100
SMS2406	Comprehensive Viva-Voce	CC	3	--	100	100

*Each student should carry out a summer project work in a company after the completion of second semester for a period of six to eight weeks. The work shall be carried out during the summer break after the second semester examination under the supervision of a guide assigned by the School. The report of the summer project must be submitted during the third semester.

*Evaluation of project work shall be made as in the other Core courses. If a candidate fails in evaluation he/she has to complete the project work and obtain pass grade along with next batch.

9.2 MBA (Part-time) Programme Structure

MBA DEGREE PART-TIME PROGRAMME STRUCTURE

FIRST SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2101	Management Concepts and Organisational Behaviour	CC	3	50	50	100
SMP2102	Statistics for Managers	CC	3	50	50	100
SMP2103	Managerial Economics	CC	3	50	50	100
SMP2104	Indian Ethos and Business Ethics	CC	3	50	50	100
SMP2105	Financial Accounting	CC	3	50	50	100

SECOND SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2201	Business Environment	CC	3	50	50	100
SMP2202	Marketing Management	CC	3	50	50	100
SMP2203	Human Resource Management	CC	3	50	50	100
SMP2204	Management Accounting	CC	3	50	50	100
SMP2205	Financial Management	CC	3	50	50	100

THIRD SEMESTER

Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2301	Business Communication	CC	3	50	50	100
SMP2302	Management Science	CC	3	50	50	100
SMP2303	Organisational Structure, Design and Change	CC	3	50	50	100
SMP2304	IT for Business and Management	CC	3	50	50	100
SMP2305	Legal Aspects of Business	CC	3	50	50	100
SMP2306	Summer Project Work*	CC	4	50	50	100

CC – Core Course

EC–Elective Course

CES – Continuous Evaluation System

ES – End Semester Examination

FOURTH SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2401	Business Research Methods	CC	3	50	50	100
SMP2402	Operations Management	CC	3	50	50	100
SMP2403	Environment Management	CC	3	50	50	100
SMP2404	Elective 1	EC	3	50	50	100
SMP2405	Elective 2	EC	3	50	50	100

FIFTH SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2501	Innovation and Entrepreneurship	CC	3	50	50	100
SMP2502	Business Analytics	CC	3	50	50	100
SMP2503	Elective 3	EC	3	50	50	100
SMP2504	Elective 4	EC	3	50	50	100

SIXTH SEMESTER

Course Code	Name of Course	CC/EC	Credit	Marks		Total Marks
				CES	ESE	
SMP2601	Corporate Governance and Strategic Management	CC	3	50	50	100
SMP2602	Elective 5	EC	3	50	50	100
SMP2603	Elective 6	EC	3	50	50	100
SMP2604	Elective 7	EC	3	50	50	100
SMP2605	Comprehensive Viva-Voce	CC	3	---	100	100

*Each student should carry out a summer project work in a company after the completion of second semester for a period of six to eight weeks. The work shall be carried out during the summer break after the second semester examination under the supervision of a guide assigned by the School. The report of the summer project must be submitted during the third semester.

*Evaluation of project work shall be made as in the other Core courses. If a candidate fails in evaluation he/she has to complete the project work and obtain pass grade along with next batch.

10. Evaluation

The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a Continuous Evaluation System (CES) and an End Semester Examination (ESE) with 50 percent weightage to each.

10.1 Continuous Evaluation System (CES):

The Continuous Evaluation System for theory courses consists of minimum of two class tests and class participation of students/assignments/seminars/quizzes etc. for which proportionate weightage shall be decided by the Department Council. The course teacher shall prepare the scheme for continuous evaluation linking each component of CES with COs before the commencement of each semester.

Satisfactory completion of the Non-Credit course will be based on at least 75 percent attendance, satisfactory submission of assignments and completion of tasks assigned by the Teacher, which will be certified by the teacher at the end of the course.

10.2 End Semester Examination (ESE) – Pattern of Question Paper

The End Semester Examination (ESE) which will of three hours duration shall cover the entire syllabus of the course. The ESE for the Core and Elective Courses shall be conducted based on the following pattern of question paper.

Sections	Cognitive Abilities to be Evaluated	Total Number of Questions	Marks	Number of questions to be Answered	Total Marks
A	Remembering & Understanding	5	2	5	10
B	Applying & Analysing	7	5	4	20
C	Evaluating & Creating	3	10	2	20
Total		15		11	50

11. SYLLABI OF MBA (FULL-TIME & PART-TIME) DEGREE PROGRAMMES

11.1 Syllabi of Course Subjects

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT I	SMS2101/ SMP2101	Management Concepts and Organisational Behaviour	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to principles of management, individual behaviour, interpersonal behaviour and current trends in OB
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in organizational behaviour and management based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse behaviour of people in organizations and their management to explore and establish relationships in the areas of people decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of organizational behaviour on people management decisions, and appraise organizational proposals using behaviour management techniques
CO6	Creating	Generate new ideas and create organisational behaviour plans and proposals for business expansion and developments.

SMS2101/SMP2101 MANAGEMENT CONCEPTS AND ORGANISATIONAL BEHAVIOUR

Course Objectives: 1. To help the students to understand the basic concepts of management, and organizational behaviour. 2. To enable them to explore the dynamics and interplay among individual, group and organisational factors. 3. To enable the students to think critically about organizational behavior problems and use suitable concepts and frameworks in making decisions on the problems.

Module 1: Concepts and Principles of Management

Concepts and Schools of Management Thoughts: Classical, behavioural, system, contingency, contemporary-Functions of Management: Planning- Organizing- Directing- Controlling- Introduction to functional areas of Management.

OB as a perspective of Management- Concept and evolution of OB- challenges and Opportunities of OB.

Module II: Individual Behaviour-1

Individual Differences- Concepts and theories in Perception, Perception and decision making Personality Concepts- Theories of Personality – Personality testing and applications in organizations- Models in Emotional Intelligence

Module III: Individual Behaviour-2

Learning concepts- Learning theories- Classical conditioning- Operant conditioning- Social learning theory - Motivation- Theories of motivation- Content and Process theories- Applications, Job satisfaction, Attitude and value.

Module IV: Interpersonal Behaviour

Understanding Groups and Teams- Process of Group Formation-Group Dynamics- Types of Teams- Team Performance- Interpersonal Communication-Conflict and conflict management, Stress and negotiation-Decision Making-Concept and theories in Leadership: Behavioral, Situational and Contingency - Power and Politics

Module V: Current Trends in Management and OB

Changing context of organizations - changing profiles of employees and consumers- Impact of Globalization, its opportunities and threats- Workforce Diversity-Technology and OB- Social responsibility and ethics.

References

1. Charles W.L, Hill and Steven McShane (2017) Principles of Management
2. Koontz, H and Weihirch, H (2010) Essentials of Management, Tata McGraw Hill, New Delhi
3. Robbins S.P, Judge T.A. and Vohra N. (2013) OrganisationalBehaviour, Pearson
4. Margie Parikh and Rajen Gupta (2010) OrganisationalBehaviour, Tata McGraw Hill Education Private Limited
5. UdaiPareek (2011) Understanding OrganisationalBehaviour, Oxford
6. Fred Luthans (2016) OrganisationalBehaviour, McGraw Hill Education, New Delhi
7. Jim Griesmer (2010) Organisational Change: Themes and Issues, Oxford,

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT I	SMS2102/ SMP2102	Statistics For Managers	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Statistics and Quantitative Techniques including Measures of central tendency, measures of Variation, Hypothesis testing and Multivariate Data Analysis
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application. They should be able to identify the right technique to be applied in a context.
CO3	Applying	Once the student has understood the right technique to be applied in a particular decision context, they should be able to apply the technique and generate results. Cases and problems sets will guide them through this process. The outcome is developing application skills in the business context.
CO4	Analysing	Impart skills to analyse the real business data to explore and establish relationships in the areas of managerial decisions. Through a field projects the students will be collecting real data and analyzing them with an appropriate statistical package. This will reinforce their application skills and help them to develop an analytical mindset to try analyzing real life data with the tools studied.
CO5	Evaluating	Evaluate the practical implications of the results found from the analysis of data. They should be able to verify the validity of assumptions (they made) they made based on the results of the analyses performed. They can re validate the conclusions through multiple analysis and techniques in the MVA domain and arrive at a most feasible and coherent conclusion.

CO6	Creating	Generate new ideas and solutions for business problems. The students based on the evaluation of real data come to statistical conclusions. Here they are able to convert statistical conclusions to business strategies.
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SMS2102/SMP2102 STATISTICS FOR MANAGERS

Objective: The objective of this course is to explain statistical concepts to students. This will help the students to understand various statistical methods used for managerial decision making. The course also intends to introduce statistical tools such as SPSS, MS Excel.

Module I

Introduction to Descriptive Statistics: Measures of central tendency, Measures of dispersion -Skewness and Kurtosis.

Module II

Probability Theory: Basic concepts, Conditional Probability, Bayes' Theorem. Probability Distributions: Random variable, Binomial, Poisson and Normal Distribution. Introduction to sampling and sampling distribution.

Module III

Introduction to Testing Hypothesis- t-test, ANOVA, chi square test. Correlation Analysis- Karl Pearson's Co-efficient of correlation, Rank Correlation, Simple regression, Regression Coefficients, Coefficient of Determination, Introduction to nonparametric tests.

Module IV

Introduction to Multivariate Data Analysis- Multiple regression, Discriminant Analysis, Factor Analysis, Cluster Analysis etc. (Concepts only. No numerical expected). Introduction to business analytics applications.

Module V

Overview of Time series Analysis and forecasting: Time series Decomposition models, Forecasting models, moving average, exponential smoothing, trend projection. – Index numbers and methods of constructing index numbers.

References

1. Richard I. Levin, David S. Rubin, Masood Husain Siddiqui, Sanjay Rastogi, , "Statistics for Management", Pearson, 2017.
2. J K Sharma "Business Statistics, 5e", Vikas Publishing, 2020
3. Naval Bajpai, "Business Statistics", Pearson Publication
4. S C Gupta, "Fundamentals of Statistics" Himalaya Publishing House

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT I	SMS2103/ SMP2103	Managerial Economics	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Basic concepts of managerial economics and the reason for existence of firms.
CO2	Understanding	the concept of managerial economics, market and firm
CO3	Applying	The demand and supply conditions and assess the position of a company
CO4	Analysing	Real-world business problems with a systematic theoretical framework
CO5	Evaluating	Effect of non-price factors on products and services of monopolistic and oligopoly firms.
CO6	Creating	Competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets.

SMS2103/SMP2103 MANAGERIAL ECONOMICS

Objectives: The objective of this course is to equip the manager with the methodology of decision making using the concepts of microeconomics. Starting out with an exposition of the theory of decision making by households and firms, the participants will be made to comprehend the working of the markets, the determination of prices and the techniques of decision making that the players in the market can adopt to ensure that sound decisions are made.

Module 1

Managerial Economics: Concept of Economy, Economics, Microeconomics, Macroeconomics. Nature and Scope of Managerial Economics, Managerial Economics and decision-making. Concept of Firm, Market, Objectives of Firm: Profit Maximization Model, Economist Theory of the Firm.

Module 1I

Utility & Demand Analysis: Utility-Meaning, Utility analysis, Measurement of utility, Law of diminishing marginal utility, Indifference curve, Consumer's equilibrium-Budget

line and Consumer surplus. Demand -Law of Demand, Elasticity of Demand. Forecasting-methods of Demand Forecasting.

Module III

Supply & Market Equilibrium-Law of Supply, Changes or Shifts in Supply. Elasticity of supply. Practical Importance, Market Equilibrium and Changes in Market Equilibrium. Production Analysis-Production Function, Cost Analysis-Economies of scale, Cost-Output Relationship in the Short Run and Long Run.

Module IV

Revenue Analysis and Pricing Policies-Relationship between Revenues and Price Elasticity of Demand, Pricing Policies, Price Determination under Perfect Competition-Pricing Under Imperfect Competition- Monopoly, Price Discrimination under Monopoly, Bilateral Monopoly, Monopolistic Competition, Oligopoly, Collusive Oligopoly and Price Leadership.

Module V

Measurement of National Income: Components of GDP-Consumption function and investment Function: marginal efficiency of capital and business expectations, Multiplier, Accelerator. Business Cycle-Theories of Business Cycles, Measures to Control Business Cycles, Business Cycles and Business Decisions, Balance of Payments.

References

1. Samuelson, W. F., & Marks, S. G. (2010). *Managerial Economics* (6th ed.). Hoboken, NJ: John Wiley & Sons.
2. Salvatore, D. (2012). *Managerial Economics: Principles and Worldwide Application*:(adapted version). OUP Publication.
3. Hirschey, M. (2016). *Managerial Economics*. Cengage Learning.
4. Samuelson, W. F., & Marks, S. G. (2008). *Managerial Economics*. John Wiley & Sons.
5. Ward, D., & Begg, D. (2016). *Economics for Business*. McGraw-Hill.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT III	SMS2104/ SMP2301	Business Communication	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to business communication, oral communication, written communication, interpersonal communication and cross-cultural communication.
CO2	Understanding	Empower the students to understand complex ideas in written and spoken communication to make them ready for application in real life scenarios.
CO3	Applying	Build application skills in business communication strategies and principles to prepare effective communication for domestic and international business situations.
CO4	Analyzing	Provide the competencies to analyze oral and written business communication to negate ethical, legal, cultural, and global issues affecting day to day business.
CO5	Evaluating	To help the student in developing the skill to assess the impact of selecting appropriate organizational formats and channels used in developing and presenting business messages.
CO6	Creating	Create innovative ways to develop and share novel business communication strategies for future business enhancement.

SMS2104/SMP2301 BUSINESS COMMUNICATION

Course objectives: Objective of this course is to make students familiar with the premises, principles and practices of different forms and types of communication in a business context and sharpen their communication skills.

Module I

Introduction: Importance of business communication – The Communication process – 7 Cs of effective communication – Communication in organizational settings - Barriers to effective communication, Ways to overcome different barriers to effective communication, Communication challenges in the VUCA world.

Module II

Oral Communication – Importance of Public Speaking, Overcoming fear of public speaking, Types of speeches, General and Specific Objectives of the speech, Structure of a Speech: Opening, body, and conclusion, Relevance of Body language, Employing Rhetoric Devices, Controlling Your Voice, Rhetoric Triangle, Using PowerPoint effectively.

Module III

Written Communication: Types of Business Writing - Instructional, Informational, Persuasive, Transactional, Principles of effective business writing, Business Letters – Relevance, types and standard components of a business letter, Business Reports - Types and structure of Business Reports, Memo – Purpose and Parts of a memo.

Module IV

Interpersonal Communication: Email Etiquettes – Anatomy of a professional email, Acceptable Email standards in Workplace, Managing Email Overload. AIDA Model of persuasive communication, listening skills – The Importance of effective listening, Barriers to Listening, Strategies for Active Listening, Listening in a Business Context.

Module V

Cross-cultural Communication – Importance of Cross Cultural Communication, Sources of Miscommunication in Cross Cultural Exchanges, Hofstede's dimensions of cultural differences, Nonverbal differences among cultures - Proxemics, Chronemics, Haptics, Oculistics, Gestures, Body postures, facial expressions, Developing cultural intelligence.

References

1. Barbara G. Shwom and Lisa Gueldenzoph Snyder : Business Communication: Polishing Your Professional Presence
2. Scott McLean : Business Communication for Success
3. Jeanne Marquardt Elmhorst, Kristen Lucas, Ronald B. Adler: Communicating at Work: Strategies for Success in Business and the Professions
4. Herta A. Murphy and others: Effective Business Communication
5. Louis E. Boone and others: Contemporary Business Communication
6. Bovee C. L., Thill J. V. & Barbara E. S: Business Communication Today
7. Raymond V. L.& John D. Petit Jr.: Business Communication – Theory and application
8. Kitty O. Locke: Business and Administrative Communication
9. Hatch Richard: Communicating in Business
10. Bowman J. P. & Bran chaw B. P: Business Communication: From process to Product.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT I	SMS2105/ SMP2105	Financial Accounting	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the accounting principles, concepts, accounting conventions, accounting standards and the concepts such as double entry book-keeping, accounting process, financial statements, and analysis and interpretation of financial statements.
CO2	Understanding	Understanding the preparation of Day Books, Ledger, Trial Balance, Financial statements and related accounting statements.
CO3	Applying	Developing marginal skills to cross check and locate errors in accounting statements and physical cash and bank balance reconciliation with the help of suitable illustrations and cases.
CO4	Analysing	Inculcating skills to examine the financial statements such as income statement and position statement to bring out meaningful information regarding the cost, revenue, assets and liabilities by establishing relationships between the above variables.
CO5	Evaluating	Develop the capacity to judge resources utilization efficiency, profitability, liquidity and solvency of business undertakings with the help of the accounting skill sets acquired.
CO6	Creating	Decomposition of financial statements to workout scenarios for comparison and better planning.

SMS2105/SMP2105 FINANCIAL ACCOUNTING

Objectives: 1. Acquaint the students in brief with accounting process and system with emphasis on understanding sound concepts and their managerial implications. 2. Familiarise them with financial statements and principles underlying them and to develop their skills in reading Annual Reports. 3. Lay a foundation for developing their skills in interpreting financial statements.

Module I: Understanding and Interpreting Financial Statements (An Overview)

Module II: Accounting Process and System

Introducing Book Keeping and Record Maintenance - Concept of double entry and fundamental principles - Journal, Ledger, Trial Balance, Subsidiary Books, Bank Reconciliation Statement - Rectification of Errors.

Module III: Significant Accounting Policies and Accounting Standards

Accounting Principles, Accounting Concepts, Accounting Conventions and Accounting Policies INDAS and IFRS (An overview)

Module IV: Final Accounts

Form and Contents of Financial Statements of Joint Stock Company and Interfaces with Companies Act - Special Features of Corporate Accounting

Module V: Analysing and Interpreting Financial Statements

Types of Financial Analysis and Tools for analysis - Practical with real industry examples

References

1. Miller-Nobles, Tracie L., Mattison, Brenda L., and Matsumura, Ella Mae (2016). Horngren's Financial and Managerial Accounting: The Financial Chapters (fifth edition). Pearson (global edition).
2. Atrill, Peter and McLaney, Eddie (2013). Financial Accounting for Decision Makers. (seventh edition). Pearson.
3. Shukla, M. C., Grewal, T. S.: Advanced Accounts, S. Chand & Company Ltd., New Delhi.
4. Bhattacharyya, Asish K. Essentials of Financial Accounting, Prentice Hall of India Private Ltd., New Delhi.
5. Jain, S. P. & Narang, K. L. Advanced Accountancy, Kalyani Publishers, New Delhi
6. Gupta, R. L., Radhaswamy M.: Advanced Accountancy, Sultan Chand & Sons, New Delhi.
7. Sarngadharan, M. and Rajitha Kumar S., Financial Analysis for Management Decisions, PHI Learning Private Ltd., New Delhi, 2011
8. Maheshwari, S. N., and Maheshwari, S. K.: Financial Accounting, Vikas Publishing House Pvt. Ltd., New Delhi

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT II	SMS2106/ SMP2201	Business Environment	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Business environment, environmental scanning, political, economic, social technological, legal, ecological environment of business.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop skills in business environment analysis based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real time data (economic/social/legal) to explore and undertake business decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of political, economic, social, technological, legal, ecological environment on business decisions taken by firms
CO6	Creating	Generate new ideas, strategies and proposals for business expansion and developments based on business environment analysis.

SMS2106/SMP2201 BUSINESS ENVIRONMENT

Objectives: The primary objective of this course is to give awareness to the students about the business environment and to enable them to analyse it to take appropriate business decisions in the context of a dynamic economy.

Module I:

Meaning, Nature, types of business environment—internal, external, micro and macro environment—Environmental Analysis- Stages, Approaches and Benefits. Environmental awareness and scanning for business planning- SWOT- PEST model- Porters' five forces model - balance scorecard

Module II:

Economic Environment: Structural changes in the economy since independence- Agriculture, Industry, Service sectors - performance of various sectors. Economic Reforms- Liberalisation, globalization & Privatisation and its Impact in the economy. Overview of the Indian financial system- Money market & Capital Market: Social Environment - Demographic trend and analysis of social structure in India - Significance of growing middle class - social & cultural factor – social change

Module III:

Political Environment: Business - government interface - public policy formulation - Implications for Business. Technological Environment: Choice of Technologies- Economic effects of technology –social consequences

Module IV:

An over view of industrial policies during the post liberalization period. Policy towards MSME --Industry– The growth and development of public sector enterprises - Trends in foreign participation in Indian business-Industrial Policy, Export - Import policy Competition Commission, -FEMA--Regulation & Licensing-IDRA - Government policy towards Foreign Collaborations – FDI& FII.

Module V:

International economic institutions and agreements— IMF, World Bank, ADB, UNCTAD, WTO. Cross national co-operation and agreements— SAARC, SAPTA, BRICS, ASEAN. Regional Economic Integration-Trade Blocs. –customs unions

References

1. Sengupta, N.K. *Government and Business in India*, Vikas Publications, New Delhi.
2. Cherunilam, Francis: *Business Environment*, Himalaya Publishing House, New Delhi.
3. Bhalla, V.K. and S. Shivaramu: *International Business Environment and Business*, Anmol, New Delhi.
4. Sivayya and Das, *Indian Industrial Economy*, S.Chand& Co Ltd, New Delhi.
5. Cherunilam, Francis: *International Business*, Prentice-Hall of India, New Delhi.
6. Dutt and Sundharam, *Indian Economy*, S.Chand& Co Ltd, New Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT I	SMS2107/ SMP2104	Indian Ethos and Business Ethics	3	CC	50	50

On successful completion of this course the students will be able to achieve the following outcomes:

Course Outcomes	Cognitive Ability	Course Outcomes
CO1	Remembering	Ability to recall the Fundamentals of Indian Ethos in relating them to Business Ethics. The students will be able to reinforce the Indian values and culture in ethical dilemmas in business. The expected outcome is to develop skills to relate Indian Ethos in making ethical decisions in the business context.
CO2	Understanding	Enable the MBA students to understand comprehensively to internalize the concepts delivered at the remembrance level to make them cognitively fit for application in real life situations. They should be able to identify the options available to take moral decisions in business situations.
CO3	Applying	Once the student has understood the options available to approach moral dilemma situations, he/she should be able to apply the options to resolve those dilemmas. Cases, games and situations will be given to guide them the process of ethical decision making.
CO4	Analysing	Imparting skills to critically analyse the ethical dilemmas in business using inputs from Indian values and culture. Also, the students will be exposed to the ethical decision making in Western Culture Vs. Indian Culture. A mini field project will be given to the students to understand how the ethical decision makings are done in real life situations, especially in an Indianised way to understand the peculiarities of ethical issues in Indian context.
CO5	Evaluating	Evaluating the usefulness of the course from the skill sets developed and practical relevance. The students must feel that Business Ethics training is a real need and not just rhetoric. A student must feel that the course made him/her to be an autonomous manager in responding to the ethical dilemmas they face in day to day business affairs. A pre and Post-training evaluation can be done. This will be the real validation of this course.

CO6	Creating	Generating new ideas and solutions for business ethics problems, mainly in Indian context. The students, based on the moral cognitive skills which they have acquired through this course, can experiment a new ethical self in them. Equipping the students to see the Business Ethics with a Corporate Strategic Dimension for the survival of the Corporate.
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SMS2107/SMP2104 INDIAN ETHOS AND BUSINESS ETHICS

Course Objective: The objective of this paper is to help the students of Business Administration to acquire a clear knowledge to analyse business situations from ethical point of view in order to make sound ethical decisions using inputs from Indian Ethos and values.

Module I: Indian Ethos and Values

Fundamentals of Indian Ethos - Values of Indian Culture and Society – Indian Heritage – Western Culture vs. Indian culture –Management in Indian Holistic Perspective – Indian Work Ethos and values – Indian system of Production and Consumption - Indian Mythologies and Values/culture – Kautilya’s Arthashastra - Importance of Yoga and Meditation for mental health and brain stilling – Ethics lessons from Bible and Quran - Relevance of Indian Ethos to Business Ethics.

Module II: Introduction to Business Ethics

Teleology, Deontology and Utilitarianism as approaches to ethics - Importance of Business Ethics – Ethical Dilemmas in Business – Ethical Universalism and Relativism in Business.

Module III: Ethical Decision-Making in Business

Factors affecting the Business Ethics - Process of Ethical Decision-making in Business – Lawrence Kohlberg Theory on Cognitive Moral Development – Whistle Blowing – Ethical Issues in Functional Areas: Marketing, HR, Production, IT/Systems and Finance – Environmental Ethics – Gender Ethics – CSR as Business Ethics – Ethics in International Business – Robotic Ethics.

Module IV: Ethics Management

Role of Organizational Culture in Ethics – Structure of Ethics Management: Ethics Programmes, Code of Conduct, Ethics Committee, Ethics Officers, and the CEO – Communicating Ethics: Communication Principles, Channels, Training Programmes, and Evaluation – Corporate Governance and Ethical Responsibility.

Module V: Recent Trends

Transparency International (TI) and other Ethical Bodies - Ethics Audit - Recent Trends and Issues in Indian Ethos and Business Ethics and Cases.

References

1. Management and Ethics Omnibus by Chakraborty, S.K. (2003), Oxford University Press.
2. Foundations of Management Work – Contributions from Indian Thought by Chakraborty S.K., (1998), Himalaya Publishing House.
3. Ethics in Management: Vedantic Perspectives by Chakraborty,S.K (1995), Oxford University Press.
4. The Marriage of East and West by Griffith, B.,(1985), Collins Publishers.
5. Ethical Choices in Business by Sekhar, R.C. (1997), Response Books - A Division of Sage Publications.
6. Ethics and the Conduct of Business by John R. Boatright (5th Ed.), Prentice Hall.
7. Business Ethics by Daniel Albuquerque (2010), Oxford University Press.
8. Business Ethics by Manuel G. Velasquez (2008), Oxford University Press.
9. Managing Business Ethics by Linda K. Trevino and Katherine A. Nelson (1995), John Wiley & Sons.
10. Business Ethics by Fernando, A.C.(2013), Pearson Education

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT I/ PT III	SMS2108/ SMP2304	IT for Business and Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recall concepts and applications of various Digital Technologies. Concepts of Information systems, Computer networks etc, Applications of IT for Business and Management. Concepts of DBMS. Various IT terminologies.
CO2	Understanding	To understand the importance of IT in providing solutions to modern business problems; To enhance personal productivity through Information technology tools; To understand the importance of information systems in managing an organization; to understand the basic theories, concepts, methods, and terminology used in information systems and in the field of IT
CO3	Applying	To help students identify processes in an organization and convert it into a system. To make the participants familiarize with the technologies and methods used for effective decision making in an organization. To help to develop a conceptual framework of information systems from implementation to control. To learn to apply Information Technology to gain competitive advantage in business. To apply computer resources for use in business and academics.
CO4	Analysing	Analyze and select applications and IT systems to create an optimal user environment. Use and apply current technical concepts and practices in the core information technologies of networking, data management, software engineering, computer security. To identify and analyze user needs and take them into account in the selection, creation, evaluation, administration and management of computer-based systems.
CO5	Evaluating	To perform non-trivial analysis of management problems via various technologies. To create awareness and interest to explore the growing potential of IT in business. To learn office applications creating professional documents and executive presentations. Effectively integrate IT-based solutions into the user environment. Develop and implement optimal solutions to complex computing problems using industry-recognized best practices and

		standards. Apply ethical decision making in the development, implementation, and management of IT systems
CO6	Creating	To create business students with the knowledge, skills, and abilities to manage information technology systems effectively for various business and Management applications.; Able to the design, development and implementation of information system; To create information systems in strategic and tactical decision making in business and Management.

SMS2108/SMP2304 IT FOR BUSINESS AND MANAGEMENT

Course Description: This course enables the student to understand the use of information technology as part of business strategy. Issues surrounding information technology such as information and communication systems and services, and enterprise-wide systems--traditional, networked, and virtual--in organizations will be explored. The growing convergence of technologies--computer video, and telecommunications--within sophisticated information networks will also be examined. Students should gain knowledge about strategic issues involving information technology management, as well as the development of specific computer skills. This course also provides a broad overview of the issues managers face in the selection, use, implementation, and management of information technology (IT). Increasingly, IT is being used as a tool to implement business strategies and gain competitive advantage, not merely to support business operations. Also gives an overview about the Disruptive Digital Technologies and recent trends in IT.

Module I : Introduction to Information Systems, Changing Environment and its impact on Business - The IT/IS and its influence on The Organisation: Structure, Managers and activities - Data, information and its attributes - The level of people and their information needs - Types of Decisions and Information – Applications of Information systems, IT for competitive advantage- Challenges of Strategic IS, Strategic roles of IS, Strategic Uses of Information Technology –IT in the value chain, Justifying IT investments, Integrating Information Systems with Business Strategy – IS planning methodologies, Strategic Information Systems Framework - Implementation framework- Critical Success Factors- Business Process - Business Systems Planning- Aspects of Information Technology adoption in Business and Management.

Module II: Building blocks of IS - Wired and Wireless Technologies- Computer networks, Network topologies - Kinds of Information Systems: Transaction Processing System (TPS) - Office Automation System (OAS) - Management Information System (MIS) - Decision Support System (DSS) - Expert System (ES) - Executive Support System (EIS or ESS) - Knowledge Based systems (KBS) System. System Analysis and Design, Development models: SDLC, Prototyping, stages in SDLC- Feasibility study, Design Tools- Issues in System Analysis and Design, Testing, Implementation and Post Implementation issues.

Module III: Digital transformation and Process- Enterprise wide systems: Concepts of Integrated Information systems, ERP, CRM, SCM, BI, E- Business & Applications-E-governance & tools and systems - Virtual Company. Concepts and Importance of Business Process Reengineering, Gap analysis, Resistant to change, Change management in IT implementations. Computer security and privacy issues -- Cryptography, Hashing, Fishing-Hacking- Ethical hacking- Malware-Firewall - User Identification, Authorization, Authentication –Biometric Authentication- Cyber security-Cyber Laws and IT Act, IPR issues- Basics of Selection and implementation of IS Projects – Critical success factors.

Module IV: Big Data Concepts and applications in business and management, Data Management- Introduction data analytics and methods, DBMS Concepts and types, Applications - –Data Mining: tools and techniques-Data Visualization and Techniques-Data Analysis using MS Excel, Excel Basics: The Fundamentals of Excel, Creating Charts and Graphics, Analyzing Data and Producing Report with Pivot Table, Excel Advanced: Worksheet Formulas. Specific Worksheet, Formatting/Printing/Functions. Extract Data and Decision Making. Data Validation and External References. Advanced Filters, AutoFilters, Names, Charts, Protection, Shared Workbooks, Track Changes, Merging Shared Workbooks.Cell references, Lookup tables, Linking disparate workbooks, Dynamic linking, updating links, data validation, Goal seek, Pivot table, Sorting, Charting and filtering Custom Views, Report Manager, Hyperlinks, Outlining. VLOOKUP and HLOOKUP, Use of Excel to solve business problems: e.g. marketing mix, capital budgeting, portfolio optimization, Investment Calculations, Depreciation calculations, Ratio Analysis, Sensitivity Analysis- Basic Statistical analysis of Data using Excel – Business Problems with Excel

Module V: Industry 4.0 and IT Technologies- Disruptive Digital Technologies –Recent Developments and Trends in Information Technology and the impact of these trends on industries and an organization's competitive environment. Concepts and Applications in Business and Management: Digital Business, Digital Society, IT enabled Disruptive Innovation and its impact on Society- Cloud computing and its applications - Deployment models (SaaS, PaaS, IaaS), Internet of Things (IoT), IIoT, Blockchains, Machine Intelligence- AI& Machine learning, Automation, Robotics and RPA, Software Robots, Virtual Reality, Augmented Reality - Future Trends in Information Technology and its impact on Business and Management.

References

1. James A O'Brien, George M Marakas and Ramesh Behl. (2014). Management Information Systems, 9th Edition, Tata McGraw Hill Education, New Delhi.
2. Michael Hammer and James Champy, (2010). Reengineering the Corporation: A Manifesto for Business Revolution, 1st Edition, HarperCollins
3. Turban, E., McLean, E. and Wetherbe, J. (2014). Information Technology for Management: Making Connections for Strategic Advantage. , 2nd Edition, John Wiley and Sons.

4. D. P. Goyal. (2016). Management Information Systems-Managerial Perspectives, 2nd Edition, Macmillan, New Delhi.
5. S. A. Kelkar. (2012). Management Information Systems-A concise Study, 2nd Edition, Prentice Hall of India.4.
6. Nirmalya Bagchi, (2013). Management Information Systems, 1st Edition, Vikas Publishing House, New Delhi
7. Jeffray L. Whitter, L.D. Bentley and V.M. Barlow, System Analysis and Design Methods' Galgotia Publications, 1991.
8. Naveen Prakash, Understanding Data Base Management, Tata Mc Graw Hill, 2005.
9. Prosenjit Sinha, Visual Basic Complete, S Chand & Co Ltd (2013)
10. Samuel Baranbarg, MS Excel Advanced: Learn excel advanced
11. Michael Alexander, Dick Kusleika, 101 Ready-to-Use Excel Formulas, Wiley India Private Limited; 1st Ed. (2014)
12. Efraim, T, Linda Volonino. Information technology for management: transforming organizations in the digital economy (2015) India: John Wiley & Sons Publications.
13. John Walkenbach Herb Tyson Michael R Groh, Faithe Wempen, Lisa A Bucki, Microsoft Office 2010 Bible, India: John Wiley & Sons Publications.
14. Ramesh, B, 2015, IT for management. New Delhi: Tata McGraw Hills Publications
15. Henry C Lucas., 2016, Information technology for management. New Delhi: Tata McGraw Hill Publications.
16. Management Science: The Art of Modelling with Spreadsheets, Powell and Baker: Wiley

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT II	SMS2201/ SMP2205	Financial Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Financial Management, Sources of Funds, Cost of Capital, Capital Structure, Leverage, Capital Budgeting, Working Capital and Dividend Policy.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in finance based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real financial data to explore and establish relationships in the areas of financial decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of cost of capital on capital structure decisions, and appraise investment proposals using capital budgeting techniques.
CO6	Creating	Generate new ideas and create financial plans and proposals for business expansion and developments.

SMS2201/SMP2205 FINANCIAL MANAGEMENT

Objective: The purpose of this course is to develop the skill of the students with the broad framework of financial decision-making in business enterprises.

Module I: Introduction to Financial Management

Meaning and scope of Financial Management; Objectives of Financial Management; Function of Finance; Risk-Return Trade-off; Agency Problems and Corporate Governance; Organisation of the Finance Functions.

Module II: Investment Decisions

Capital Budgeting Decisions: Concept of capital budgeting, Need, types and importance of capital investment decisions, Time Value of Money, Capital Budgeting Appraisal Methods – Pay-back Period, Net Present Value, Present Value Index, Internal Rate of Return, and Modified Internal Rate of Return. Investment in Working Capital (An Overview)

Module III: Sources of Finance and Cost of Capital

Financial Environment of Business: Capital and Money Market. Sources of Finance: Security financing, Internal financing, and Loan financing. Cost of Capital: Concept and Significance, Component Costs of capital - Costs of Debt, Preference Share Capital, Equity Capital, and Retained Earnings; Composite Cost of Capital.

Module IV: Capital Structure Decision

Meaning and Patterns of Capital Structure, Concept of Optimum and Appropriate Capital Structure; Factors affecting Capital Structure, Theories of Capital Structure - Net Income Approach, Net Operating Income Approach, Traditional Approach and M-M Approach; EBIT-EPS Analysis; Operating, Financial, and Composite Leverages

Module V Dividend Decision

Dividend and its forms, Dividend Policy, Relevance and Irrelevance Theories of Dividend Decision: Walter's Approach; Gordon's Approach and MM Approach.

References

1. James C. Van Horne, John M. Wachowicz Jr.: Fundamentals of Financial Management, Prentice Hall of India, New Delhi.
2. Richard A. Brealey, Stewart C. Myers, Franklin Allen, Pitabas Mohanty: Principles of Corporate Finance, Tata McGraw Hill Publishing Company Ltd. New Delhi.
3. Pandey I. M.: Financial Management, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Prasanna Chandra: Financial Management – Theory and Practice, Tata McGraw Hill Publishing Company Ltd. New Delhi.
5. Khan M. Y., Jain P. K.: Financial Management – Text and Problems, Tata McGraw Hill Publishing Company Ltd. New Delhi.
6. Lawrence D. Schall, Charles W. Haley: Introduction to Financial Management, McGraw Hill, Inc., New York.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT II	SMS2202/ SMP2202	Marketing Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Marketing Management, like Strategic marketing, segmentation, targeting, positioning, product, promotion, price and place.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to marketing decision making process.
CO3	Applying	Develop application skills in Marketing based on the understanding of the different contents delivered with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life marketing problems and opportunities encountered by marketing managers, with the help of data and facts relevant to making effective marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues and implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of product, promotion, price and place as relevant in the context of strategic marketing environment.

SMS2202/SMP2202 MARKETING MANAGEMENT

Objective: The purpose of this course is to develop an understanding of the underlying concepts, strategies and emerging trends involved in the marketing of products and services.

Module I: Introduction to Marketing

Evolution of Marketing-Nature and scope -Marketing Vs selling- core marketing concepts – Company orientation toward the market place- Consumer Vs Industrial markets- The value concept of marketing: Concept of Customer value, value delivery process- the marketing environment and environment scanning - marketing information system and marketing research.

Module II: Marketing Strategy and Plan

Marketing Planning-strategic planning-Significance of marketing strategy-Fundamentals of marketing mix- market segmentation, targeting and positioning- creating long term loyalty relationships.

Module III: Product and Price Decisions

Concept and definitions-Different levels of product-Product classification- product life cycle - new product development -branding and packaging decisions –Pricing: major factors influencing pricing-pricing methods and strategies.

Module IV: Promotion and Distribution Decisions

Promotion mix - advertising, sales promotion, publicity, personal selling and direct marketing; Channel management -Types of Channel, selection, co-operation and conflict management - vertical, horizontal and multi-channel systems.

Module V: Emerging Trends in Marketing

Industrial Revolution 4.0 and its impact on marketing - Consumerism- Green marketing - Digital Marketing - content marketing - mobile marketing -**disruptive marketing, etc.**– Use of Social Media in Marketing.

(The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course.)

References

1. Philip Kotler and Kevin Lane Keller; *Marketing Management*; Pearson, 2015
2. Kotler, Philip and Armstrong G., *Principles of Marketing*, Prentice Hall of India, New Delhi, 2014
3. Ramaswamy V S and Namakumari, *Marketing Management*, Sage, New Delhi, 2018
4. Rajan Saxena; *Marketing Management*; the McGraw-Hill, New Delhi, 2009.
5. Neelamegham, S., *Marketing in India: Cases and Readings*, Vikas, New Delhi, 2010.
6. William J. Stanton, Michael J. Etzel, Bruce J. Walke: *Fundamentals of Marketing*, McGraw-Hill, 1991

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT IV	SMS2203/ SMP2402	Operations Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Production and Operations and its importance in an industrial organization. Also to recall the basic concepts and terms related to Production and Operations, Inventory, Customer service, Optimization
CO2	Understanding	The objective of this course is to provide insights into the management of strategic and functional issues in the operational environment of any organization. The course will also familiarize the students with various tools and techniques used by operations managers for operational, tactical and strategic decision making. Also to understand the operational decision areas for managing manufacturing and service organizations. Able to describe the concept of operations management and productivity.
CO3	Applying	Gaining knowledge about managing production processes. To equip the students with operations management concepts, strategies and tools for effective utilization of resources and meeting customer expectations. Apply the decision models to various real time problems. Describe MRP & CRP concepts, inventory types and its objectives and calculate EOQ using various models. Develop the optimum schedule for allocation of machines and jobs. To identify the bottlenecks and apply various methods to eliminate.
CO4	Analysing	Analyze and evaluate various facility alternatives and their capacity decisions, develop a balanced line of production & scheduling and sequencing techniques in operation environments. Solve and analyze problems using different OM tools and techniques
CO5	Evaluating	Develop aggregate capacity plans and MPS in operation environments. Plan and implement suitable materials handling principles and practices in the operations. Evaluate and rank capacity locations, plan and schedule production by solving the problems.
CO6	Creating	Management skills needed for the effective operations

		<p>management; Plan and implement suitable quality control measures. How to run operations effectively. Better understanding of modern production techniques. Analyze OM with creativity and innovation and to initiative especially in new situations of professional practice for Industry 4.0 environment; and Recommend or make decisions concerning OM Strategies, designs and operations with high level personal autonomy and accountability.</p>
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SMS2203/SMP2402 OPERATIONS MANAGEMENT

Course Description:

This course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-rendering organization. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization.

Objectives:

- To develop an understanding of and an appreciation for the production and operations management function in any organization.
- To understand the operational decision areas for managing manufacturing and service organizations
- To understand the importance of productivity and competitiveness to both organizations and nations
- To equip the students with operations management concepts, strategies and tools for effective utilization of resources and meeting customer expectations.
- To help students understand the planning, design and control decisions in the operation function, both in manufacturing and services.
- To understand the various production and operations design decisions and how they relate to the overall strategies of organizations.
- To understand the importance of product and service design decisions and its impact other design decisions and operations.
- To understand the impact of Technology in production and operations activities
- Obtain an understanding of quality management practice in organizations and how total quality management and six-sigma facilitate organizational effectiveness.
- To understand the relationship of the various planning practices of capacity planning, aggregate planning, project planning and scheduling.
- To understand the roles of inventories and basics of managing inventories in various demand settings.
- To understand contemporary operations and manufacturing organizational approaches and the supply-chain management activities and the renewed importance of this aspect of organizational strategy.

Module I

Introduction: production and operation management as function, nature and scope, decision areas, Production-systems concept, transformation process, difference between products and services, make or buy Decisions - Manufacturing in India – issues and challenges - Operations strategy – Strategic, Tactical and Operations decisions in Operations Management. 5P's and 9M's of OM.-Types of Manufacturing Systems, Concepts and Applications of Computer Integrated Manufacturing, Flexible Manufacturing Systems, Group Technology and Cellular Manufacturing, Quick Response manufacturing, Concurrent Engineering, FMS. Concepts of Productivity, Efficiency, Effectiveness, Throughput, OEE - Variables affecting productivity and throughput improvements, Bottlenecks and its identification - starving and blocking in Production and assembly lines- synchronization in production and assembly lines.

Module II

Process and Capacity Analysis – planning premises, Capacity planning framework – definitions, measures , issues , time frame-Design of Manufacturing Process- process types, operations systems. Process-Product matrix. Design of Service systems. Facility Location - factors , competitiveness. Facility Layouts, Layout Decisions- types –design; Hybrid layout, Line Balancing & Sequencing –Capacity Planning- Contributions of Japanese Manufacturing - Kanban, Kaizen, Poka Yoke, JIT, 5S, TPS, , Lean Manufacturing- FMS, Lean & agile Manufacturing - Pull and Push systems, QRM, Elements of JIT manufacturing- Role of Technology in manufacturing and Services

Module III

Concepts of work and motion Study, Implications on Productivity -Total Quality Management- elements, tools for TQM, Cost of Quality, ISO Certifications - Quality Standards-Statistical Process Control(SPC), control charts, Quality circles, Concepts of acceptance sampling - OC curve, Six sigma quality control-DMAIC methodology, Process capability, Maintenance management – measures, alternatives. Basics of Maintenance Management – Maintenance Decisions, Total Productive Maintenance (TPM) – overview. Operations Forecasting: Forecasting methods.-Quantitative and Qualitative approaches- Bench Marking- Industrial Safety and Security, Work Environment & Ergonomics.

Module IV

Inventory and materials Management-Inventory planning and control for independent demand items- inventory control systems, Classifications, EOQ, inventory Models-selective control of inventory, Material handling equipments, Managing Vendors; Vendor, Identification, Analysis, Rating and Selection – Procedure and Criteria, VMI-World class manufacturing practices- Supply chain Management- Concept of Supply chain, Stages and flows in Supply chain, Terminology in Supply chain management – Supply chain disruption- Bull Whip effect, components, measures, and design issues. Sourcing and Supply Management - strategic sourcing, procurement process, Global Sourcing- Concept of outsourcing, examples -mass customisation,

Module V

Resource planning – Material requirement planning (MRPI), MRPII, Aggregate production planning, CRP, Bill of Materials, Balanced Scorecard, Master Production Schedule(MPS), Scheduling of operations- flow shop, job shop, scheduling rules, theory of constraints- synchronous manufacturing, The Drum – Buffer-Rope (DBR) methodology. Concept of ERP, International Scenario and Indian Scenario. Business Process, *Simulation and Modelling: Concepts and Importance of Business Process Modelling- Industry 4. 0- Operations 4.0/Ops 4.0- Disruptive Technologies and its impact in Production and Operations area –Robotics, AI, Machine learning, Autonomous Mobile Robots, IoT and IIoT, Smart Manufacturing, Additive Manufacturing/3D Printing, Smart factory, Smart Products, Automation, RPA, Augmented and Virtual Reality- Current topics in Production and Operations Areas-, Case Studies*

References

1. Operations Management Theory and Practice, Third edition B Mahadevan. Pearson (Text Book)
2. Adam, Everette E and Ronald J Ebert. Production and Operations Management: Concepts, Models, and Behavior. PHI, 2010.
3. Aswathappa, K and Sridhara Bhat. Production and Operations Management. Himalaya Publishing House, 2014.
4. Bozarth, Cecil. Introduction to Operations and Supply Chain Management (3/e).Pearson, 2015.
5. BuffaSarin, Wiley, Modern Production and Operations Management, India Edition
6. Chase, Richard B. Operations Management for Competitive Advantage. Tata McGraw Hill, 2014.
7. Chunawala, S. A. Basics of Production and Operations Management. Himalaya Publishing House, 2011.
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9. Finch, Byron J. Operations Now: Supply Chain Profitability and Performance. McGraw Hill, 2017.
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12. Hill, Terry. Operations Management. Palgrave Macmillan, 2016.
13. Jay Heizer & Barry Render .Operations Management.: Pearson Education Publication New Delhi
14. Joseph G Monks – Operations Management (Theory and Problems) –McGraw-Hill Intl.
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16. Kanishka Bedi, Production and Operations Management, Oxford University Press.
17. Krajweski, Ritzman, Malhotra and Srivastava, Operations Management, Process and Value chains, Pearson Education.
18. Lee J. Krajewski et al, Operations Management, Process and Supply chains. 11th Edition Pearson,India Education Services Ltd. India
19. Operations management, Heizer,Render, Munzon and Sachhan , Pearson.
20. Pannerselvam R, Production and Operations Management, Prentice Hall India, 2010.

21. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Nicholas J. Aquilano, Operations and Supply Management, Tata McGraw Hill.
22. Russel& Taylor, Wiley, Management, Quality and Competitiveness in a Global Environment, Fifth Edition, India Edition
23. Russell, Robert S and Bernard W Taylor. Operations Management: Along the Supply Chain (6/e). Wiley India, 2012.
24. Stevenson, William J. Operations Management. McGraw Hill, 2013.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT II	SMS2204/ SMP2203	Human Resource Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Human Resource planning, strategic HRM, recruitment, training and development, performance management, compensation and industrial relations.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in HRM based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse human resource practices to explore and establish relationships in the areas of human resource decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of human resource management practices on business performance and appraise existing HR practices
CO6	Creating	Generate new ideas and create human resource plans and proposals for overall business expansion and developments.

SMS2204/SMP2203 HUMAN RESOURCE MANAGEMENT

Objectives: 1. To introduce the basic concepts, functions and processes of human resource management, 2. To provides insights on how to develop strategies, initiatives and programs to sustain competitive HR advantage in organizations. 3. Addresses the concept of human capital as a critical role in a firm's survival in the knowledge economy.

Module I: Concept of HRM

Objectives, Nature and Scope of HRM- Difference between HRM and HRD- Human Resource Management in India and present day scenario. Strategic HRM, skills and competencies of HR professionals.

Module II: Human Resource Planning and Development

Human Resource planning- Forecasting- Job Analysis- Recruitment- Selection- Induction and Socialization
Training and Development- Training Need Analysis- Types of Training- Training Evaluation- Employee Development- Mentoring and Coaching

Module III: Performance and Rewards Management

Performance Appraisal and Management- Challenges in Appraisal- Changing trends in Performance Management-Succession Planning- Employee counselling
Theory of Wages- Salary and Wage Administration-Job Evaluation- Executive Compensation- Employee Benefits and Incentives

Module IV: Employee Relations and Welfare

Industrial Relations-Trade Unions, Collective Bargaining and Workers' Participation in Management- Grievance Handling- Sexual Harassment at the workplace.
Stress Management- Worklife Balance- Employee safety

Module V: Global HRM and Contemporary Trends in HRM

IHRM-Cross Cultural HRM-Cultural Intelligence- HRIS- Automation at work place- Knowledge Management- Organizational Change- Social HR- Global work Ethics

References

1. Dessler, G. and Varkey, B. (2013). *Human Resource Management*. Pearson.
2. Decenzo, D. A. and Robbins, S. P. (2013). *Human Resource Management*. John Wiley and Sons.
3. Armstrong, M (2010). *Handbook of Human Resource Management*. 11th edition. Kogan Page.
4. Rao, V. S. P. (2013). *Human Resource Management: Text and Cases*. Excel Books
5. Dessler, G. and Varkkey, B. (2013). *Human Resource Management*. Pearson.
6. Jyoti, P. &Venkatesh, D.N. (2013). *Human resource management*. India: Oxford University Press.
7. Snell, S. Bohlander ,G. &Vohra,V. (2012). *Human Resource Management: A South Asian Perspective*. India: Cengage Learning.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT II	SMS2205/ SMP2204	Management Accounting	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the basic concepts and terms related to cost and management accounting process, cost control techniques, and performance evaluation measures.
CO2	Understanding	Understand the context and purpose of management accounting and appreciate the statements of changes in financial position by recognising their strengths and weaknesses.
CO3	Applying	Develop application skills in finance control based on the understanding of the different contents delivered with examples and cases.
CO4	Analysing	Analyze the real business scenarios with established management accounting principles and cost control techniques.
CO5	Evaluating	Explain and critically evaluate various principles and techniques of management accounting in finance and cost control
CO6	Creating	Develop new ideas and alternative choices for future managerial decisions relate to accounting and finance in a fast changing business environment.

SMS 2205/SMP2204 MANAGEMENT ACCOUNTING

Objective: The course aims at developing knowledge and skills for students in the application of management accounting processes and techniques to information for planning, decision-making, performance evaluation and control.

Module I: Introduction to Management Accounting

Meaning, Nature, Scope, and Importance of Management Accounting – Limitations of Financial Accounting - Comparison of Financial Accounting, Cost Accounting and Management Accounting – Classification of Cost – Elements of Cost – Cost Ascertainment and Cost Control – Cost Sheet

Module II: Marginal Costing and Break Even Analysis

Meaning and Concept of Marginal Costing - Features of Marginal Costing - Absorption Costing vs Marginal Costing - Cost Volume Profit (CVP) Analysis - Contribution and Profit Volume ratio or MCSR - Break Even Point, Target profit and Margin of Safety- Break Even Chart and Angle of Incidence - Applications of Marginal costing - Limitations of Marginal costing.

Module III: Standard Costing and Budgetary Control

Meaning and Importance of Standard Costing- Types of Standards - Establishment of Standards – Variance Analysis – Material, Labor and Overhead Variances (Theory only). Budget and Budgetary Control – Meaning of budget and budgeting – Functions of Budgeting – Fixed vs Flexible Budgeting – Performance Budgeting –Functional and Master Budgets - Cash Budget – Budget Control Ratios.

Module IV: Statement of Changes in Financial Position

Fund Flow Analysis - Meaning and Concept of Flow of Funds – Schedule of Changes in Working Capital – Funds from Operations - Fund Flow Statement –Cash Flow Analysis - Cash Flow Statement and Uses– Preparation of Cash Flow Statement – Understanding Cash Flow Statement (AS 3- Revised Method).

Module V

Strategic Performance Management

Bench Marking – Target Costing – Activity Based Costing – Life Cycle Costing – Performance Evaluation –Key Performance Indicators (KPI) - Financial Performance Indicators (FPIs) and Non-financial Performance Indicators (NFPIs) for Profitability – Return on Investment (ROI) and Du Pont Analysis- Value Added Measures – GVA, NVA, EVA and MVA – Balanced Score Card (BSC).

References

1. AlnoorBhimani, Srikant M. Datar, Charles T. Horngren&Madhav V. Rajan., Management and Cost Accounting, Pearson Education
2. Arora, M.N. Cost Accounting – Principles and Practice, Vikas Publishing House, New Delhi
3. Charles T Horngren., George Foster & Srikant M. Datar., Cost Accounting – A Managerial Emphasis, Pearson Education
4. Jain S. P. &Narang K. L. Cost Accounting: Principles and Practice- Kalyani Publishers, New Delhi.

5. Jan Williams, Susan F. Haka, Joseph Carcello & Mark S. Bettner, Financial and Managerial Accounting – The basis for business Decisions, Tata McGraw Hill, New Delhi
6. Hingorani N. L. & Ramanathan A. R., Management Accounting, Vikas Publishing House Pvt. Ltd., New Delhi.
7. Khan M. Y. & Jain P. K., Management Accounting: Text, Problems and Cases, Tata McGraw Hill, New Delhi
8. Maheshwari S. N. Sharad K Maheshwari & Sunil K Maheshwary, A text book of Accounting for Management. Vikas Publishing House, New Delhi.
9. Ravi M Kishore., Cost and Management Accounting, Taxmann, New Delhi
10. Sarngadharan M. & Rajitha Kumar S., Financial Analysis for Management Decisions, PHI Learning, New Delhi
11. Singhvi Bodhanwala, Management Accounting -Text and cases, PHI Learning, New Delhi
12. Shukla, M.C., Grewal, T.S & Gupta, M.P. Cost Accounting, Text and Problems, S. Chand & Co. Ltd., New Delhi

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT IV	SMS2206/ SMP2401	Business Research Methods	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Enumerate and define various concepts & terms associated with scientific business research.
CO2	Understanding	The various types of measurement scales & attitude scaling techniques and their application in the context of business research.
CO3	Applying	Design a variety of data collection instruments for contemporary business research issues and apply the principles of sampling and sample size determination to contemporary business research problems
CO4	Analysing	Analyse and graphically present quantitative data and derive actionable inferences from the same from a decision making perspective.
CO5	Evaluating	Construct different types of testable hypotheses and interpret the statistical test outcomes.
CO6	Creating	Formulate alternative research designs for a real-life business research problem and discuss the pros and cons of each design and research proposal.

SMS2206/SMP2401 BUSINESS RESEARCH METHODS

Course Objectives: 1.To read and understand a variety of empirical research papers using different techniques, so as to develop awareness of possible solutions to problems that the learner may encounter as independent researchers in the future. 2. To develop measurement tools for attitudinal/ behavioral or social/ economic /business / economic phenomena relevant to the research problem. 3. To familiarize the learners with concepts and techniques of sampling and go about with sampling for a research problem. 4. To design research data collection tools and using the same for data collection and to make the data thus collected properly presented fit for analysis.

Module I

Foundations of Research Methodology, Introduction to research, What is Research, Objectives & motivations for research, Types of Research, Introduction to Qualitative Research, Introduction to Quantitative Research Conceptualization, Business Problem, Problem Formulation

Module II

Research Process & Research Design, Introduction to Research Process, Steps in Research Process, Introduction to Research Design, Types of Research Design: Exploratory, Descriptive and Causal, Research, Nature of good design.

Module III

Sampling Technique, Sampling, Population, Sampling Frame, Sample, Bias, and Statistical Terms in Sampling: statistic, parameter, Sampling Distribution, Sampling & non-sampling errors, Probability & Non-Probability Sampling, Sample Size Determination.

Module IV

Analysis & Report Writing, Data Preparation, Data aggregation, Data accuracy, Data structure, Data transformation, Descriptive Statistics, Univariate analysis, Correlation/Regression, Inferential Statistics, Hypothesis Testing Process, Large sample test, Small sample, Parametric and Non Parametric Test.

Module V

Data Presentation: Business Research Report- Types of Research Reports- Components of Research Reports- Written Presentation- Pre-writing Concerns-Writing the Draft-Presentation of the Research-Report Oral Presentations.

References

1. Business Research Methods,4e (Ie), Alan Bryman, Oxford University Press. 2018
2. Research Methods for Business Students, Mark N.K. Saunders, Lewis, Thornhill, Pearson, 2015
3. The Practice of Social Research, Earl R Babbie, 13th edition, OUP, 2017

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT III	SMS2207/ SMP2305	Legal Aspects of Business	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to laws that have a bearing on business including Contract Act, Sale of Goods Act, Companies Act, LLP Act, Negotiable Instruments Act, IT Act, Consumer Protection Act, Labour laws and other relevant acts
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in business laws based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse case laws to explore and establish awareness in the areas of legal aspects while doing business
CO5	Evaluating	Make the students capable to evaluate the implications of law while doing business especially those governing contracts, negotiable instruments, sale of goods, companies act, LLPs and other laws that have a bearing on businesses
CO6	Creating	Generate hypothetical situations that businesses might face with a view to initiate discussions and understanding to resolve with the extant law.

SMS2207/SMP2305 LEGAL ASPECTS OF BUSINESS

Objectives: The course is designed to assist the students in understanding basic laws affecting the operations of business and industry in India.

Module I

The Law of Contracts : Definition of contract Essential elements of a valid contract - Offer and acceptance - Free consent, Competency of parties, Lawful consideration,

Legality of object - Void, void able -unenforceable and illegal contracts –Provisions regarding performance and discharge of contracts- Remedies for breach of contracts.

Module II

Sale of Goods Act : Definition of a sale and a contract of sale -Difference between (1) sale and agreement to sell (2) sale and a contract form (3) sale and bailment (4) sale and mortgage of goods (5) sale and time purchase - conditions and warranties -Passing of property of goods - Rights of an unpaid seller.

Module III

Limited Liability Partnership Act 2008: Characteristic features-Definition of LLP, Difference between LLP and partnership of 1932, Comparison between LLP and Company

Company Law : Evolution of company form of organization- Companies Separate legal entity -Kind of companies Comparison of private and public companies -Formation of companies -general idea about Memorandum and Articles of Association, Prospectus, Statement in lieu of prospectus - General idea of management of companies - Management and meetings-Winding up of companies.

Module IV

Negotiable Instruments Act:Negotiable instruments in general,Cheques - bills of exchange and promissory notes, Definition and Characteristics.

Module V

Consumer Protection Act 1986, GST-An overview, IT Act 2000, Overview of Labour laws and other laws relevant to business

References

1. Business Law including Company Law, Gulshan S.S and Kapoor G.K: New Age International Pvt Ltd.
2. Elements of Mercantile Law:N.D.Kapoor: S.Chand Publishers
3. Legal Aspects of Business: R.S.N Pillai and Bhagavathi, S. Chand Publishers
4. Sale of goods Act: Pollock &Mulla, LexisNexis
5. A manual of Mercantile Law: M. C Shukla, S. Chand Publishers

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT II/ PT V	SMS2208/ SMP2501	Innovation and Entrepreneurship	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Innovation and entrepreneurship, Entrepreneur, characteristics, traits, theories, concept of innovation, entrepreneurship environment, sources of ideas, starting a business, sources of funds, government support for entrepreneurship
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in entrepreneurship based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real time data to explore and establish relationships in the areas of entrepreneurship decisions.
CO5	Evaluating	Make the students capable to evaluate various business ideas and select the most appropriate one on the basis of opportunity identification, opportunity evaluation and feasibility studies
CO6	Creating	Generate new business ideas and create business plans and proposals for starting business or business expansion/diversification.

SMS2208/SMP2501 INNOVATION AND ENTREPRENEURSHIP

Objective: The objective of this course is to expose the students to the innovations and developments in the field of entrepreneurship in India. Student will also be familiarised with the process of developing an enterprise.

Module I

Entrepreneurship and its role in economic development. Entrepreneurial climate in India; Ease of doing business, Competitiveness, Government support for entrepreneurship, Startup India Programme, Standup India, Udyamimitra, PMMY, Business Incubation and other schemes.

Module II

Entrepreneurship Definition; Entrepreneurial traits, types and significance; Entrepreneurial characteristics, Qualities and functions of entrepreneurs. Entrepreneurial Behaviours and entrepreneurial motivation. Entrepreneurship Theories-Achievement and management success, Innovation and entrepreneur. Entrepreneurship types-Social entrepreneurship and Technology entrepreneurship-Family business-Startups.

Module III

Innovation and entrepreneurship- types of innovation-creativity-challenges of innovation management-steps in innovation management-technology and innovation-new business models

Module IV

Search for business idea, sources of Ideas, design thinking, feasibility study, idea processing, input requirements. Business Plans, Sources of Finance- venture capital, angel investment, crowd funding. Mechanics of setting of new enterprises – forms of business organisation. Business plan –elements-technical-marketing-financial -Practical exercises on preparation of Business plans

Module V:

Protection of Intellectual Property Rights, Patent, Trademark and copyrights. Managerial problems of new enterprises; production purchasing, financing labour and marketing problems.

MSME Policy; Govt. Policy towards SSI's entrepreneurial input; technical assistance, marketing assistance, sickness of units and remedial assistance, Training of Target groups.

References

1. Clifton, Davis S and Fyvie, David E. *Project Feasibility Analysis*, John Wiley, New York, 1977
2. Drucker, Peter, *Innovation and Entrepreneurship*, Heinemann, London, 1985
3. McClelland, D C and Winter, W G., *Motivating Economic Achievement*, Free Press, New York, 1969
4. Pareek, Udai and Venkateswara Rao T., *Developing Entrepreneurship – A Handbook on Learning Systems*, Learning Systems, Delhi, 1978
5. Kaplan, J.M and Warren A.C., *Patterns of Entrepreneurship Management*, John Wiley & Sons Inc, 2013
6. Charantimath Poornima M, *Entrepreneurship Development and Small Business Enterprises*, Pearson, 2018

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT III/ PT III	SMS2301/ SMP2302	Management Science	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Concepts of Modelling and Optimization and its applications in Business and Management. To recall the quantitative models used in business decisions. How to translate business situation into quantitative models for optimal decision making
CO2	Understanding	The Objectives of this course is to develop an understanding of basic management science techniques and their role in managerial decision-making. To provide a conceptual understanding of the role of operations research in the decision making process; To create a scientific approach to formulation and problem solving under competitive environment; To familiarize the participants with the scope and applications of Management Science tools in Managerial decision making; To expose the students use of various Scientific tools and Models in OR for Business analysis.
CO3	Applying	To develop mathematical models for a real life situation and problems in Business and Management; Conducting what if analysis and Scenario analysis to find the activities to optimize cost and time
CO4	Analysing	To apply various Management Science techniques for Resource, time and cost Optimization; To apply various optimization Techniques in Business and Management Applications; To develop optimum schedules for completing various projects
CO5	Evaluating	Know principles of construction of mathematical models of conflicting situations and mathematical analysis methods of operations research; Be able to choose rational options in practical decision-making problems using standard.
CO6	Creating	Have skills in analysis of operations research objectives, mathematical methods and computer systems. Able to develop mathematical model for business and Management applications. The course aims at building capabilities in the students for analyzing different

		situations in the industrial/ business scenario involving limited resources and finding the optimal solution within constraints.
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SMS2301/SMP2302 MANAGEMENT SCIENCE

Course Objectives: 1. To develop an understanding of basic management science techniques and their role in managerial decision-making. 2. To help the students to translate business situation into quantitative models for optimal decision making

Module I

Decisions – Business and Management Decisions - Optimum Decisions - Decision Making Process- Types of Decisions – Concept of Modeling and Optimization – Modeling Techniques – Classifications and Types of Models –Applications - Introduction to Operations Research, Evolution and Scope, Nature, Significance and Limitations - Methodology of OR - OR models - Applications of OR.

Module II

Programming techniques – Linear programming and applications – General Linear Programming Problems- Solution methods: Graphical methods, Simplex methods - Slack and Artificial Variables- Basic and non- Basic variables - Maximization problems – Minimization problems - Big-M Method – Standard and Canonical Forms of LPP – Special cases in LPP - Concepts of Duality – Shadow price- Sensitivity analysis –Integer Programming(theory only)

Module III

Special Linear Programming Problems- Basic feasible and Optimal Solutions-Transportation problem – Transportation algorithms – North West Corner Method (NWCM) – Least Cost Method (LCM) – Vogel’s Approximation Method (VAM) – MODI method for Optimal Solution – Unbalanced Transportation Problems, Maximization Transportation Problems - Degeneracy in transportation problem - Assignment problem – Assignment algorithms - Hungarian method -Unbalanced & Prohibited assignments- - Maximization Problem-Travelling salesman problem - Transshipment Problems.

Module IV

Decision Theory- Decisions under Certainty, Uncertainty, Risk and Conflict - Payoff matrix-Hierarchical Decisions - Decision Tree - Game theory – Two person zero sum game –payoff Matrix - Minimax and Maximin Criteria- Saddle point- Optimum Strategy- Pure and Mixed Strategies- Theory of Dominance – Queuing theory –Queuing Process- Models and Techniques- single server models-Sequencing- Assumptions and Different types - Simulation Techniques – Monte Carlo Technique - Markov Chain model.

Module V

Network modeling and Analysis – Network Construction- Deterministic and Probabilistic Models- CPM and PERT - Time estimation, Critical Path, Basic Concepts of Crashing, Resource leveling, Resource Smoothing - Industry 4.0 and MS/OR Techniques - Importance and applications - Familiarization with Project Management Software Packages - Solving MS problems with Excel Solver.

References

1. Hamdy A Taha, An Introduction to Operations Research, Prentice Hall, ,
2. Ronald L. Rardin, Optimization in Operations Research, Pearson Education, India
3. J.K. Sharma, Operations Research, Macmillan India Ltd.
4. G. Srinivasan, Operationa Research- Principles and Apllications, PHI Learning
5. Gould F J etc. Introduction to management Science Englewood cliffs, New Jersey, Prentice hall Inc.,
6. Mathur, K and Solow, D, Management Science Englewood Cliffs , New jersey Prentice hall Inc.,
7. Narag A S Linear Programming and Decision Making New Delhi, Sultan Chand,
8. Sharma, J.K. Operations Research: Theory and Applications, New Delhi Macmillan India Ltd.,
9. Theirout, R J and Klekamp, R C Decision Making Through Operations Research, New York, John Wiley.
10. N. D Vohra, Quantitative Techniques, Tata McGrew hill

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT III/ PT III	SMS2302/ SMP2303	Organisational Structure, Design and Change	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to organisational, structure, strategy, culture and change.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in organisational design and change based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the organizational design and organizational development to explore and establish relationships in the areas of organizational management decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of structure, strategy and culture in organizational design decisions, and appraise organizational change plans using organizational development techniques.
CO6	Creating	Generate new ideas and create organizational designs and OD interventions for business expansion and developments.

SMS2302/SMP2303 ORGANISATIONAL STRUCTURE, DESIGN AND CHANGE

Objective: 1.To enable students to develop knowledge of various organization theories which enable managers to understand, predict, and influence organizational structure and

design and their role in organizational effectiveness. 2. To develop an understanding of the dynamics of change in organizations.

Module 1: Organisations and Structure

Organizational stakeholders- Systems theory- Organizational Effectiveness- Types of Structure- Functional- Divisional- Matrix- Mintzberg typology of structures- Contemporary structures (Holacracy, Network, Hybrid)-Organigraphs

Module 2: Strategy and Environment

Concepts of strategy- Strategy frameworks-Organizational Redesigning-Blue ocean strategy - General and Specific environment- Resource dependency theory- Transaction cost theory- Organizational life cycle- Population ecology model- Institutional theory- Greiner's life cycle theory- Organizational decline and death

Module 3: Organisational Culture

Organizational culture-climate- values- Hofstede's cultural dimensions- Managing cultural diversity- Learning Organization- - Knowledge Management- Nonaka Model

Module 4: Conflict, Power and Politics in Organisations

Organizational conflict- conflict resolution strategies- Organizational power- sources of power- Organizational politics- Cost and benefits of politics

Module 5: Organisational Change

Organizational change and development- Types of change- Process of change- Models of change management- OD interventions

References

1. Jones, G. R. (2013). *Organizational theory, design, and change*. Upper Saddle River, NJ: Pearson.
2. Daft, R. L. (2015). *Organization theory and design*. Cengage learning.
3. Mintzberg, H., & Van der Heyden, L. (1999). Organigraphs: Drawing how companies really work. *Harvard business review*, 77, 87-95.
4. Mintzberg, H. (1993). *Structure in fives: Designing effective organizations*. Prentice-Hall, Inc.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT III/ PT V	SMS2303/ SMP2502	Business Analytics	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recall descriptive statistics, various methods, analytical methods, various distributions, regression and methods, correlation and techniques , forecasting etc
CO2	Understanding	Enable students to recognise, understand and apply the language, theory and models of the field of business analytics; foster an ability to critically analyse, synthesise and solve complex unstructured business and management problems; encourage an aptitude for business improvement, innovation and entrepreneurial action.
CO3	Applying	Identify and describe complex business problems in terms of analytical models. Apply appropriate analytical methods to find solutions to business problems that achieve stated objectives. <ul style="list-style-type: none"> • Translate results of business analytic projects into effective courses of action. Demonstrate ethical decision-making in structured or unstructured and ambiguous situations. Apply descriptive, predictive, and prescriptive analytics to business problems for input into management decision-making processes. • How tools like Excel, python, SAS and R help with conducting analytics
CO4	Analysing	<ul style="list-style-type: none"> • Analyse and evaluate appropriate business strategies, practices, and theories that inform and guide organizations to ensure sustainability. • To become familiar with the processes needed to develop, report, and analyze business data. • To analyze the different types of analytics and the tools available to analyse them.
CO5	Evaluating	Evaluation of various alternatives and select the best alternatives, conduct what if analysis, Scenario Analysis and evaluate alternatives. Design a solution to a business dilemma, incorporating management practices and theories with principles of marketing, economics, accounting, operations management, and finance.

CO6	Creating	<p>Create business reports that effectively communicate business strategies, practices, and goals using emerging technology and management theories. To gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.</p> <ul style="list-style-type: none"> • be able to choose suitable business analytics methods and use them in practice; • be able to draw logical conclusions and give recommendations in strategic decision-making situations based on output from decision support methods; • be competent in applied business research; • be able to systematically analyze discipline-related real type problems; • be able to draw well justified conclusions and analytically discuss the implications of produced research results; • be able to produce an academic research report according to the principles for good scientific conduct; • have skills in responsible business skills and a profound understanding on the discipline-specific responsibility issues; • be able to critically evaluate consequences of business decisions from a responsibility perspective;
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SMS2303/SMP2502 BUSINESS ANALYTICS

Course Objectives:

- To help you think critically about data and the analyses based on those data
- To enable you to identify opportunities for creating value using business analytics
- To help you estimate the value created using business analytics to address an opportunity
- To gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.
- To become familiar with the processes needed to develop, report, and analyze business data.
- To understand the different types of analytics and the tools available to analyze them.
- How tools like Excel, python, SAS and R help with conducting analytics

Module I – Introduction

Revision of Statistics - Introduction to Data Analytics – Data Science – Technology and Business perspectives; Types of Analytics – Descriptive Analytics, Predictive and

Prescriptive Analytics - Decision Analytics, Diagnostics Analytics, Cognitive analytics- Applications; Analytics Career and opportunities. Data – Types of Data, Traditional data and Big data, Characteristics, Sources and Uses of Business Data –Data aggregation - Data Visualization - Data Management- Data quality and cleaning methods; Business Analytics: Meaning & Evolution – Definitions – Characteristics - Emergence of Business Analytics as a Competitive Strategy – Business Analytics process - Analytics Industry- The value generated & its applications; Introduction to Big data, Characteristics of Big data, Applications of Big data in business and Management- Artificial Intelligence (AI): Concept and Basic Applications – Machine learning - Deep Learning: Basic Concepts and Applications - Cloud Computing: Basic Concepts advantages and Applications.

Module II - Descriptive Analytics

Descriptive Analytics : Data Summarization and visualization, Central tendency, Percentiles and box plots, variance and standard deviations, Covariance and correlation coefficients, summarizing data – Important techniques for exploration - frequency, relative frequency, histograms, box plots, scatter plots- Other visualization techniques - bar, line, percentages and quartiles, cross tabulation, pivots-story telling with data, Tools for data visualization, Data Story telling; Principal components -charts and graphs, data queries – sorting and filtering, summarizing data – Important techniques for exploration-Principal components -charts and graphs, data queries – sorting and filtering- Applications and Simple Problems.

Module III – Predictive and Prescriptive Analytics

Predictive analytics: Analytics to understand relationship- Linear and Non-linear relationship - Correlation and Causality. Forecasting, Different methods- Regressions - Regression model building framework –Linear Regression - Multiple linear regression, Logistic and Multinomial Regression, regression with categorical predictors; Forecasting using Supervised Machine Learning: kNN, SVM, classification etc. Forecasting using Unsupervised ML: Cluster analysis Hierarchical clustering etc. Market Basket Analysis, Recommendation Systems, Network Analytics, Text Analytics; Industry Applications - Design of Experiments: Introduction – Simple comparative experiments – Single factor - Experiments – Introduction to factorial designs- Applications and Simple Problems.

Prescriptive Analytics: Simulation and Optimization– Optimization models - Techniques – testing- simulating the future--Stochastic Models – Markov Chain, Monte Carlo simulation, Poisson Process- Applications and Simple Problems.

Module IV - Applications of Business Analytics

Applications of Business Analytics - Decision Analytics, Diagnostics Analytics, **Cognitive analytics** – Applications and Business Problems- Financial Analytics – Investment Analytics- Marketing Analytics – Pricing Analytics – Operations analytics – Supply Chain Analytics - HR Analytics – Talent Analytics – Web and Social Media analytics- Sports Analytics-Healthcare Analytics- Business intelligence: Concept and Basic Applications; Basic Concepts and Applications- Design Thinking- Data mining and tools –Applications- Problems and Case Studies - Data Modelling and analysis- Predicting outcomes, Quality of predictions- Lending analytics, healthcare analytics,

sports analytics, Direct Marketing-- Design of trading strategies; Retail analytics, Sales force analytics, portfolio analytics, pension analytics; Optimising complex decisions and multiple objectives- Multi-criteria decision making (MCDM) Techniques, Concepts and applications- Goal Programming, AHP- Simple Problems and Case Studies; Industry 4.0 and Business Analytics – Importance and Applications.

Module V – Analytic tools

Introduction to Analytics tools : different types, Applications – Introduction to R programming: use of Rstudio, Simple arithmetic operation and array operation, R as a calculator -Vectors, Matrices, Data frames, Lists Packages and functions -Reading and writing data- Introduction to Python programming: Simple arithmetic operation and array operation, Use of matplotlib for plots and charts - Spreadsheet Modeling and Analysis- Data Analysis using MS Excel : Analyzing Data, Creating Charts and Graphics and Producing Report with Pivot Table- VLOOKUP and HLOOKUP- Statistical analysis of Data- Goal seek analysis, what-if analysis - - Scenario Analysis- Introduction to SAS : Concepts and Applications - Business and Management Applications – Familiarization with Visualization tools - Rattle, Tableau and PowerBI – Lean thinking, Value stream mapping - Applications- Recent Developments and Current Topics in Business Analytics.

References

1. Essentials of Business Analytics (1st Ed.) by Camm/Cochran/Fry/Ohlmann/Anderson/Sweeney/Williams ISBN:978-1-285-18727-3
2. Fundamentals of Predictive Analytics with JMP By Ron Klimberg and B. D. McCullough ISBN: 978-1-61290-425-2. Publisher: SAS Institute. (e-book is available throughOhiolink).
3. Discovering Knowledge in Data: An Introduction to Data Mining, Daniel T. Larose & Chantal D. Larose, Wiley, SecondEdition.
4. James R. Evans, Business Analytics: Methods, Models & Decisions, first edition, Prentice Hall
5. PurbaHaladyRao, Business Analytics: An Application Focus, PHI Learning
6. Gupta, S.C., Fundamentals of Statistics, Himalaya Publishing House
7. Evans, J.R. (2013), *Business Analytics: Methods, Models, and Decisions*, 3rd ed. Pearson India
8. Malhotra, N.K. and Dash, S. (2011), *Marketing Research*, 6th ed. Pearson India
9. Prasad, R.N. and Acharya, S. (2011), *Fundamentals of Business Analytics*, 1st ed. Wiley India
10. Davenport, T.H. and Harris, J.G. (2007) *Competing on Analytics: The New Science of Winning*, 1st ed. Harvard Business Review Press
11. Fitz-enz, J. (2010), *The New HR Analytics: Predicting the Economic Value of YourCompany's Human Capital Investments*, 1st ed., American Management Association
12. John Walkenbach Herb Tyson Michael R Groh, FaitheWempen, Lisa A Bucki, Microsoft Office 2010 Bible, India: John Wiley & Sons Publications.
13. James R. Evans, Business Analytics: Methods, Models & Decisions, first edition, Prentice Hall

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16. <https://www.tableau.com/products/trial>
17. <https://udemy.com/course/business-data-analysis-using-microsoft-power-bi>
18. Data Science for Business, Provost and Fawcett: O'Reilly
19. Data Mining for Business Intelligence, Concepts, Techniques and Applications, Shmueli, Patel, and Bruce: Wiley
20. Management Science: The Art of Modeling with Spreadsheets, Powell and Baker: Wiley
21. *Big data: The next frontier for innovation, competition, and productivity* and can be found at: http://www.mckinsey.com/insights/mgi/research/technology_and_innovation/big_data_the_next_frontier_for_innovation
22. Optional Software – Rattle: this is an open source R-based data analysis tool. <http://rattle.togaware.com/> An introductory book to Rattle
23. Data Mining with Rattle and R: The Art of Excavating Data for Knowledge Discovery, Williams: Springer
24. Tableau: this is a data visualization tool. A trial version may be downloaded at <http://www.tableausoftware.com/products/desktop/download>

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT IV/ PT VI	SMS2401/ SMP2601	Corporate Governance and Strategic Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recollect the basic concepts and terms related to Corporate Governance and Strategic Management, Definitions, issues and practices, Competition, Competitive Analysis, and various levels and types of Strategies.
CO2	Understanding	Enable the students to make out comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application in the field of Corporate Governance and strategic management.
CO3	Applying	Develop application skills in the field of Corporate Governance and strategic management based on the understanding of the different contents delivered to apply them with examples and business cases.
CO4	Analysing	Impart skills to assess the real world of business competition to explore and develop appropriate in the field of Corporate Governance and strategic management by developing framework for the sustainable business functioning.
CO5	Evaluating	Make the students capable of evaluating different decision options in cases relating to Corporate Governance and Strategic Management
CO6	Creating	Generate new ideas and create plans and proposals for problem cases relating to Corporate Governance and strategic Management.

SMS 2401/SMP2601 CORPORATE GOVERNANCE AND STRATEGIC MANAGEMENT

Objective: The aim of this course is to provide students of business education with concepts and theories relating to the understanding of strategic management and integrate their prior learning to practical issues in business. The course gives emphasis to the value and process of strategic management with solid basis of ethics and governance in the current competitive world.

Module I

Definitions and Importance of Corporate Governance-Reputation, Competition and Corporate Governance-Corporate Ethics-Corporate Governance and Corporate Responsibility-Globalization and Corporate Governance.

Shareholder Rights-Equitable Treatment-Responsibilities of Shareholders-Minority Shareholders' Protection.

Structure and Independence of the Board-Responsibilities and Duties of the Board-Organization of Audit Committee-Responsibilities of the Audit Committee

Module II

An overview of strategic management process; Levels of strategy; vision; mission; objectives and goals; Social responsibility of business; social audit and corporate governance; case discussion/presentation on strategic transformation of companies.

Business Environment; Environmental Appraisal and Scanning Techniques; EFE Matrix, Strategic Business Units (SBUs), Portfolio analysis and portfolio strategies; SWOT analysis, Synergy and Dysergy; practical exercise in SWOT analysis.

Module III

Nature and types of competition; competitive analysis; Porters Five Forces Model; GE 9 Cell Model; competitive strategies; strategic advantage profile; value chain approach; positioning. Case discussion on competitive strategies.

Module IV

Globalization; Expansion and Growth strategies; Diversification strategies; vertical, concentric and conglomerate diversification; Growth strategies; mergers and acquisitions; takeovers; strategic alliances; collaborative partnership; industrial sickness; industrial restructuring and turn around management; case discussion/presentation.

Module V

Implementation of strategy; strategy and structure; evaluation and control of strategy; corporate culture; management of change; managing for the future.

References

1. Gerry Johnson and Keven Scholes: *Exploring Corporate Strategy*, Prentice Hall of India, New Delhi. The Times Research Foundation: *Business Policy for Indian Industry*, Mumbai
2. William F Glueck : *Business Policy and Strategic Management*, McGraw Hill International Book Co., Tokyo
3. Pearce and Robinson : *Strategic Management*, All India Travellers Bookseller, New Delhi
4. Kenichi Ohmae: *The Mind of the Strategist*, (Penguin Books, New York) Gary
5. Hamel & Competing for the Future Harvard (C. K. Prahalad Business School Press, Boston)
6. Michael E Porter : *Competitive Strategy*, The free press, New York
7. Michael E Porter : *Competitive Advantage*, The Free Press, New York

8. Ansoff H. Igor, Corporate Strategy: An Analytical Approach to Business Policy for Growth and Expansion, McGraw – Hill, New York.
9. Srinivasan R., Strategic Management – The Indian Context, Prentice Hall of India.
10. Hamel, G. and S.K. Prahalad, Competing for the Future, Harvard Business School Press.
11. Mallin, Christine A., Corporate Governance (Indian Edition), Oxford University Press, New Delhi.
12. Blowfield, Michael, and Alan Murray, Corporate Responsibility, Oxford University Press.
13. Francesco Perrini, Stefano, and Antonio Tencati, Developing Corporate Social Responsibility-A European Perspective, Edward Elgar.
14. Sharma, J.P., Corporate Governance and Social Responsibility of Business, Ane Books Pvt. Ltd, New Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
FT IV/ PT VI	SMS2402/ SMP2403	Environment Management	3	CC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Environment Management, dimensions, sustainable development, green economics, corporate social responsibility, environment management system.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in environment management from business perspectives based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real data to explore and establish relationships in the areas of business decisions that have bearing on environment.
CO5	Evaluating	Make the students capable to do environment impact evaluation and create projects that support sustainable development.
CO6	Creating	Conduct a project that has a theoretical basis and practical application of environmental management and sustainable development perspectives.

SMS2402/SMP2403 ENVIRONMENT MANAGEMENT

Objectives: This course is designed to teach the participants about sustainable development in the backdrop of contemporary trade and business interventions endangering the life -sustaining resources and systems in the world.

Module I

Concept of sustainable global development – Dimensions-Economic, environmental. Social –Sustainable Development Goals-Summits on Sustainable Development.Environmental Economics-efficiency and optimality in resource allocation-market failure and public policy-Common Property resources-Tragedy of Commons-Green Economics and Green GDP

Module II

Issues affecting ecological equilibrium – population growth- depletion of natural resources – Industrial and urban population –industrial and trade driven waste and emerging issues- global warming. Impact of industrial and business activities on the environment – energy and environment – environmental cost of consuming fossil fuel – alternative sources of energy – implementation challenges – cost benefit analysis

Module III

Regional level issues (issues to be discuss on priority for Kerala) Rocks and minerals and their exploitation – depletion of wet land – usage of plastics at retail trade level and packaging – alternatives – challenges- house hold waste disposal – issues- challenges.

Module IV

Corporate philanthropy and CSR- models of CSR in India, Carroll's mode-International framework for corporate social Responsibility, Millennium Development goals- CSR- Legislation in India & the world. Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII

Module V

Environment impact studies and assessment - environment accounting and audit - Environment Management System (EMS) - EMS standards - ISO 14000 - international initiatives for environment management – Carbon trading-Case studies

References

1. Weatherly, D and Sheehan, N., “Cambridge IGCSE Environmental Management” Collins, UK.
2. Uberoi, N.K., “Environmental Management” Excel Books, New Delhi.
3. Pandey, G.N., “Environmental Management”, Vikas Publishing, New Delhi.
4. Gupta, N. Dass, “Environmental Accounting”, Wheeler Publishing, New Delhi.
5. Mark S. Schwartz., “Corporate Social Responsibility: An Ethical Approach”
6. Mallin, Christine A., Corporate Governance (Indian Edition), Oxford University Press, New Delhi.

11.2 SYLLABI OF ELECTIVES COURSE

11.2.1 ELECTIVES IN FUNCTIONAL AREAS OF MANAGEMENT

1. Finance Area
2. Marketing Area
3. Human Resource Management Area
4. Production and Operations Management Area
5. Information Technology Area
6. International Business Area
7. General Management Area

11.2.2 LIST OF ELECTIVE COURSES IN FINANCE AREA

1. Security Analysis and Portfolio Management
2. International Finance
3. Working Capital Management
4. Management of Financial Services
5. Financial Derivatives and Risk Management
6. Corporate Restructuring
7. Financial Modelling
8. Analytics for Finance
9. Behavioural Finance
10. Project Management
11. Bank Financial Management
12. Fundamentals of Insurance

11.2.3 LIST OF ELECTIVE COURSES IN MARKETING AREA

1. Consumer Behaviour
2. Integrated Marketing Communication
3. E-Commerce
4. Marketing Research
5. Strategic Marketing
6. International Marketing
7. Sales Management
8. Services Marketing
9. Brand and Product Management
10. Retail Management
11. Digital Marketing
12. Customer Relationship Management
13. Marketing Analytics

11.2.4 LIST OF ELECTIVE COURSES IN HUMAN RESOURCE MANAGEMENT AREA

1. Strategic Human Resource Management
2. Management of Industrial Relations
3. Training and Development
4. Global Human Resource Management
5. Compensation Management
6. Human Resource Planning and Development
7. Organisational Change and Development
8. Managing Interpersonal and Group Processes
9. Performance Management
10. HR Analytics

11.2.5 LIST OF ELECTIVE COURSES IN PRODUCTION AND OPERATIONS MANAGEMENT AREA

1. Supply Chain Management
2. Purchasing and Materials Management
3. Quality Management
4. International Logistics Management
5. Service Operations Management
6. Simulation and Modelling
7. Enterprise Resource Planning
8. Project Management
9. Supply Chain Analytics
10. Customer Relationship Management

11.2.6 LIST OF ELECTIVE COURSES IN INFORMATION TECHNOLOGY AREA

1. Enterprise Resource Planning
2. Strategic Management of Information Technology
3. Data Base Management Systems
4. Business Process Reengineering
5. System Analysis and Design
6. Technical Foundation for E-Business
7. Data Mining for Business Intelligence
8. Advanced Data Analytics for Business Decisions
9. Technology Management
10. E-Commerce
11. Customer Relationship Management
12. Digital Marketing

11.2.7 LIST OF ELECTIVE COURSES IN INTERNATIONAL BUSINESS AREA

1. International Finance
2. Supply Chain Management
3. International Logistics Management
4. Global Human Resource Management
5. International Marketing
6. Export Import Policies and Procedures
7. Enterprise Resource Planning

11.2.8 LIST OF ELECTIVE COURSES IN GENERAL MANAGEMENT AREA

1. Technology Innovation and Entrepreneurship
2. Corporate Social Responsibility
3. Management of NGOs
4. Management Consulting

11.2.9 SYLLABI OF ELECTIVE COURSES IN FINANCE AREA

Elective Courses in Finance Area

1. Security Analysis and Portfolio Management
2. International Finance
3. Working Capital Management
4. Management of Financial Services
5. Financial Derivatives and Risk Management
6. Corporate Restructuring
7. Financial Modelling
8. Analytics for Finance
9. Behavioural Finance
10. Project Management
11. Bank Financial Management
12. Fundamentals of Insurance

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Security Analysis and Portfolio Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Financial Market, Financial Instruments, Risk, Return, Valuation of Securities and Portfolio Theories.
CO2	Understanding	Enable the incumbents to understand fundamental factors affecting the security market.
CO3	Applying	Develop application skills in calculating risk and return from investments in security market and to value the securities.
CO4	Analysing	Analyse the movement of security market using technical analysis.
CO5	Evaluating	Make the students capable to evaluate diversification strategy to construct investment portfolio with reference to modern portfolio theories.
CO6	Creating	Design and create optimum investment portfolio taking into account the risk and return of securities and the overall market environment.

1. SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Objective: This course is designed with a view to providing the students a comprehensive introduction to the areas of security analysis and portfolio management and to develop them the skill required for portfolio management.

Module I: Financial Markets and Investment: Concepts of investment – Characteristics – Objectives – Investment Alternatives – Approaches to Financial Investment Decisions; Financial Markets: Meaning - Functions – Classification – Securities Market – Primary Market – Secondary Market - Functions of Stock Exchanges – Trading and Settlement procedures.

Module II: Risk and Return Analysis: Return Analysis: Concept of Return – Computation of Return; Risk analysis: Concept of Risk - Sources of Investment Risk - Measurement of Risk

Module III: Valuation of Securities: Valuation of Debt and Equity: Valuation of Debt: Fixed-Income Securities, Overview of fixed-income securities, Types of bonds, Bond risk, Bond pricing, Bond Yields Valuation of Equity: Based on Balance sheet: Book value, Liquidation value, Replacement cost – Dividend Discount Model – Earnings Multiplier Approach – Valuation through P/E ratio

Module IV: Security Analysis: Fundamental Analysis: Objectives - Economic Analysis: Macro economic factors, Economic forecasting – Industry Analysis: Industry classification by product and according to business cycle; Industry life cycle; Key factors in industry analysis – Company Analysis: Factors in company analysis, Operating analysis, Earnings of the company, Financial analysis Technical Analysis: Meaning and assumptions of technical analysis - Charting Techniques - Dow Theory – Elliot Wave Theory - Bar and Line Charts – Point and Figure Charts - Moving average analysis – Relative Strength Analysis – Japanese Candlesticks - Technical Indicators

Module V : Portfolio Theories and Portfolio Management: Formulation of Portfolio Strategy - Portfolio Construction: Markowitz Theory - Sharpe's Single Index Mode – Capital Asset Pricing Model – Arbitrage Pricing Theory - Efficient Market Theory; Portfolio Performance Evaluation: Treynor' Measure – Sharpe's Measure – Jensen Measure – Portfolio Revision. Recent Developments in Investment Management.

References

1. Donal E. Fisher, Ronald J. Jordan: Security Analysis and Portfolio Management (Sixth Edition), Prentice Hall of India Private Limited, New Delhi.
2. Gordon J. Alexander, William F. Sharpe, Jeffery V. Bailey, Fundamentals of Investments (Third Edition), Prentice Hall of India Private Limited, New Delhi.
3. Edwin J. Elton, Martin J. Gruber: Modern Portfolio Theory and Investment Analysis, John Wiley & Sons.
4. David G. Luenberger: Investment Science, Oxford University Press, New Delhi.
5. Frank K. Reilly, Keith C. Brown: Investment Analysis and Portfolio Management (Indian Edition), Thomson – South Western.
6. Robert A. Haugen, Modern Investment Theory, Prentice Hall of India Private Limited, New Delhi.
7. Prasanna Chandra: Investment Analysis and Portfolio Management, Tata McGraw-Hill, New Delhi.
8. Bhalla V. K.: Investment Management – Security Analysis and Portfolio Management, S. Chand and Company Ltd., New Delhi.
9. PunithavathyPandian: Security Analysis and Portfolio Management, Vikas Publishing House Pvt. Ltd., New Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		International Finance	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Enumerate the key concepts related to Behavioral Finance
CO2	Understanding	The role of key finance organisations in the global economic system and international capital and foreign exchange market
CO3	Applying	Apply knowledge of foreign exchange hedging to identify and manage the foreign exchange risks faced by globally active firms
CO4	Analysing	Key operations of foreign exchange market tools and strategies
CO5	Evaluating	Current conditions in developing emerging markets, and evaluate present and future opportunities and risks for international financial activities like Forex and financial flows
CO6	Creating	Framework to support successful decision-making in all relevant functions and financial activities within the competitively international environment

2. INTERNATIONAL FINANCE

Objective: Objective of this course is to provide knowledge on the international monetary system, to analyse the nature and functioning of foreign exchange markets, determination of exchange rates and to manage foreign exchange risk.

Module I: Introduction to International Financial System

Global Economy - A Historical Perspective; Financial Globalization- The Missing Link Experiences from India; Openness of Indian Economy Indicators of Openness of Indian Economy; Developments in the international monetary system

Module II: Balance of Payments:

Balance of payments – significance- preparation of BOP statement – Link between BOP and the economy.

Module III: Foreign Exchange Market and Exchange Rate Mechanism:

Exchange Rate Mechanism: Exchange rate quotations, direct and indirect quotes, bid and ask quote, Nominal, real and effective exchange rates, Determination of exchange rate in the spot and forward markets, Factors influencing exchange rate.

Foreign Exchange Market: Meaning, Features, Major participants

Spot Market: Meaning, Features, Currency arbitrage; Forward Market: Meaning, Features, Arbitrage in forward market; Market for Currency Futures: Meaning, Forward and Futures Contracts, Hedging in currency Futures Market; Market for Currency Options: Types of Option Market, Types of Options, Option pricing, Hedging with Currency Options.

Module IV: Foreign Exchange Exposure Management:

Meaning, Types of Exposure, Hedging of exposure.

Module V: International Investment and Financing Decision:

Significance, Factors affecting international investment, Cost Benefits of Foreign Direct Investment, Strategies for FDI, Mode of Investment.

International Portfolio Investment: Concept of optimal portfolio, Measurement of Returns, Measurement of risk.

International Financial market Instruments: International Equities, International Bonds, Short term and medium term instruments.

Financial Swaps: Meaning, Interest rate Swap and Hedging, Currency Swap, Management of Interest rate risk.

References

1. Maurice D. Levi: International Finance – The Markets and Financial Management of Multinational Business
2. Alan C. Shapiro: Multinational Financial Management, Printice Hall of India
3. Keith Pilbeam: International Finance,
4. Prakash G. Apte: International Financial Management, Tata McGraw-Hill Education Private Ltd., New Delhi
5. Vyuptakesh Sharan: International Financial Management, PHI Learning Private Limited, New Delhi
6. Thummuluri Siddaiah: International Financial Management, Pearson
7. Francis Cherunilam: International Economics, Tata McGraw-Hill Education Private Ltd., New Delhi

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Working Capital Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Remembering the nature of working capital and its management in terms of basic concepts, strategies, policies, and its financing.
CO2	Understanding	Understanding the objectives and significance of working capital management in terms of basic characteristics and functions of each component of current assets and current liabilities. Also understand the importance of liquidity-profitability tradeoff in working capital management.
CO3	Applying	Demonstrate different strategies for efficient management of cash, receivables and inventories. Develop skills to suggest context specific physical control over inventory.
CO4	Analysing	Analyse the planning of working capital requirements in terms of need, determinants and its computation.
CO5	Evaluating	Develop the capacity to evaluate the quantitative effects of changes in credit policies and inventory policies on key variables and profit of firms.
CO6	Creating	Designing credit policies, collection policies and inventory policies by factoring in variables related to specific contexts.

3. WORKING CAPITAL MANAGEMENT

Objective:

The objective of the course is to acquaint the students with the importance of the working capital and the techniques used for effective working capital management.

Module I: Introduction to Working Capital Management

Importance of Working Capital and its management, Kinds of Working Capital, Objectives of WCM, WC as a Measures of Liquidity, Working capital policy, Risk-return

trade-off, Liquidity v/s profitability trade-off, Cost trade-off, Basic approaches for determining the working capital financing mix, Sources of Financing for working capital.

Module II: Assessment of Working Capital

Gross Operating cycle, Net Operating Cycle/Cash Conversion Cycle, Production cycle, Weighted Operating cycle, Factors Determining Working capital, Estimating Working capital Requirements.

Module III: Management of Cash and Marketable Securities

Motives for Holding Cash, Objectives of Cash Management, Factors Determining Cash Balance, Determination of Cash Need and Cash Management Models -Baumol Model, Miller-Orr Model, Stone Model, Orgler's Model, Bernanke's Model. Cash Budget as a tool for cash management, Cash Management Strategies. Meaning and characteristics of Marketable Securities, Selection Criterion.

Module IV: Receivable Management

Objectives, Costs and Benefits of receivables, Decision Areas in Receivables Management- Marginal Cost-Benefit Analysis, Credit Policy, Credit Standard, Credit Analysis, Credit Terms, Cash Discount, Collection policies. Monitoring Receivables- Average Collection Period, Aging Schedules, Collection Experience Matrix.

Module V: Inventory Management

Nature of Inventories, Need to hold inventories, Benefits and Costs of Holding Inventories, Objectives of Inventory management, Inventory Management Techniques- EOQ, Reorder Point, Safety stock. Types of Inventory levels, Physical Control of Inventory/Inventory Control Systems-ABC/PVA/CIE, JIT, FSN.

References

1. Sagner, James. *Working Capital Management: Applications and Cases*. 2014
2. Bhattacharya, Hrishikes. *Working Capital Management: Strategies and Techniques*. 3rd Edition 2014.
3. Van Horne, James C and Wachwicz. Jr. *Fundamentals of Financial Management*. 13th Edition
4. Brealey, Richard A., and Stewart C. Myers. *Principles of Corporate Finance*. 10th ed. McGraw-Hill, 2011.
5. Berk, Jonathan, and Demarzo, Peter. *Financial Management*. Third edition, 2016.
6. Pandey, IM. *Financial Management*. 11th Edition, 2015.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Management of Financial Services	3	EC	50	50

Course Outcomes(COs):On successful completion of the course the student will be able to:

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recognize the components of Financial system viz. Financial Markets, Financial Institutions and the present condition of these in India.
CO2	Understanding	To understand how closely the financial system of a country related to the economic development of that country and also to know the role, functions and regulations of Credit rating agencies, Merchant Bank, Mutual Fund, Venture Capital and Leasing industries.
CO3	Applying	Applying the acquired knowledge in the evaluation of Shares/ Bonds, Bill Discounting, Hire purchase and Leasing in real life situation.
CO4	Analysing	Analysing the functions, Scope and Growth potential of Financial Services in India and thereby obtaining clarity about Indian Financial System.
CO5	Evaluating	Ability to evaluate various investment opportunities in the context of SEBI regulations and ratings by various rating agencies like CRISIL,CARE, ICRA
CO6	Creating	Generate new ideas and plans to improve the current financial system of the county and to utilize the knowledge for better investment plans

4. MANAGEMENT OF FINANCIAL SERVICES

Objective:

The main objective of this course is to help students to learn the various financial services and their role in the overall financial system.

Module I : Financial System and Market:

Indian Financial System: Structure and constituents of Indian Financial System, Financial institutions, Financial System and Economic Development

Financial Markets: Nature, Functions, Primary and Secondary Markets, Money and Capital Market, New Issue Market – Issue Mechanism – Public issue, Rights issue, private placement, Issue of Bonus Shares, SEBI and its role as regulator.

Financial Services: Meaning, Nature and Scope, Classification of Financial Services, Financial products and services, Need and importance of financial services, Regulatory Frame Work for Financial Services.

Module II : Merchant Banking Services:

Meaning, Services of Merchant Bankers, Role and functions in new issue market, Managing issue of Shares and Bonds, Guide lines of SEBI for Merchant Bankers, Scope for Merchant Banking in India.

Module III : Mutual Funds:

Meaning, Origin and growth, types, importance, Products/Schemes, Managing Mutual Funds in India, Function of Asset Management Company, Net Asset Value, Investors rights, Selection of a Fund, Regulations regarding Mutual Funds, Evaluation of Performance of Mutual Funds, Mutual Funds rating, Mutual funds industry in India

Module IV : Other Financial Services:

Venture Capital: Concept, features, Dimensions, Scope, Importance, Venture Capital industry in India, Guide Lines for the Venture Capital Companies in India. Factoring: Concept, Types, Functions, and benefits. Bills Discounting – Concept, Importance, Factoring and Discounting. Leasing – Concept, Types, Merits and Demerits, Structure of Leasing Industry in India, problems of leasing; Hire purchase – Concept, features, advantages, Hire purchasing and Leasing. Debt Securitization – concept, mechanism of securitization, benefits of securitization, Securitization in India. Housing Finance in India

Module V : Credit Rating:

Concept, functions, benefits and limitations, Credit Rating Agencies in India- CRISIL, ICRA, CARE

References:

1. Khan M.Y., Financial Services, Tata McGraw Hill Publishing Company Limited, New Delhi.
2. Albert J. Fredman, Russ Wiles: How Mutual Funds Works, Prentice Hall of India Private Ltd., New Delhi.
3. Pandey I. M., Venture Capital: The Indian Experience, Prentice Hall of India Private Ltd., New Delhi.
4. Gurusamy S. Financial Services and Markets, Thomson – Vijay Nicole Imprints Pvt. Ltd., Chennai
5. Machiraju H. R., Indian Financial System, Vikas Publishing House, New Delhi
6. Bhole, L. M.: Financial Institutions and Markets, Tata McGraw Hill, New Delhi.
7. Varshney P. N., Mittal D.K.: Indian Financial System, Sultan Chand and Sons, New Delhi

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Financial Derivatives and Risk Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Explain the basic concepts and terms related to derivative instruments and their valuation procedures.
CO2	Understanding	Understand the uses of derivatives in different risk context and appreciate various risk management strategies comparing their relative merits and demerits
CO3	Applying	Develop application skills in risk management and price forecasting based on the understanding of the different contents delivered with examples and cases.
CO4	Analysing	Analyze the risk management strategies with the use of established derivative trading instruments under different investment scenarios.
CO5	Evaluating	Evaluate and make informed judgment on the use of derivative instruments in risk control and price forecasting.
CO6	Creating	Develop financial derivatives pricing and risk management ideas in a clear and precise manner.

5. FINANCIAL DERIVATIVES AND RISK MANAGEMENT

Objective: The objective of the course is to provide a rigorous understanding of theory and applications of derivatives instruments and develop working knowledge and skills on their uses in portfolio allocation and risk management in asset markets.

Module I

Introduction to derivatives and risk management - risk and uncertainty - market risk - sources of market risk - Financial derivatives– concept and meaning - need and importance - classification of derivatives - derivative markets and instruments - functions -major participants- structure of derivative market and regulations in India.

Module II

Forwards and Futures - Forward contract- meaning, features and uses - futures contracts - meaning, characteristics and applications - hedging with futures- futures pricing -cost of carry and reverse cost of carry- Value at Risk (VaR) and Expected Shortfall (ES)- Margining and MTM - stock and stock index futures - currency futures - commodity futures.

Module III

Options- meaning, need and importance - embedded options - exotic vs vanilla options- real options - option types - short and long positions - hedging with options and Pairs trading - basic option trading strategies - straddle, strangle and spread - option trading in India

Module IV

Options pricing– intrinsic value and time value - pay offs - put-call parity- price bounds - factors affecting option pricing - Martingale measures-pricing models - Binomial model - Black Scholes model-Option Greeks- definition and properties.

Module V

Swaps- concept, features and applications- types of swaps- generic and non-generic swaps- interest swaps - currency swaps - cross currency swaps - swaption contracts - hedging with swaps. Credit derivatives - types of credit risks - credit default swaps -credit linked notes

References

1. John C Hull, *Options Futures and Other Derivatives*, Pearson Education.
2. Kevin Dowd, *Measuring Market Risk*, John Wiley & Sons
3. Robert W. Kolb&James A. Overdahl, *Financial Derivatives: Pricing and Risk Management*, John Wiley & Sons
4. Sundaram Janakiraman, *Derivatives and Risk Management*, Pearson Education
5. Jayanth Rama Varma, *Derivatives and Risk Management*, TMH
6. Bishnupriya Mishraand Sathya Swaroop Debasish, *Financial Derivatives*, Excel Books
7. S.L. Gupta, *Financial Derivatives: Theory, Concepts and Problems*, Prentice Hall of India
8. S.S S Kumar, *Financial Derivatives*, Prentice Hall of India.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Corporate Restructuring	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms broad regulatory framework related to corporate restructuring
CO2	Understanding	Enable the participants to understand comprehensively the broad theoretical framework of firm valuation and the relevant concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop skills to apply various firm valuation models in the firm restructuring context.
CO4	Analyzing	Impart skills to analyse the implication of restructuring decisions on the firm valuations – from differ stake holders perspective
CO5	Evaluating	Make the students capable to evaluate the impact of M&A decisions.
CO6	Creating	Generate new perspectives and proposals for achieving better corporate performance through mergers, acquisitions and divest strategies.

6. CORPORATE RESTRUCTURING

Objective: The course provides an integrated perspective of corporate governance and agency dimensions, financial and strategic management aspects, and legal and accounting considerations into a unified framework for achieving superior corporate performance.

Module I : Corporate Restructuring, Rescue and Insolvency, Bankruptcy Laws in India - Companies Act, 1956, SICA 1985, SRFAESI Act Overview of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, Special Purpose Vehicle (SPV), Asset Reconstruction Companies (ARCs), Qualified Institutional Buyers (QIB), Revival, Rehabilitation and Restructuring of Sick Companies.

Module II: Corporate Valuation: Shareholder Vs. Stakeholder Theory Agency theory and problem of free cash flows Excess capacity - Balance Sheet Restructuring -Asset Restructuring - Modes of asset disposition -Methods of valuing the firm—value creation—Corporate expansions and diversifications - Sell offs and changes in ownership: Business downsizing-- Divestitures—Spin offs and Split ups—Going public—privatisation—Leveraged Buy Outs(LBOs)—Buyback of shares—Joint Ventures and Strategic Alliances—Defense tactics against takeovers and their rationale.

Module III: Mergers and Acquisitions: Rationale—mechanics—evaluation of targets—merger negotiations— Legal and other formalities –tax aspects of mergers—Regulation of Mergers and Takeovers in India—Takeover code—Competition Act.

Module IV: Business Failure and Re-organisation: Types and causes of business failure—Reorganization, reconstruction and liquidation—Financing M&A Deal Structuring in M&A Risk Management in M&A - Regulatory Issues in M&A.

Module V: Economic Value Added (EVA) and shareholder wealth EVA measurement Drivers of EVA Relationship between EVA and Market value Added (MVA).

References

1. Donald M. DePamphilis, *Mergers, Acquisitions, and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions*, 8th edition, by Academic Press, San Diego, Ca., 2015.
2. Bhalla, V.K., *Financial Management and Policy*, Anmol Publications, New Delhi.
3. Chandra, Prasanna, *Financial Management, Theory and Practice*, Tata McGraw-Hill Publishing Co.Ltd, New Delhi.
4. Weston, Chung, and Hoag, *Mergers, Restructuring, and Corporate Control*, Prentice-Hall, New Delhi.
5. Copeland, Keller, and Murrin, *Valuation: Measuring and Managing the Value of Companies*, John Wiley & Sons, New York.
6. Donaldson, G, *Corporate Restructuring: Managing the Change Process from within*, HBS Press, Boston, Massachusetts.
7. Hitt, Harrison, and Ireland, *Mergers & Acquisitions-A guide to Creating Value for Stakeholder*, Oxford University Press, New York.
8. Shiva Ramu,S, *Cross-Border Mergers and Acquisitions*, Wheeler Publishing, New Delhi.
9. Mohana Rao, P(ed), *Mergers and Acquisitions of Companies*, Deep& Deep Publications, New Delhi.
10. Sudarsanam, P.S., *The Essence of Mergers and Acquisitions*, Prentice-Hall, New Delhi.
11. Ramaiya, A., *A Guide to the Companies Act*, Wadhwa& Co, Nagpur.
12. LaxmiNarain, *Principles and Practices of Public Enterprise Management*, Sultan Chand, New Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Financial Modelling	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Remember the uses and application of excel inbuilt general functions and financial functions to build financial models. Also know about the financial modeling process, features of financial modeling, factors to be considered in constructing an efficient financial model.
CO2	Understanding	Impart how spreadsheet skills can be used for building an abstract representation (a model) of a real world financial situation related to accounting, interpretation of financial documents, project evaluation, performance of a financial asset or portfolio, project, or any other investment.
CO3	Applying	Developing application skills through academic cases to make financial models for financial situations related to accounting, interpretation of financial documents, project evaluation, performance of a financial asset or portfolio, project, or any other investment.
CO4	Analysing	Inculcating skills through cases to build financial models for real world financial situations related to accounting, interpretation of financial documents, project evaluation, performance of a financial asset or portfolio, project, or any other investment.
CO5	Evaluating	Develop the capacity to judge or validate financial models. Acquire competencies for suggesting measures for improving models, reconstructing models and to make financial models error-free.
CO6	Creating	Ability to create financial model templates in Excel that suits to general contexts and customized contexts.

7. FINANCIAL MODELLING

Course Objective: Impart Spreadsheet skills to the students for building an abstract representation (a model) of a real world financial situation related to accounting, interpretation of financial documents, project evaluation, performance of a financial asset or portfolio, project, or any other investment.

Module I

Introduction to Excel, Understanding Advanced Features of Excel, VLOOKUP, HLOOKUP, Match Function, Index Function, Index plus Match Function, What if Analysis, Goal seek Analysis-Modelling Database Functions in Excel-Introduction to Financial Modelling, Approach to Financial Modelling, Guidelines for Creating Effective Financial Model. Modelling EMI, DEI, WEI, FEI-Creation of Amortisation Schedule-Application of advanced excel features to retrieve information from Amortisation Schedule/data bases.

Module II

Project evaluation through excel modelling-Discout Rate-cost of debt-cost of Equity-modelling CFATs-XNPV-XIRR.Risk Analysis in Project Appraisal. Cash book modelling-inventory modelling-working capital estimation modelling.

Module III

Scenario Analysis and Sensitivity Analysis-Common uses of Scenarios-Sources of Scenarios-Data Tables. Case studies on Scenario and Sensitivity Analysis of companies. Forecasting Financial Statements using Excel-Case studies.

Module IV

Expected Return and Asset Pricing Modelling-Single factor model (CAPM), three-factor model (FFM), four factor model (Carhart), five factor model (FFM). Modelling portfolio return and risk-Jenson Alpha-portfolio optimization-MPT-Case studies.

Module V

PDURATION-NPER-IMPT-Modelling valuation of Bonds and Shares-sensitivity and risk analysis related to valuation. Value at Risk (VaR).

References

1. Michael Rees, Principles of Financial Modelling: Model Design and Best Practices Using Excel and VBA, Wiley
2. Joachim Häcker&Dietmar Ernst, Financial Modelling: An Introductory Guide to Excel and VBA Applications in Finance, Palgrave
3. Danielle Stein Fairhurst, Using Excel for Business and Financial Modelling: A Practical Guide, Wiley
4. Jules Nkansah Love to Excel: A Financial Modelling Masterclass for the Analyst in You, Partridge
5. Danielle Stein Fairhurst, Financial Modelling in Excel For Dummies, Wiley

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Analytics for Finance	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Opportunities for creating value using business analytics and describe the basic concepts in financial analytics, data Science and business
CO2	Understanding	The applications of financial analytics in multiple market domains and scenarios.
CO3	Applying	The standard asset pricing models and investigate market interdependence (in the mean and variance equations) in real scenarios.
CO4	Analysing	Analyze data graphically by creating a variety of plots using the appropriate visualization tools of stata/Eviews.
CO5	Evaluating	Linear/ non-linear models and Forecast financial data using econometric techniques and measure their effectiveness.
CO6	Creating	Various tools and functions of Stata/Eviews programming and use them in live analytical projects in multiple domains and scenarios.

8. ANALYTICS FOR FINANCE

Course Objectives: This course is intended to understand the basics of econometrics test the standard asset pricing models and investigate market interdependence (in the mean and variance equations) and to Estimate non-linear models and Forecast financial data using econometric techniques and measure their effectiveness.

Module I

Different data types – cross section, time series and panel data and problems associated with them – examples from Indian context Statistical Concepts - Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses.

Module II

Estimation of model by method of ordinary least squares; properties of estimators; goodness of fit; tests of hypotheses; scaling and units of measurement; confidence intervals- Multiple Linear Regression Model: Estimation of parameters; properties of

OLS estimators; goodness of fit - R² and adjusted R²; partial regression coefficients; testing hypotheses – individual and joint, BLUE property.

Module III

Introduction to times series– Unit root tests - Deterministic and stochastic trend models- Augmented Dickey Fuller Testing Framework - Univariate Autoregressive Models - Univariate Moving Average Models - Autoregressive-Moving Average Models. – Forecasting Univariate financial Time Series Models- ARIMA Model-Box-Jenkins approach - Forecast Evaluation Statistics.

Module IV

Causality – Granger causality test (1969) – VAR – concept – formulation and applications – Impulse response analysis and variance decomposition – Co-integration analysis – Single equation test and Johansen’s system cointegration test- Volatility – features of volatility in financial time series - Introduction to ARCH and GARCH models

Module V

Static and Dynamic Panel Data Models Introduction to panel data, pooled repeated cross-section model, within and between estimators, time fixed effects, Tests of hypothesis for pooled or fixed effects model, pooled and or random effects models (Breusch-Pagan Lagrange Multiplier Test) and fixed or random effects (Hausman test), Introduction to dynamic Panel data models, Arellano and Bond Estimator, The Arellano and Bover Estimator, The Blundell and Bond System GMM Estimator.

References

1. D. N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, 4th edition, International Edition, 2009.
2. Christopher Dougherty, Introduction to Econometrics, Oxford University Press, 3rd edition, Indian Edition, 2007.
3. Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House, 2nd edition, 2008.
4. Stan Hurn, Vance Martin, Peter Phillips and Jun Yu, Financial Econometric Modeling
5. Hamilton, J. D., Time Series Analysis, Princeton University Press, 1994

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Behavioural Finance	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Enumerate the key concepts related to Behavioral Finance
CO2	Understanding	Theoretical and empirical foundations and challenges to the efficient market hypothesis.
CO3	Applying	apply the main concepts, research tools and methodologies of behavioral finance that help to reveal biases, heuristics, etc. in the decision making process on individual, corporate and financial market level.
CO4	Analysing	key behavioral biases of individual, professional investors and anomalies in the markets proving the behavioral biases
CO5	Evaluating	Describe how behavioral biases of managers affect the decision-making process in a corporation
CO6	Creating	models using behavioral finance concepts to identify problems and propose possible solutions

9. BEHAVIOURAL FINANCE

Objectives: The course aims to explain the principles and methods of behavioural finance while contrasting them with standard economic models. It will also provide an understanding of the policy implications of behavioural approaches through case studies.

Module I

Investment Decision Cycle: Judgment under Uncertainty: Cognitive information perception - Peculiarities (biases) of quantitative and numerical information perception - Weber law -Subjective probability – Representativeness – Anchoring Asymmetric perception of gains and losses framing and other behavioural effects - Exponential discounting - Human economic behaviour - Discount factors for short and long horizons - Experimental measurement of the discount factor

Module II

Utility/ Preference Functions: Expected Utility Theory and Rational Thought: Decision making under risk and uncertainty - Expected utility as a basis for decision-making –

Theories based on Expected Utility Concept – Decision making in historical prospective - Allais and Elsbeg's Paradoxes - Rationality from an economics and evolutionary prospective – Herbert Simon and bounded rationality- Investor rationality and market efficiency - Empirical data that questions market efficiency.

Module III

Behavioural Factors and Financial Markets: The Efficient Markets Hypothesis – Information available for Market Participants and Market Efficiency -Market Predictability –The Concept of limits of Arbitrage Model - Asset management and behavioural factors - Active Portfolio Management: return statistics and sources of systematic underperformance.

Module IV

Emotions and Decision – Making: Experimental measurement of risk-related - Measuring Risk - Emotional mechanisms in modulating risk-taking attitude - Neurophysiology of risk taking. Personality traits and risk attitudes in different domains -Making decisions with “play” and real money - Modulating altruistic behaviour by utilizing the essentials of the specific proximal mechanisms - Emotions and rationality - Antonio Damasio and somatic markers.

Module V

Behavioural game theory-Nature of behavioural game theory- Mixed strategies-Bargaining- Iterated games- Signaling- Learning- Application: Case studies on Market entry in Monopoly and Impasses in bargaining and self-serving bias.

References

1. Nick Wilkinson and Matthias Hales, An Introduction to Behavioral Finance, 2nd Edition, Palgrave Macmillan 2012
2. Edward Cartwright, Behavioural Economics, Routledge 2011.
3. Erik Angner, A Course in Behavioral Economics, Palgrave Macmillan 2012.
4. Dan Ariely, “Predictably Irrational: The Hidden Forces that Shape Our Decisions”, Harper Collins 2009,
5. Richard Thaler and Carl Sunstein, “Nudge: Improving Decisions about Health, Wealth and Happiness”, Penguin UK 2009.
6. Kahneman, Daniel and Amos Tversky. Choices, Values and Frames, New York: Russell, Sage Foundation; Cambridge, U.K.; New York: Cambridge University Press, 2000.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Project Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Project and Project Management. They should also remember basic techniques like NPV, WBS, PERT/CPM, EVA.
CO2	Understanding	Enable the incumbents to understand the concepts delivered at the remembrance level to make them cognitively fit for application. They should be able to understand the importance of conducting project feasibility studies, preparing project plan and conducting project analysis.
CO3	Applying	Once the student has understood the specifics of various tools and techniques to be applied in a particular project decision context, they should be able to apply the technique and generate results. Here students are trained on conducting a real project feasibility study, preparing project schedules and conducting progress analysis. Cases and problems sets will guide them through this process. The outcome is developing application skills in the project context.
CO4	Analysing	Impart skills to analyze the project data to explore and identify bottlenecks and performance constraints. Use a range of tools like WBS, PERT CPM, Critical Chain, EVA etc to analyze the data Project management packages will also be covered which will help them in performing these analyses. This will reinforce their application skills and help them to develop an analytical mindset to try analyzing real life data with the tools and techniques studied.
CO5	Evaluating	Evaluate the practical implications of the results found from the analysis of data. They should be able to do a cost benefit analysis of various decision options, perform risk analysis with respect to each proposed solution and arrive at the most feasible alternative.

CO6	Creating	Generate new project proposals, project financing options and project plans based on a new idea. This will help both future project managers and entrepreneurs to start from a clean state in developing new projects.
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10. PROJECT MANAGEMENT

Project Management deals with seeking methods of planning, organizing, and controlling non-routine tasks. The management of a project differs in several ways from management of a typical enterprise.

The general objectives of this course include to understand key Project Management concepts in the Project lifecycle, to identify managerial roles and responsibilities of executing a project, to learn the concepts in scheduling tasks, preparing budgets and allocating resources, to understand Project monitoring techniques, to develop working competence in the use of a Project Management Software.

Module I: Basic concepts in project: Project, Project Management, PMBOK, Project Triad, Project Life cycle, Project Stake holders.

Module II: Project selection. Why the project, project feasibility, numeric and non-numeric models of project selection, financial models, project portfolio

Module III: Project planning: Project charter, project plan, Work Breakdown Structure, project schedule, Network Diagrams, Critical chain approach, Preparing the Budget, role of project manager

Module IV: Project Execution:

Resource allocation and resource management, project organization, Managing the team, risk management, project communication.

Module V: Project Monitoring and Control: Progress reporting, Earned value approach, Project control, Change Management, project closure, project auditing

References:

1. Project Management: A Managerial Approach, Jack Meredith and Samuel Mantel Jr, 6th ed., Wiley.
2. Project Management The Managerial Process, Gray and Larson, McGraw Hill
3. Project Management: Achieving competitive advantage , Jeffrey K Pinto, Pearson Education
4. Project Management, Gido and Clements, Cenage Learning

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Bank Financial Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Management of finances in banking-liquidity risk-credit risk, interest rate risk, foreign exchange risk
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in risk management in banks based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the risk related banking business data to explore and establish relationships in the area of bank management decisions.
CO5	Evaluating	Make the students capable of evaluating the impact of risks affecting banking systems and ways to estimate and monitor the same.
CO6	Creating	Generate scenarios of bank risk and create coping strategies to contain and mitigate risk.

11. BANK FINANCIAL MANAGEMENT

Module 1: Banking Scenario

Role of Banking and Financial Markets in economic development - Types of banks-classification- Difference between banking and other businesses- Principles of banking-Determinants of Interest Rates

Module 2: Introduction to Risk Management:

Overview of Risk Management in Banking and Financial Markets- Liquidity & Solvency Risk -Overview of Liquidity and Solvency-Managing Liquidity (CRR and SLR)-Managing Solvency & Capital-Adequacy (BASEL-I)-Liquidity Risk

Management-Operational Risk: Measuring and Managing Operational Risk-Basel II Guidelines for Capital Adequacy-Basel III Guidelines- Monetary Policy in India

Module 3: Credit Risk & Interest Rate Risk in Banking

Retail Lending-Lending to SMEs-Measuring Credit Risk- Managing credit risk-Monitoring Credit Risk-Credit Risk Assessment Models-Loan Concentration Risk-Loan Portfolio Risk-Off-Balance Sheet Risk -Overview of Interest Rate Risk-Yield Curve: An Overview-Measuring and Managing IRR: Repricing Model-Measuring and Managing IRR: Duration Gap Analysis-Interest Rate Derivatives-Interest Rate Futures-Interest Rate Swaps-Risk Measurement Matrices-VaR (Value at Risk)-Stress Test

Module 4: Foreign Exchange Risk & Asset Securitization

Foreign Exchange Risk -Concepts and Terminology- Introduction-Management of Foreign Exchange Risk: Transaction Exposure-Translation Exposure-Operating Exposure-Currency Futures-Currency Options
Asset Securitization: An Overview-Basic Attributes, Cash Flows and Structuring Payment Structure -Credit Rating and Credit Enhancements-Types of Securitization: Residential Mortgage Backed-Securities (RMBS)-Credit Card Securitization -Credit Enhancements using CDS-Collateralized Debt Obligation

Module 5: Asset Liability Management

Asset Liability Management in Banks: Components of a bank's balance sheet – components of liabilities, components of assets, bank's profit and loss account, meaning and significance of Asset Liability Management (ALM), purpose and objectives of ALM.

References

1. Indian Institute of Banking and Finance.2008. *Risk Management*. Macmillan
2. Rene Stulz M. 2009. *Risk Management and Derivatives*. Cengage Learning
3. Seethapathi .K..2007. *Risk Management – An Enterprise Wide Approach*. ICFAI.
4. Padmalatha Suresh, Justin Paul 2019, Management of Banking And Financial Services, Pearson
5. Kanaiah Singh and Vinay Dutta, 2019, Commercial Bank Management, McGraw hill publications
6. Moorad Choudhry, 2018, An introduction to banking – Principles, strategy and risk management, Wiley

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Fundamentals of Insurance	3	EC	50	50

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

Course Outcome	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Insurance and risk management
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in risk management by understanding insurance based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the risk related data to explore and establish relationships in the area of insurance services.
CO5	Evaluating	Make the students capable of evaluating the impact of risks and ways to overcome such risks by insurance.
CO6	Creating	Generate scenarios of risk and use of knowledge of insurance to contain and mitigate risk.

12. FUNDAMENTALS OF INSURANCE

Objective: To impart to the students theoretical as well as practical knowledge with respect to different types of insurance and to give them a picture about the insurance market in India.

Module 1

Concept of risk in insurance: Definition, degree of risk, categories of risk, types of pure risk, types of personal risk, types of property risks; Concept of insurance: Definition, basic characteristics of insurance, purpose and need of insurance, role of insurance in economic development; Risk management: Meaning, objectives of risk management – prior to a loss and after a loss, risk management process.

Insurance market in India: Origin and growth of insurance companies in India – LIC, GIC, private sector and foreign insurance companies; Bancassurance; Malhotra Committee on Insurance Sector Reforms – main recommendations; Insurance Regulatory Development Authority (IRDA) – objectives, powers and functions.

Module 2

Essentials of a valid contract: Offer and acceptance, consensus ad idem, capacity to enter into a contract, consideration, legality of objective; void and voidable contracts; immoral and illegal contracts

Module 3

Basic principles of insurance: Principle of co-operation, principle of large numbers, principle of equality of risk; Fundamental principles of insurance contracts – indemnity, insurable interest, subrogation, utmost good faith, contribution, proximate cause, mitigation of loss; reinsurance and double insurance.

Module 4

Types of insurance: Life Insurance – Principles of life insurance; difference between life insurance and other insurance contracts; life insurance products - term life insurance, endowment assurance policies, whole life insurance, unit linked insurance, annuity policies, group insurance, micro insurance, riders, life insurance underwriting, pricing, policy benefits payment.

Module 5

General insurance – types of losses covered, types of property insurance – fire insurance, engineering insurance, transit insurance, accident insurance, income insurance, liability insurance, personal insurance.

References

1. Mishra K.C. & Thomas G.E. *General Insurance: Principles and Practice*. Cengage Learning
2. Trieschmann.Hoyt.&Sommer. 2007. *Risk Management and Insurance*. South Western.
3. HargovindDayal, 2017, *The Fundamentals of Insurance - Theories, Principles and Practices*Notion Press
4. George E Redga&MichealMcnemmara, 2017, PEARSON INDIA *Principles Of Risk Managment And Insurance* 13th Edition

11.2.10 SYLLABI OF ELECTIVE COURSES IN MARKETING AREA

Elective Courses in Marketing Area

1. Consumer Behaviour
2. Integrated Marketing Communication
3. E-Commerce
4. Marketing Research
5. Strategic Marketing
6. International Marketing
7. Sales Management
8. Services Marketing
9. Brand and Product Management
10. Retail Management
11. Digital Marketing
12. Customer Relationship Management
13. Marketing Analytics

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Consumer Behavior	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Consumer behavior, like motivation, attitude, personality, learning, social influence, new product adoption etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to generating consumer insights for marketing decision making process.
CO3	Applying	Develop application skills in understanding consumer psychology based on the understanding of the different contents delivered with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life consumer marketing problems and opportunities encountered by marketing managers, with the help of data and facts relevant to making effective marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues related positioning and other strategic marketing and tactical decisions.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of understanding consumer and tracking trends in the changing nature of consumer behavior.

1. CONSUMER BEHAVIOUR

Objective:

The basic objective of this course is to develop an understanding about the many aspects of consumer behaviour and its applications in marketing.

Module I:

Introduction to Consumer Behaviour - definition, components, four domains of consumer behaviour - factors that affect it. Overview of Consumer behaviour concepts applications in making marketing decisions. Consumer Behaviour and marketing Strategy- linkage. overview of consumer behaviour research methods. Psychographics: Values, Personality, and Lifestyles

Module II:

Psychological core 1-Consumer motivation, ability, and opportunity to process information; make consumer behaviour decisions; its influence factors and outcomes. consumers' exposure and attention to marketing stimuli ;consumer sensory perceptions – role of marketing tactics. Pre-attentive processing, Absolute threshold, Differential threshold/just noticeable difference (j.n.d.) Subliminal perception, Perceptual organisation.- Consumer knowledge and consumer understanding. Knowledge content and structure- concepts like schemas, associations, images, categories, and prototypes and its implications to marketers.

Module III:

Psychological core 2Consumer attitudes-importance and Characteristics. The Foundation of Attitudes – cognitive and affective – in both high effort and low effort buying behaviour. Cognitive and affective based Attitude Formation and Change-source, message and context .classical conditioning, mood, Attitude towards Ad, the mere exposure effect. Analytical Processes of Attitude Formation Theory of reasoned action and theory of planned behaviour. Memory and Retrieval – types, ways to enhance.

Module III:

Consumer decision making process-Problem Recognition, Internal and external search process.

Consumer judgement and decision making process- high effort and low effort buying context. Evaluative criteria, decision rules.

Post-decision process-dissonance, regret, Learning from Consumer Experience, Satisfaction/Dissatisfaction, disposition, recycling. Role of culture and Social Influences on Consumer Behavior.

Module V:

Social Class and Household Influences. Adoption of, Resistance to, and Diffusion of Innovations. Ethics, Social Responsibility, and the Dark Side of Consumer Behaviour and Marketing. Tracking Indian urban and rural consumer – size, profile market structure,

evolution and trends Understanding & influencing consumers- neuro-marketing approach.

References

1. Hoyer, MacInnis, Peiters. *Consumer Behaviour*, South western Cengage learning , sixth edition.
2. Rama Bijapurkar, *Never before world-tracking the evolution of consumer India*, Penguin, India
3. Hawkins, D I etc. *Consumer Behaviour Implications for Marketing Strategy*. Texas, Business.
4. 5. Morin, Renvoise, *Persuasion code* Wiley
5. Schiffman,, Wisenbilt, Ramesh Kumar *Consumer Behaviour*, Pearson, 11th edition India.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Integrated Marketing Communication	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Consumer behavior, like DAGMAR Approach of communication objectives, steps in Advertising Campaigns, media planning etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to generate insights for developing integrated marketing communication.
CO3	Applying	Develop application skills in understanding integrated marketing communication process including advertising campaign management and other promotion tools like Sales Promotion ,PR, sponsorships , event management etc.
CO4	Analysing	Impart skills to analyse the real life advertising and promotion development planning and implementation issues encountered by marketing managers, with the help of data and facts relevant to making effective marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues related to strategic marketing and tactical decisions. .
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of advertising and promotion including advertising appeals, media selection and other online media strategies.

2. INTEGRATED MARKETING COMMUNICATION

Objective: The objective of the course is to introduce the concepts and processes of advertising and sales promotion as well as to highlight the need for integrating the individual elements of the marketing communications mix.

Module 1: Introduction to Integrated Marketing Communication (IMC) - IMC as an Integral Part of Marketing – Buying Decision Process - Communication Response Hierarchy – Setting Communication Objectives: DAGMAR Approach -Budgeting for Marketing Communication.

Module II: Fundamentals of Advertising Campaigns - Brand Positioning through Advertising; use of appeal in advertising; Elements of Print Advertisement - Scriptwriting for Radio and Television, Celebrity Endorsement; Legal and Ethical aspects of Advertising.

Module III: Advertising media, media planning and scheduling; advertising & promotion budgets, Advertising research; Advertising Agencies – Roles – Types - In House Agencies - Direct Response Agencies - Sales Promotion Agencies - PR Firms - Client Agency Relationship - Agency Selection - Agency Compensation;

Module IV: Promotion Tools: Sales Promotion - Trade Oriented Sales Promotion - Direct Marketing – PR – Publicity – Sponsorships –Mobile Advertising – Word-of-Mouth -Village Fairs - Trade Shows - Exhibitions and Event Management - Transit Advertising ; Personal Selling ; Strategies for combining Advertisements and Promotional Tools for IMC.

Module V: Online Marketing Communication Process; Online Advertising - Online Sales Promotion - Online PR - Direct Marketing through Internet. - Impact of Consumer Generated Communication - Virtual Community Influence on IMC.

References

1. George E Belch & Michel E Belch, Advertising & Promotion: An Integrating Marketing Communication Perspective, Tata McGraw Hill, 2014
2. Kenneth E. Clow, Donald E. Baack, Integrated Advertising, Promotion, and Marketing Communications, Pearson 2016
3. Lawrence Ang, Integrated Marketing Communications: A focus on new technologies and advanced theories, Cambridge University Press, 2014
4. Aaker, David A *Advertising Management* , Prentice Hall of India, New Delhi 1998
5. Blattberg, Robert C and Scott, A Neslin, *Sales Promotion Concept, Methods and Strategies*, Englewood Cliffs, New jersey, Prentice Hall Inc., 2011
6. Batra, Rajeev *Advertising Management* – Prentice Hall of India Pvt. Ltd., 2002
7. Kazmi, SHH – *Advertising and Sales Promotion* Excel Books, 2009

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		E-Commerce	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to E-commerce like B2C, B2B, C2C, P2P, M Commerce. Internet protocols, Electronic Payment Technology etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to generate insights for designing effective ecommerce solutions.
CO3	Applying	Develop application skills in understanding e-commerce technology tools and solutions in different e-commerce domains.
CO4	Analysing	Impart skills to analyse the real life e-commerce n development, planning and implementation issues encountered by managers, studying cases and application exercises.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues related to e-commerce strategic thinking and action..
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of evolving e-commerce technology options and other technology infrastructure development platforms.

3. E-COMMERCE

Objective: The objective of the course is to acquaint the students with the use of E-Commerce in competing markets.

Module I: Introduction to E-Commerce:

Types of E commerce. B2C, B2B, C2C, P2P, M Commerce. Issues in E Commerce Collapse of the DotCom Bubble and the lessons for future- . Business Models in E

Commerce, Emerging legal frame work of E Commerce. Ethical Political and social Issues of E Commerce.

Module II: Technology Infrastructure for E Commerce:

The internet, technology and standards. Internet protocols. Markup languages. Web servers, browsers and clients. Search engines and E mail, Bots, Emerging applications like streaming media, distributed computing, E Learning.

Internet Service Providers – Internet access providers – Internet Vs. Online Services: Concepts – Technology – Applications –

Developing and putting on line a site. Domain registration, hiring web space, promoting the site to develop traffic.

Module III: E Commerce payment systems:

Electronic Payment Systems: Electronic Payment Technology – Digital Cash – Electronic check – On-line Credit Card; Electronic Commerce and Banking; Changing dynamics in the banking Industry – Home banking Implementation approaches – Open Vs. Closed models Management issues in online banking Electronic Commerce and Retailing – Delivery systems in E commerce. Logistics of delivery.

Module IV : Marketing for E Commerce:

Marketing for E Commerce. Promoting the products and services, Internet marketing technologies. Web transaction logs and customer profiling and targeting. Databases, Data mining Data ware housing, Data analysis, mailings and spam. Marketing and branding strategies in E Commerce. On line marketing research, Digital copyrights and Electronic publishing.

Module V: E Commerce some areas of business:

Retailing on the web and On line shops, Online services –travel services, on line financial services, Career and job search services. B2B Applications, Supply chain management, CRM, Online Auctions, Portals and Communities, Emerging trends in E-Commerce

References

1. Laudon, Kenneth C and Traver Carol, *E Commerce-Business, Technology and Society*, Pearson
2. Cady, G H and Part McGreger, *The Internet*, BPB Pub. Delhi
3. Carpenter Phil *e Brands*, HBS Press, Boston
4. Keen, Peter and Mark McDonald *The e-Process Edge*, Tata McGraw-Hill, Delhi
5. Mann, Catherine, L *Global Electronic Commerce*, Institute for International Economics, Washington, DC
6. Oberoi, Sundeepe-*Security and You*, Tata McGraw-Hill, Delhi
7. Rich, Jason R. *Starting an E-Commerce Business*, IDG Books, Delhi

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Marketing Research	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Marketing research like MR research designs, primary and secondary data sources, sampling types and marketing research tools types both quantitative and qualitative.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to marketing research process.
CO3	Applying	Develop application skills in Marketing research based on the understanding application of MR tools with the help of application exercises.
CO4	Analysing	Impart skills to analyse the real life marketing research problems and opportunities encountered by marketing managers, with the help of data analysis tools and data collected using small student projects.
CO5	Evaluating	Make the students capable to evaluate the impact of their research strategies made in the context of implementation, limitations and other implication issues on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of designing new methods of research applications in the area of marketing.

4. MARKETING RESEARCH

Objective:

This course emphasizes an applied approach with practical applications that give students a basic understanding of the scope of marketing research by means of lectures, case studies, group discussions, seminars, games and research projects.

Module I:

The nature of marketing research and its applications types of MR. Decision making in marketing and the role of MR to provide relevant information. Marketing Information Systems and Decision Support Systems. The MR process and Research Design.

Module II:

Sources of data, Primary and secondary sources. The sources of secondary data. Audits and panel data. Surveys and Experiments in marketing research. The experimental designs in MR.

Module III:

Measurement in MR. Concept of scales and property of scales- reliability and validity. Design of questionnaires and Schedules. Specific type of measurement instruments- attitude scales, measures of emotion, perceptual scales. Qualitative research methods. FGDs, Depth interviews, Content analysis, Projective techniques, Observation and Physiological measures.

Module IV:

Sampling Sample size determination, sampling plans and methods; Field work planning and control; Data analysis- Data Editing, Coding and tabulation. Use of software. Data screening and purification. Frequency tables, Cross tabulation, measures of central tendency and variation. Tests of hypothesis- Uni and multi variate tests Z test, T test, Chi Square tests and ANOVA- univariate and multi variate. Analysis of Experimental designs. Non-Parametric tests.

Module V:

Measures of association, Correlation and regression, Advanced methods of analysis in MR- Cluster analysis, factor analysis, Multi-dimensional scaling, Conjoint analysis, Multiple Discriminant analysis,

References

1. Tull, Donald S, Hawkins Del I, *Marketing Research –Measurement and Methods*, PHI
2. Nargondkar, *Marketing Research*, TMH
3. Malhotra ,Naresh, *Marketing Research* , PHI
4. William G. Zikmund, Dryden, *Exploring Marketing Research*

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Strategic Marketing	3	EC	50	50

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

Course Outcome	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Strategic Marketing like SBUs, product differentiation; brand positioning, market challenger and niche strategies.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to strategic marketing decision making process.
CO3	Applying	Develop application skills in strategic marketing based on the understanding of the different case studies application exercises.
CO4	Analysing	Impart skills to analyse the real life strategic marketing problems and opportunities encountered by marketing managers, with the help of data and tools drawn from the secondary data and field studies.
CO5	Evaluating	Make the students capable to evaluate the impact of their strategic marketing decisions made in the light of implementation issues and its implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of developing sustainable competitive advantage based on marketing function.

5. STRATEGIC MARKETING

Objective:

The basic objective of this course is to develop skills for analysing market competition and design appropriate competitive marketing strategies for higher market share.

Module I :

Nature and scope of market oriented strategic planning – Corporate & division planning SBUS, Business strategic planning, the marketing process, marketing plan.

Module II :

Market Situation Analysis; Analysis of Competitor's Strategies and Estimating their Reaction Pattern and Competitive Position; Market Leader Strategies – Expanding the Total market, Protecting market Share, Expanding market Share

Module III:

Market Challenger Strategies – Choosing and Attack Strategy, market Follower Strategies; market Nicher Strategies; Competitive Market Strategy for Emerging Industries, Declining Industries and Fragmented Industries; Balancing Customer and Competitor Orientations, Industry Segmentation and competitive Advantage;

Module IV:

Product Differentiation and brand Positioning, Competitive Pricing. Competitive Advertising, Role of Sales Promotion in Competitive Marketing.

Module V:

Balanced Score Card, Formulating strategies for sustainable competitive advantage; Emerging trends in strategic marketing

References

1. Cravens, D W *Strategic Marketing Homewood Illinois*, Richard D. Irwin.
2. Kaynak E and Savitt, R *Comparative Marketing Systems*, New York, Praegar,
3. Koller Philip *Marketing Management Analysis, Planning, Implementation and Control*, New Delhi, Prentice Hall of India.
4. Porter M E *Competitive Advantage: Creating, Sustaining Superior Performance*, New York, Free Press.
5. Porter M E *Competitive Strategy: Techniques for Analysing Industries Competitors*, New York, Free Press.
6. M.J. Xavier, *Strategic Marketing*, Response Books. A division of Sage Publications.
7. Tony Procter *Strategic Marketing*
8. Musadiq A. Sahaf, *Strategic Marketing*, PHI.
9. Shajahan S, *Viva Strategic Marketing*

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		International Marketing	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to International Marketing , like International market segmentation and market coverage strategies
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to international marketing strategy development process.
CO3	Applying	Develop application skills in International Marketing based on the understanding of the different contents delivered with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life International marketing problems and opportunities encountered in the light of emerging International business environment.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues and implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain International marketing strategies.

6. INTERNATIONAL MARKETING

Objective:

The objective of this course is to acquaint the students with the environment, principles and strategies of and trends in international marketing and related aspects.

Module I:

Introduction to international business; why go international? Special problems/features of international marketing vis-a-vis domestic marketing; internationalisation stages and international marketing orientations.

International business environment; economic environment; political and legal environment; demographic and cultural environment; natural environment; international trading environment.

Module II:

International marketing research; market profiling' analysis and selection; market entry and operating strategies ; exporting; licensing; contract manufacturing; foreign assembly, foreign production; joint ventures; production in free areas; third country location; counter trade; strategic alliance.

Module III:

International market segmentation and market coverage strategies differentiated marketing; undifferentiated marketing; concentrated marketing; niche marketing.

Product strategies; international marketing and PLC; pricing strategies; promotion strategies; distribution strategies.

Module IV :

International marketing organization; export department; subsidiary; foreign branches/offices; global organisation. Multinational corporations; foreign direct investment.

Module V:

Foreign trade strategy of India; Foreign Trade Policy, export promotion measures; analysis of global trade and foreign trade of India; major problems of India's export sector. trends, problems and prospects of globalisation of Indian business.

References

1. W.J. Keegan :*Global Marketing* (PHI)
2. Cateora, Philip :*International Marketing* (Richard D Irwin)
3. Keegan, Warren :*Global Marketing* (Prentice Hall of India)
4. Majaro, Simon: *International Marketing* (GeorgeAtten& Unwin)
5. Ministry of Commerce :*Foreign Trade Government*

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Sales Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to sales management like AIDA framework, personal selling process, sales force motivation, sales force management.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to sales management and personal selling.
CO3	Applying	Develop personal selling and sales force management skills based on the understanding of the different contents delivered with the help of role plays, short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life selling situations and opportunities encountered by sales people, with the help of various metrics and decision issues relevant in the personal selling context.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of sales force management and implementation issues and its implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of sales motivation, performance evaluation, sales audit budgeting and quota preparation.

7. SALES MANAGEMENT

Objective:

The objective of this course is to acquaint the students with the principles, practices and strategies for effective sales management.

Module I :

Salesmanship Fundamentals – Nature of selling, Salesmanship, Theories of salesmanship – AIDAS Theory, Right set of circumstances theory, Buying formula theory and Behavioral equation theory, Qualities of salesmen, Objectives of sales management – Sales Function and The Sales Organisation – Concept of Personal selling, Stages in the personal selling process, Sales organisations and its purposes, Setting up of sales organisations, Basic types of sales organisations.

Module II:

Selection and Training – Sales job analysis, Sales job description, Recruiting Sales persons. Selection – Screening, Interviewing/Testing, Induction and placement – Building Sales training programmes, Deciding Training Contents, Selecting training methods, Execution and evaluation of training programmes

Module III :

Sales Territories – Concept of Sales territory – Procedures for setting up Sales territories – Deciding assignment of sales personnel to territories – Sales Budget and Sales Quota – Sales budget – Purpose, form and content of sales budgets, Sales Quota – Concept, Types of quota, Quota setting procedures, Administering the quota system.

Module IV:

Motivating Salesmen – Concept of motivation, Need for motivating sales persons, Motivation and morale of sales persons, Application of different motivation theories in sales management – Compensating Salesmen – Requirement of a good sales compensation plan, Types of compensation plans, Steps in devising a sales compensation plan.

Module V :

Performance Evaluation for Salesmen – Standards of performance, Relation of performance, standard to personal selling objectives, Recording actual performance, Evaluation – Sales Meetings and Field Sales Control – Sales meetings - Planning and staging sales meetings, Sales contests, Sales Control – The sales audit, Sales analysis Marketing cost analysis.

References

1. Stanton, Buskirk and Spiro: *Management of a Sales Force*, Irwin Publishers.
2. Charles Futrell :*ABC's of Selling*, Irwin Publishers.
3. Stilt, Cundiff and Govoni: *Sales Management – Decisions, Strategies and Cases* Prentice Hall
4. Anderson, Hair and Bush: *Professional Sales Management*, McGraw Hill International editions.
5. Bill Donaldson: *Sales Management by Theory and Practice*, Mc Million.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Services Marketing	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to services marketing like service marketing triangle, SERVQUAL, service marketing extended mix, service branding recovery and complaint handling process.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to effective service management decisions.
CO3	Applying	Develop application skills in services marketing based on the understanding of the different contents, tools and topics delivered with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life service marketing problems and opportunities encountered by marketing managers in different service sectors.
CO5	Evaluating	Make the students capable to evaluate the impact of their service marketing decisions made in the context of design and implementation issues and its implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of extended service marketing mix and delivering service quality.

8. SERVICES MARKETING

Objective:

The objective of this course is to develop insights into emerging trends in the service sector in a developing economy and tackle issues involved in the management of services on national basis.

Module I: Emergence of service economy, nature of serviced – goods and service marketing – Marketing challenges, service triangle and marketing mix. Service classification. Integrated approach to service management.

Module II: Service consumer behavior expectation, perception and service encounter. Service quality dimensions and gap model of service quality.

Module III: Listening to customers, Marketing Research in services. Targeting customers, relationship marketing. Creating service product, blue printing advertising Branding and packaging of services.

Module IV: Complaint handling, Recovery management, Service Guarantees. Demand and supply management, pricing of services.

Module V: Physical evidence of Service, service scope. Marketing of financial services and telecommunication services the Indian scenario

References:

1. Lovelock Christopher H. *Managing Services: Marketing Operations and Human Resources*; Englewood Cliffs, New Jersey, Prentice Hall, Inc. 1995
2. Lovelock, Christopher H. *Services Marketing* Englewood Cliffs, New Jersey, Prentice hall Inc. 1993
3. McDonald, Malcom and Payne, *A Marketing Planning for Services* butterworth, Heinemann, 1996
4. Newton M P Payne, A *The Essence of Services Marketing* New Delhi, Prentice Hall of India, 1996
5. Verma, H V *Marketing of Services* , New Delhi, Global Business Press, 1993
6. Zeithaml, V A and Bitner, M J. *Services Marketing* New York, McGraw Hill, 1996

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Brand and Product Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to branding practices, Product management, Brand identity, Brand Personality, Brand Image, brand extension, new product development etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their inter-relationships to aid proper understanding of branding.
CO3	Applying	Develop application skills in Branding domain based on the understanding of the different branding strategies with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life brand and product management problems and opportunities encountered by marketing managers, with the help of data, brand success and failure stories.
CO5	Evaluating	Make the students capable to evaluate the impact of their brand decisions made in the context of implementation issues and implication on product management level.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of branding and product strategies for long term growth.

9. BRAND AND PRODUCT MANAGEMENT

Objective:

The objective of this course is to impart in-depth knowledge to the students regarding the theory and practice of Brand and Product Management.

Module I:

Understanding brands – branding practices, Brand Manager concept & organization
Product management: introduction.

Module II:

Assessment of Brands through Research – Brand identity, Brand Personality, Brand Image, brand identity, Brand Positioning, Brand Equity; Value addition from Branding – Brand-customer Relationships, Brand Loyalty and Customer loyalty.

Module III:

Managing Brands; Brand Creation, Brand Extensions Brand-product Relationships, important factors in conception and various stages of growth and maturity of brands.

Module IV:

Brand Portfolio, brands going international, brand revitalization, brand repositioning; financial aspects of brands, branding in different sectors: customer, industrial, retail and service brands.

Module V:

New product development and launching, Managing development risk, Product portfolio management; Incremental and radical innovation; product leadership; Power brands; Emerging trends in brand and product management

References

1. Aaker, David, *A Managing Brand Equity*, New York, Free Press
2. Cooper, *Product Leadership*
3. Linda Gorchels, *The Product Manager's Handbook*, McGraw-Hill
4. C. Merle Crawford, C. Anthony Di Benedetto, *New Products Management*, McGraw Hill/Irwin
5. Cowley, Don *Understanding Brands* London, Kogan page
6. Kapferer, J N *Strategic Brand Management* New York, Free Press
7. Murphy, John A. *Brand Strategy* Cambridge, The Director Books
8. Steward, P. *Building Brands Directly* London, MacMillan
9. Upshaw, Lyhh B. *Building Board Identity: A Strategy for success in a hostile market place* New York, John Wiley:
10. SubrotoSengupta, *Brand Positioning*. Tata McGraw Hill
11. Fiona Gilmore (Ed) *Brand Warriors*, Profile Books
12. John, Philip Jones, *What is in a Brand?* Tata McGraw Hill
13. YLR. Moorthi, *Brand Management – The Indian Context*, Vikas Publishing House

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Retail Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to retailing like retailer types, retail pricing merchandising ,store layouts etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to retail management decision making process.
CO3	Applying	Develop application skills in retailing based on the understanding of the different contents delivered with the help of short cases, application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life retailing related problems and opportunities encountered by store managers, and retail heads with the help of data and facts provided in cases to making effective retailing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their retailing decisions made in the context of implementation issues and its implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of merchandising, private label, retail promotions, pricing and other store design aspects relevant in the context of retail management process.

10. RETAIL MANAGEMENT

Objective:

The course aims to acquaint students with the various concepts, tools, techniques and platforms used in the planning and execution of different digital marketing campaigns in businesses. Developing a Customer centric digital marketing strategic campaign building

perspective and campaign optimising skills in students is what the course aims to impart in students.

Module I:

Overview of Digital marketing and the online environment –orgins, characteristics, internet users and digital advertising size, type, growth, digital marketing strategy, tools and techniques; digital marketing campaign planning process. Major B2C and B2B internet business models.Owned, earned and paid media.

Module II:

Online consumer behavior – decision making process. Consumer segments and targeting. User experience-Website and other digital assetsplanning ,design and development.SEO-onsite and offsite- basics.

Module III:

Search engineadvertising& Online display advertising- adcampaign types, targeting, .Video marketing.Email marketing basics.

Module IV:

Social Media Marketing , Social media use statistics, Social media marketing strategy. Facebook marketing- FB for business, Ad campaign, types placement, Facebook insights and other related tools.Linkedin, Twitter, Instagram, Snapchat and Pinterst marketing – content, strategy, tools analytics and campaign.

Module V:

Mobile marketing.Online PR and Reputation Management.Web Analytics- data collection, metrics, multichannel attribution, tracking codes. Mobile analytics, universal analytics, competitive intelligence.Google Analytic account - Google Analytics Reports .

References

1. Levy, Michael & Barton A. Weitz *Retailing Management*, Irwin, London,
2. Swapna Pradhan, *Retailing Management*, Tata McGraw Hill (3 edn.), 2010
3. Piyush Kumar Sinha, Uniyal, *Managing Retailing*, Oxford University Press, 2007
4. Chetan Bajaj, RajnishTuli, Nidhi Srinivastava, *Retail Management*, Oxford University Press, 2010
5. Barry Berman, Joel Evans, *Retail Management – A Strategic Approach* (11th Edn,), 2010.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Digital Marketing	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to search engine optimization, search advertising, display advertising, social media Marketing, web analytics, content marketing and campaign management and many other digital marketing tools.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to digital marketing campaign planning development and implementation process.
CO3	Applying	Develop application skills in digital marketing based on the understanding of the different digital marketing tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life digital marketing problems and opportunities encountered by marketing managers, with the metrics and other established frameworks relevant to making effective digital marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of digital marketing campaign rollout for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven digital marketing practices and innovative content and other digital assets creation process.

11. DIGITAL MARKETING

Objective:

The course aims to acquaint students with the various internet and e-commerce business models and the process of marketing through Internet, Social Media and Mobile Marketing relevant for 'Business to Business' (B2B), 'Business to Consumer' (B2C) and 'Not-for-Profit' businesses.

Module I:

Overview of Digital marketing, the online environment – tools and techniques; characteristics of digital marketing and new media; digital marketing and e-commerce evolution and growth; history. Major e-commerce B2C and B2B business models.

Module II:

Understanding online consumer behavior – B2C and B2B buying process. Website planning design and development - process tools and techniques. Different websites, functions and design issues. Content Marketing Strategy, e-CRM basics.

Module III:

Paid and non-paid ; inbound and outbound digital marketing campaigns . Search Engine Optimization (SEO): On- site and off-site optimization. Online display advertising PPC- Search engine advertising, and Network advertising .Affiliate Marketing programmes.

Module IV:

Social Media Marketing - Understanding various social media platforms – marketing through Facebook, Youtube, Twitter, LinkedIn and Pinterest. Viral Marketing, Online PR and Reputation Management;

Module V:

Website Analytics- Google Analytic account - Google Analytics Reports .Mobile marketing-features tools and campaign planning; Local and location based Mobile Marketing tools and techniques. Measuring success of mobile marketing campaigns. Email Marketing-tools and techniques and process.

References

1. Dave Chaffey and PR Smith *E marketing excellence planning and optimizing your digital marketing* : Butterworth-Heinemann , Elsevier
2. Damian Ryan and Calvin Jones, *Understanding digital marketing: marketing strategies for engaging the digital generation*, KOGAN PAGE, London. 2014.
3. Damian Ryan and Calvin Jones, *The best digital marketing campaigns in the world: mastering the art of customer engagement*, KOGAN PAGE London.2014
4. Kenneth Laudon and GuericoTraver*E-commerce Business , technology and society*, Pearson 11th edition,2015

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Customer Relationship Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to CRM processes, Cross Selling, Cross Selling, Customer life time value, Analytical CRM and many other CRM tools.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to Customer Relationship management planning development and implementation process.
CO3	Applying	Develop application skills in CRM based on the understanding of the different CRM frameworks and analytical tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life CRM design problems and opportunities encountered by managers, with the metrics and other established frameworks relevant to making effective strategic marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of CRM rollout for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven CRM practices and. CRM budget planning and CRM return on investment objectives.

12. CUSTOMER RELATIONSHIP MANAGEMENT

Objective:

The aim of this course is for students to fully understand how a Customer Relationship Management Programme should be formulated and implemented. The course will emphasize developing the knowledge and skills needed to create a successful CRM programme.

Module I:

CRM concepts: Acquiring customers, customer loyalty, and optimizing customer relationships, Strategic frame work of CRM – origins, the role of CRM. Types of CRM. Key cross functional CRM processes

Module II:

CRM strategy: CRM strategy development process. Customer strategy. The CRM value creation process -Customer Profitability, customer acquisition and retention. Cross Selling Customer segment life time value.

Module III:

The multi-channel integration process- customers and the use of channels, sales force, call center, internet, website, direct mail, e-commerce, m-commerce. channel integration, channel strategies- role of customer channel experience and channel categories.

Module IV:

Analytical CRM- information management process in CRM. The data repository- data marts, data warehouse. Analytical tools for datamining- visualization tools, segmentation, prediction tools, neural networks, decision trees, affinity grouping, churn management, customer profiling and profitability analysis, OLAP. Data protection, privacy codes of practice.

Module V:

IT systems – front office and back office applications-sales force automation, call center management, marketing automation campaign management,. Selecting a CRM solution. Organising for CRM implementation. CRM change and project management. Establishing a CRM performance monitoring system-standards, metrics and key performance indicators. CRM budget and CRM return on investment.

References

1. Peelen E. D., *Customer relationship management*, Pearson Education 2010.
2. Adrian Payne, *Hand Book of CRM- Achieving Excellence Through Customer Management*, Butterworth Hienennan,
3. Francis Buttle ,*Customer Relationship Management Concepts and Technologies*, Butterworth Hienennan
4. Paul Greenberg fourth edition, *CRM at the Speed of Light*, Tata McGraw Hill.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Marketing Analytics	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Marketing Decision Models, Customer Choice Models, Customer Lifetime Value Assessment models and many other marketing analytics tools and techniques
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to marketing analytics tools used for analysing marketing data.
CO3	Applying	Develop application skills in marketing analytics based on the understanding of the different research tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life application situations of marketing analytics tools for marketing managers, with the metrics and other established frameworks relevant to making effective digital marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of using marketing analytics tools for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven digital marketing practices and innovative content and other digital assets creation process.

13. MARKETING ANALYTICS

Objective:

The aim of this course is to acquaint students with various tools and techniques for analyzing marketing data to help make decisions about market segmentation and target

market selection; new product and service development; product positioning; and allocation of marketing mix expenditures to accomplish various business objectives.

Module I: The Art and Science of Marketing Decisions

Marketing Decision Models, Response Models Response Modelling; introduction to marketing engineering ME XL software Strategic Market analysis, Market/Product Analysis Methods; Market Entry and Exit Decisions; Product Portfolio Models, GE/McKinsey portfolio for project selection/prioritization

Module II: New Product Decisions

New Product decision Models for new product forecasting and testing New Product Design, Conjoint Analysis for Product Design, Marketing Decisions: Product Design Ratings Based Conjoint models, Forecasting the sales of New Products, Overview of the Bass model, Technical description of the Bass model, Extensions of the basic Bass model, Pre-test Market Forecasting Trial-Repeat models

Module III: Customer Analysis & Lifetime Value Concept:

Customer Lifetime Value Assessment and Loyalty data and customer Value model and techniques, Assessment, Software Choice models for customer targeting - Targeting and Customer Value: Logit Models, Customer Choice Models, Multinomial Logit choice models; Targeting Segments.

Module IV: Marketing Decisions

Segmentation and Targeting and Positioning, Designing and Collecting Data for Segmentation Methods, Behavior-Based Segmentation: Cross-Classification, Regression and Choice Models; identifying market segments, Choosing Target Segments Distinguishing segments offer the highest potential (Cluster & Discriminant analysis) Product Positioning using perceptions and preferences; (MDS and Clustering) Positioning Through Brand Linkages, Positioning Using Mapping Techniques Combining Perception and Preference Maps Translating Preference into Choice

Module V:

Resource Allocation Promotional Analysis Planning promotional budget optimal level of promotional spending. Price Planning -Estimate linear and multiplicative models for optimal level of price and advertising .Measuring Price Promotion Effects. Advertising budgeting with a linear response function, estimating nonlinear response models - \ADBUDG; Profit Models -Estimate an ADBUDG function and create a profit model from it. Resource Allocation- Sales Force Allocation Multiplicative Models sales force size and allocation.

References

1. Gary L. Lilien, ArvindRangaswamy and ArnandDBruyn, *Principles of Marketing Engineering*, Trafford Publishers, 2007
2. Gary L. Lilien, Philip Kotler and K. Sridhar Moorthy, *Marketing Models*, Englewood Cliffs, NJ: Prentice-Hall . .
3. Wierenga, Berend (Ed.) Springer, *Handbook of Marketing Decision Models*, 2008 ,

11.2.11 SYLLABI OF ELECTIVE COURSES IN HUMAN RESOURCE MANAGEMENT AREA

Elective Courses in Human Resource Management Area

1. Strategic Human Resource Management
2. Management of Industrial Relations
3. Training and Development
4. Global Human Resource Management
5. Compensation Management
6. Human Resource Planning and Development
7. Organisational Change and Development
8. Managing Interpersonal and Group Processes
9. Performance Management
10. HR Analytics

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Strategic Human Resource Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to Strategic Human Resource Management such as organizational wealth, framework of HR strategy, strategic change and balanced scorecard
CO2	Understanding	Empower the students to understand complex ideas in Strategic Human Resource Management to make them ready for application in real life business scenarios.
CO3	Applying	Build application skills in Strategic Human Resource Management to build a future ready, competent and diverse workforce.
CO4	Analyzing	Provide the skills to analyze and identify various Strategic Human Resource Management related issues affecting day to day business faced by the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of relevant Strategic Human Resource Management interventions that facilitate futuristic business strategies.
CO6	Creating	Create inventive ways to develop and share innovative Strategic Human Resource Management practices for future business enhancement.

1. STRATEGIC HUMAN RESOURCE MANAGEMENT

Objective: The purpose of the course is to enable students to develop and appreciate the perspective that human resource has a strategic significance in an organisation, and the initiatives needed to achieve the ‘fit’ with the concerns of the business on a continued basis.

Module I: The conceptual framework: Concept of HRM, HRM and personnel management, reservations about HRM, evaluation of HRM, the hr system. Investment perspective of HRM, concept of strategic HRM, nature of SHRM, strategic fit, resource-based view of strategic HRM, best fit approach, bundling of HR practices.

Module II: Organisational Wealth from HR perspective: Intellectual Capital, Human Capital, Social Capital and Organisational Capital. Models of SHRM – General Models, the performance, commitment and involvement management models. Business model, role of HR in business model innovation. The strategic role of HR- strategic business partner model, strategic role of HR practitioners.

Module III: Framework of HR strategy: Nature, purpose and types of HR strategies; developing, setting out, implementing and evaluating HR strategies. The impact of strategic HRM-concept of performance, HR activities and organisational performance, high performance work system, components of HPWS. Strategic HRM in action.

Module IV: HR strategies: Human Capital Management, HCM and business; Organisational Development, OD and business; Knowledge Management, Strategic KM issues, KM and business; Employee Resourcing, Employee Value Proposition and strategic resourcing plans; Talent Management, process of TM; Strategic Human Resource Development (SHRD), Elements of HRD; Reward strategy, content of reward strategy and effective reward strategies

Module V: Implementing Strategic Change: Employee engagement, factors affecting and enhancing employee engagement, Corporate social responsibility, rationale for CSR, strategic role of HR in CSR. HR practices that improve business performance, Psychological Contract, The Balanced Business Scorecard, Strategic HRM in India, Strategic HR perspective of Global Organisations in India, Emerging concepts and trends.

References

1. Mello, Jeffrey (2007) Strategic Human Resource Management, 2nd edn. Thomson Learning, India.
2. Armstrong, Michael (2011) Armstrong's Handbook of Strategic Human Resource Management, 5th edn. Kogan page, New Delhi.
3. Das, Pulak (2011) Strategic Human Resource Management- A Resource Driven Perspective, Cengage Learning, India Pvt. Ltd., New Delhi.
4. Sharma, Anuradha and Khandekar, Aradhana (2006) Strategic Human Resource Management- An Indian Perspective, Response Books, New Delhi.
5. Dessler, Gary and Varkkey, Biju (2011), Fundamentals of Human Resource Management- Content, Competencies, and Applications, Pearson Prentice Hall, Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Management of Industrial Relations	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to industrial relations like its history, relevance and also the related laws and regulations.
CO2	Understanding	Empower the students to understand complex ideas in industrial relations to make them ready for application in real life country specific complex scenarios
CO3	Applying	Build application skills in management of industrial relations to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and identify various industrial relations related issues affecting day to day business faced by the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of effective industrial relations management practices that facilitate futuristic business strategies.
CO6	Creating	Create inventive ways to manage industrial relations for future business enhancement.

2. MANAGEMENT OF INDUSTRIAL RELATIONS

Objective: This course provides the conceptual and practical aspects of IR at the macro and micro levels.

Module 1: Industrial Relations Perspectives: Conceptual framework and approaches to industrial relations; Influence of the emerging socio-economic scenario on industrial relations; Roles of employer/management, trade union and government in industrial

relations; IR at the shop floor, Standing Orders, salient features of Industrial Employment (Standing Orders) Act, 1946.

Module 2: Trade Union and the employee: Structure, characteristics and functions of trade unions; Trade Union Security; Theories and problems of trade unions; Recognition of trade unions as collective bargaining agents; Essentials of Trade Unions Act, 1926; Principles of Grievance Handling.

Module 3: Industrial Unrests: Industrial Unrests - causes and cures of industrial disputes; Bipartite and Tripartite machineries; Collective Bargaining, Conciliation, Voluntary Arbitration and Adjudication; Collective Agreements and settlements; Authorities for settlement of industrial disputes and relevant provisions under Industrial Disputes Act, 1947; Awards and Writ of Certiorari; Productivity Bargaining and Gains Sharing.

Module 4 :Method of Direct Action: Purpose and relevance to other peaceful methods; Strikes, Lock out-concept and elements, types and forms of strike, legal, illegal and unjustifiable strikes and lock outs; protections to workmen and prohibitions on the right to strike and lock out.

Module 5: Employee Empowerment: Industrial Democracy, Workers' Participation in Management: Industrial Peace and International Labour Organisation; IR Policy, Recommendations of II National Commission on Labour; IR and Technological Change. Emerging concepts and Trends.

References

1. Mamoria C.B. and S. Mamoria : Dynamics of Industrial Relations in India.
2. Pramod Varma : Management of Industrial Relations, Vora Publications, Ahmedabad.
3. Tripathi P.C. : Personnel Management and Industrial Relations, Sultan Chand & Sons Publications, New Delhi.
4. Ramaswamy E.A.: The Strategic Management of Industrial Relations, Oxford University Press, New Delhi.
5. Niland R. et. al: The Future of Industrial Relations, Sage, New Delhi.
6. C.S. Vekata Ratnam: Globalisation and Labour-Management Relations, Response Books, New Delhi.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Training and Development	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to learning and development such as training need analysis, training design, training development and training evaluation.
CO2	Understanding	Empower the students to understand complex ideas in training and development to make them ready for application in real life business scenarios.
CO3	Applying	Build application skills in different training and development strategies to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and identify various training and development related issues affecting day to day business faced by the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of relevant training and development interventions that facilitate futuristic business strategies.
CO6	Creating	Create inventive ways to develop and share innovative training and development strategies for future business enhancement.

3. TRAINING AND DEVELOPMENT

Course Objectives: All organisations need to pay adequate attention to equip their employees. Rapid progress in technology has changed not only in the physical facilities but also in the abstract qualities required of the men who are using them. This paper will attempt to orient the students to tailor themselves to meet the specific needs of the organisations in training and development activities.

Module I

Introduction - Training as an open system - ADDIE training process model - Approaches to Training, Trends in training - Importance concepts and meaning – Difference between training, learning, development and education - Career Opportunities in Training – OD, Strategy and Training, Motivation and Performance .

Module II

Training Need Analysis - Relevance of TNA - The TNA Model, Identifying Organizational performance gaps - Framework for conducting TNA - Organizational analysis, Task Analysis, Person Analysis - Output of TNA – training and non-training needs , Approaches to TNA – Proactive and reactive TNA.

Module III

Training Design - Organizational Constraints – Developing Training Objectives - Focus on Trainee, Training Design, Training and Organizational Intervention, Training Methods - On the Job and Off the Job Training methods - Computer based training methods - E Learning and delivery systems.

Module IV

Training Development and Implementation – Development of Training – Choosing Instructional methods - Materials and equipment – Training Facilities – KSA of Trainer, Alternatives to Development, Implementation of Training – Dry Run, Pilot Program, Transfer of Training, Key areas of organizational training.

Module V

Training Evaluation – Rationale of Evaluation, Resistance to training evaluation – Types of evaluation data collected – Kirkpatrick’s model of evaluation – Evaluating the cost of training - Cost/benefit and Cost effectiveness evaluations – Evaluating corporate training and development, Employee and Management Development.

References

1. James W Thacker and P. Nick Blanchard, Effective Training: Systems, Strategies and Practices, Pearson (2008).
2. Rolf P. Lynton and Udai Pareek, Training for Development, Vistaar Publications (Sage Group), 2006.
3. Martyn Sloman, Training Strategy for Implementing Training, Infinity Books.
4. Alan M. Saks and Robert R. Haccoun, Performance Management through Training and Development, Cengage Learning.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Global Human Resource Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Equip the student in remembering basic concepts related to global human resource management in the context of international mergers and acquisitions, technological advancements, employee discipline and cultural convergence.
CO2	Understanding	Enable the students to understand intricate concepts in global human resource management to excel in international business scenario.
CO3	Applying	Develop application skills in various global human resource management strategies to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and narrow down different issues related to global human resource management affecting organization operating at international level.
CO5	Evaluating	To help the students in building the skill to evaluate the impact of relevant global human resource management interventions that support futuristic business strategies.
CO6	Creating	Create unique ways to develop and share creative global human resource management strategies for future business enhancement.

4. GLOBAL HUMAN RESOURCE MANAGEMENT

Objective: This paper helps the students to learn how environmental and institutional constrains, including culture, impact human resource planning and other human resource functions of international firms.

Module I: Key perspectives in Global HRM – Factors influencing the need for Global HRM – Domestic Vs. Global HRM

Module II : International merger & acquisitions and Global HRM – Competitive HR strategies of MNCs – Global HRP – Global staffing – Global training and development – Global performance management – Global compensation management.

Module III: Technological advancements and Global HRM – Impacts of demographic changes and migration – Offshore sourcing – Managing international assignments including career planning.

Module IV: Employee discipline in Global HRM – Cross-national cooperation and conflicts – Workplace discrimination

Module V : Cultural convergence and divergence in Global HRM – Hofstede’s cultural dimensions – Grievance handling in Global HRM - Global employee relations - Global HRM challenges and trends – Case studies

References

1. Charles M. Vance and Yongsun Paik (2009), *Managing a Global Workforce*, PHI, New Delhi.
2. Biswajeet Pattanayak (2004), *Human Resource Management*, PHI, New Delhi.
3. Amitabh DeoKodwani and Senthil Kumar, S. (2006), *Global Human Resource Management*, ICFAI University Press
3. Hugh Scullion and David G. Collings (2011), *Global Talent Management*, Routledge
4. Peter J. Dowling, Marion Festing, and Sr. Allen D. Engle (2008), *International Human Resource Management*, Cengage Learning.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Compensation Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to compensation management such as wage, salary, job evaluation, performance based compensation, ESOP etc
CO2	Understanding	Empower the students to understand the process of compensation management to make them ready for application in real life business scenarios.
CO3	Applying	Build application skills in compensation management practices and techniques to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and identify various compensation management related issues affecting day to day human resource management practices in the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of relevant compensation management practices that facilitates futuristic human resource strategies.
CO6	Creating	Create inventive ways to develop and share innovative compensation management practices for future business enhancement.

5. COMPENSATION MANAGEMENT

Objective: This course will enable the students (i) to understand the various components of compensation and rewards, (ii) to understand the micro and macro factors influencing compensation management, (iii) to be familiarised with job based and person/

performance based compensation, and (iv) to design and implement various compensation strategies.

Module I: Compensation- Concept and Importance- Wage and Salary- Components of compensation- Theories of wage determination- Theories of Motivation and compensation-Factors influencing compensation

Module II: Macro and microeconomics of Labour Market- Legal aspects of compensation management- National and International legislations

Module III: Job based compensation- Job Analysis- Job Design-Job Evaluation- Salary surveys and Benchmarking

Module IV: Performance linked compensation- Incentive plans- Team based compensation- Compensation for Salespeople- Executive compensation

Module V: Current and future trends in Compensation Management- ESOP- International trends in Compensation Management- Strategic importance of Compensation Management- Compensation Practices in different sectors

References

1. Milkovich, G. & Newman, J. (2004). *Compensation (8th ed.)*. McGraw-Hill/Irwin.
2. Richard I. Henderson(2009). *Compensation Management in a Knowledge-Based World (10th Edition)*Pearson Education.
3. Bhattacharya, D.K.(2009). *Compensation Management*. Oxford University Press.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Human Resource Planning and Development	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to human resource planning and development such as manpower demand and supply forecasting, job analysis, strategic planning and HR audit
CO2	Understanding	Empower the students to understand complex ideas in training and development to make them ready for application in real life business scenarios.
CO3	Applying	Build application skills in human resource planning and development to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and identify various human resource planning and development related issues affecting day to day business faced by the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of relevant human resource planning and development that facilitate futuristic business strategies.
CO6	Creating	Create inventive ways to develop and share innovative human resource planning and development strategies for future business enhancement.

6. HUMAN RESOURCE PLANNING AND DEVELOPMENT

Objective: This paper is to enable the students to have a clear view of the process of human resource planning like assessing the current human resources, estimating the supplies and demand for labour and matching demand with current supplies of labour.

Module I: Concepts and process of HRP – Philosophy, history and features of HRD - HRD mechanisms or subsystems – Micro and Macro level scenario of HRP.

Module II: Micro and Macro levels of HRD - Methods and Techniques of manpower demand forecasting - Methods and Techniques of manpower supply forecasting – HRP at corporate level, national level and international level.

Module III: Job analysis and job description - Recruitment, Selection and Placement - Performance appraisal and potential appraisal - Transfer and Promotion - Training and retraining – Career planning and development - Succession planning

Module IV: HRP as a Strategic Planning - Wastage analysis of manpower – Retention – Redeployment and Exit strategies – Impact of Technology on HRP.

Module V: Human Resource Information System in Human Resource Planning and Development - Human Resource Audit - Human Resource Accounting - Current trends and issues in HRP – Case studies.

References

1. BiswajeetPattanayak (2004), Human Resource Management, PHI.
2. Rao, V.S.P. (2000), Human Resource Management, Excel Books.
3. Bhattacharya, Human Resource Planning, Excel Books, New Delhi.
4. William J. Rothwell and H. C. Kazanas (2002), Planning and Managing Human Resources, Human Resource Development Pr.
5. Paul Turner(2002), HR Forecasting and Planning, CIPD Publishing

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Organisational Change and Development	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to organizational change and development such as OD competencies, diagnostic approaches, interventions and evaluations.
CO2	Understanding	Empower the students to understand complex ideas in organizational change and development to make them ready for application in real life business scenarios.
CO3	Applying	Build application skills in different organizational change and development interventions to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and identify various organizational change and development related issues affecting day to day business faced by the organization and solve them.
CO5	Evaluating	To help the students in developing the skill to assess the impact of organizational change and development interventions that facilitate futuristic business strategies.
CO6	Creating	Create inventive ways to develop and share innovative organizational change and development strategies for future business enhancement.

7. ORGANISATIONAL CHANGE AND DEVELOPMENT

Objective: The objective of this paper is to prepare students as organisational change facilitators using the knowledge and techniques of behavioural science.

Module I: Organisation Change: An overview:

Module II: Approaches to Problem Diagnosis- Some major Techniques of Planned Changes.

Module III: Steps in OD -- General OD Competencies, OD Skills.

Module IV: Designing Interventions – Interpersonal Team, Inter group.

Module V: Evaluation of OD, Ethics of OD Professional, Future of OD.

References

1. French and Bell: Organisational Development
2. Harvey and Brown: An Experiential Approach to Organisational Development.
3. Dharani Sinha P: Consultants and Consulting Styles

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Managing Interpersonal and Group Processes	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to nature of teams, groups, interpersonal communication, team performance and interventions.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in interpersonal and group processes based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analyzing	Impart skills to analyse interpersonal and group processes to explore and establish relationships in the areas of interpersonal and organizational decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of group dynamics on interpersonal decisions, and appraise group decision making strategies
CO6	Creating	Generate new ideas and create plan for interpersonal decisions and group dynamics and proposals for business expansion and developments.

8. MANAGING INTERPERSONAL AND GROUP PROCESSES

Objective:

The purpose of this course is to advance understanding regarding interpersonal and group processes and help the participants to examine and develop process facilitation skills mainly through laboratory and other experience based methods of learning.

Module I: Nature of Groups at work

What is a group? Definition, Types of groups, Dynamics of group formation, structure and dynamics of work groups, group cohesiveness.

Module II: Group Vs Teams

Concept of Teams, Distinguishing Team from groups, types of teams – Dysfunctions of groups and Teams, Dynamics of Informal groups

Module III: Effective Team Performance

Creating Teams, making Team successful obstacles to success, Training in Team skills developing successful teams.

Module IV: Individual Performance in groups

Interpersonal communication, - Johari Window, Interpersonal awareness, Social facilitation, Social loafing Interpersonal Trust, - Interpersonal conflicts, Group decision making, Group Synergy

Module V: Intervention Techniques

Counseling Techniques, Grid Management, Transactional Analysis, Sensitivity Training, Process Consultancy, Skill development techniques.

References

1. Janasz, D. (2007). Interpersonal skills in organisation. Tata McGraw-Hill Education.
2. Bennis, W G Essay in International Dynamics U.S.A Dorsey Press, 1979
3. Kolb, D etc. Organizational Behaviour: An Experiential Approach 5th edn. Englewood Cliffs, New Jersey, Prentice Hall, Inc. 1991
4. Kolb, D etc. Organizational Behaviour : Practical Readings for Management 5th edn. Englewood Cliffs, New Jersey, Prentice Hall, of India. 1991
5. Mainiero, L A & Tromley C I Developing Managerial Skills in OB New Delhi, Prentice hall of India, 1985

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Performance Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Facilitate the student in remembering fundamental concepts related to performance management in the context of measurement of performance, job evaluation and organizational structure.
CO2	Understanding	Empower the students to understand complex ideas in performance management to make them ready for application in organizational contexts. ,
CO3	Applying	Build application skills in performance management strategies and principles to ensure efficient management of performance for domestic and international workforce.
CO4	Analyzing	Provide the competencies to analyze performance management skills to negate various issues affecting day to day business.
CO5	Evaluating	To help the student in developing the skill to assess the impact of designing and implementing unique performance management strategies to excel in ever changing business environment.
CO6	Creating	Create novel ways to develop and implement innovative performance management strategies for future business enhancement.

9. PERFORMANCE MANAGEMENT

Objective: The objective of this course is to sensitize the students to the multi-faceted nature of Performance Management, to make them understand the issues, complexities and challenges of Performance Management and to enable them to relate the Performance Management to rewards/compensation management and behavioural change.

Module I: Definition, Scope, Features, Principles, Benefits, History and Process of Performance Management (PM) – Performance Appraisal and PM - PM Cycle – Deming’s Model and Torrington & Hall Models of PM - Designing and Maintaining PM

Module II: Measurement of Performance – Types of Performance Measure – Performance Standards – Performance Metrics - Organisational Performance, Team Performance and Individual Performance - Criteria for Performance Measure - Issues in Measuring Performance – Performance Development Review – Balanced Scorecard – Performance Feedback.

Module III: Job Evaluation – Pay Structures – Different Types of Pay: Competence Related Pay, Skill Based Pay, Team Related Pay – Incentive Schemes – Rewards – Gain Sharing and Profit Sharing.

Module IV: Organisational Structure and PM – Leadership and PM – Contributions of HRM Practices on PM - Relating Career Strategies to PM – Organisational Climate and PM – Links Between Strategic Management and PM – Culture Based PM.

Module V: Evaluation of an Effective PM - Coaching and Counselling in Performance Problem Solving - Virtual PM - Current Issues and Trends in PM. Case Studies.

References:

1. Tracey B. Weiss and Franklin Hartle, Reengineering Performance Management, Vanity Books International, 1998.
2. SoumendranarainBagchi, Performance Management, Cengage Learning, 2010.
3. Srinivas R. Kandula, Performance Management, PHI, 2011
4. Herman Aguinis, Performance Management, Pearson, 2012.
5. Varsha Dixit, Performance Management, Vrinda Publications, 2007.
6. Frances Neale, Handbook of Performance Management (Edited Volume), Jaico Publishing House, 1995.
7. DewakarGoel, Performance Appraisal and Compensation Management: A Modern Approach, PHI, 2009.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		HR Analytics	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to HR metrics, analytics, balanced scorecard, dashboard creation, and predictive analytics
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in HR analytics based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real HR data to explore and establish relationships in the areas of HR decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of analytics on HR decisions, and appraise HR decisions and strategies using descriptive and predictive techniques.
CO6	Creating	Generate new ideas and create HR predictive models and proposals for business expansion and developments.

10. HR ANALYTICS

Course Description: This introductory course introduces students to HRM metrics and analytics. This course intends to increase students' awareness of the usefulness of HRM metrics and analytics and equip in using them at the workplace. Complexity in today's workforce, new technology investments, economic pressures, talent as a competitive

edge, aligning the people strategy with the business strategy and many other reasons are driving a change in HR to be analytics-dependent.

This course is expected to familiarise students with the application of statistics in HR decision making, enable the students to integrate knowledge of metrics and analytical models and their implications for HRM, and enable the students to display an understanding of transformational HR operations in interactions with other strategic business concepts.

Module I Quantitative HRM

How decision science influences HR measurements, connecting measures and organizational effectiveness, Today's HR measurement and approaches. Evolution of HR Analytics; HR Metrics and HR Analytics; Analytical Pyramid- Descriptive and Predictive models; Intuition versus analytical thinking; Ethical issues in Analytics; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HCM: 21 Model.

HR measurement

Traditional vs. contemporary HR measures; Fundamental analytical concepts from statistics and research design; analytical concepts from economics and finance. Analytical Foundation of HR measurement

Module II Descriptive Analytics- HR Reporting

Recruitment Metrics; Performance and compensation metrics; Learning and developmental metrics. HR's role in value chain. Human Resources Balanced Score Card.- FTE- Utilization Ratio. - Dashboard creation

Module III Descriptive Analytics- HR Effectiveness Measures

Measures of efficiency, effectiveness and impact in HR processes and optimizing HR decisions.

Linking HR measures to business results; choosing the right measures for scorecards; Identifying and using key HR Metrics. Metrics and organisational Ethics.

Module IV Strategic Analytics

Workforce segmentation and search for critical job roles; Statistical driver analysis – association and causation –Data requirements; identifying data needs and gathering data; HR data quality, validity and consistency; Using historical data; Data exploration; Data visualization; Association between variables; Insights from reports; Root cause analysis of HR issues. (*Workshop Mode*)

Module V Predictive Analytics

Descriptive and indicative models for Employee retention and turnover; workforce productivity and performance; scenario planning. (*Workshop Mode*)

Notes:

- 1. Students will be given hands-on training in Model building and dashboard creating using MS Excel and SPSS**
- 2. Internal Evaluation will be carried out in the form of a compulsory project**

References

1. Becker, B E ., Huafelid, M.A. & Ulrich, D (2001). *The HR Scorecard: Linking people, strategy, and performance*. Harvard Business Review Press.
2. Bhattacharyya, D.K. (2017). *Understanding Theories and Applications of HR Analytics*. Sage Publications.
3. Sullivan, J (2010). *HR metrics*. Kennedy Information.
4. Gregory, I E (2013). *HR Metrics: Practical Measurement Tools for People Management*. Knowledge Resources. (ISBN: 9781869221690)
5. Bucknall, H., Wei Z (2007). *Magic Numbers for Human resource Management*. Wiley India.
6. Valerie, P., & Andreasson R. *HR metrics : Bench marking human resources*
7. Christman, W (2012) *HR Metrics That Matter. HR smart*
8. *HR Metrics standards & glossary published by the HR metrics service*. Version 8.0/December 2012
9. *HR metrics service, HR metrics Interpretation guide published by BC HRMA version 3.4 / December 2012*.

11.2.12 SYLLABI OF ELECTIVE COURSES IN PRODUCTION AND OPERATIONS MANAGEMENT AREA

Elective courses in Production and Operations Management Area

1. Supply Chain Management
2. Purchasing and Materials Management
3. Quality Management
4. International Logistics Management
5. Service Operations Management
6. Simulation and Modelling
7. Enterprise Resource Planning
8. Project Management
9. Supply Chain Analytics
10. Customer Relationship Management

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Supply Chain Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Production and Operations, Inventory, Warehousing. Transportation, Customer service, Optimization
CO2	Understanding	Develop a sound understanding of the important role of supply chain management in today's business environment. Become familiar with current supply chain management trends Understand and apply the current supply chain theories, practices and concepts
CO3	Applying	Effectively apply knowledge of research principles and methods of supply chain analysis and business decision analysis; Demonstrate cognitive skills to demonstrate mastery of SCM and related business theories and to reflect critically on both theory and professional practice. Demonstrate and use cognitive, technical and creative skills to generate and evaluate complex supply chains at an abstract and at a practical level;
CO4	Analysing	Use cognitive, technical and creative skills to investigate, analyse and synthesize complex information, problems, concepts and theories and to apply theories of SCM to different contextual problems in supply chains and their business applications; and
CO5	Evaluating	Apply technical and communication skills to design, evaluate, implement, analyze, theories about new and emerging developments in SCM and the analysis of SCM problems and opportunities;
CO6	Creating	Analyze SCM with creativity and initiative especially in new situations of professional practice; and Recommend or make decisions concerning supply chain designs and operations with high level personal autonomy and accountability. <ul style="list-style-type: none"> • be able to communicate about professional issues relevant to SCM and logistics, on an expert- as well as a common level

		<ul style="list-style-type: none"> • be able to apply acquired knowledge and skills within new areas of research and applications • be able to read scientific papers and other academic work with a critical view • have advanced knowledge about supply chains and logistics in general • have extensive knowledge of scientific theories and methods relevant to managing supply chains and operations within such chains • have advanced knowledge of the relations between supply chains and relevant theories within economics and business administration
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1. SUPPLY CHAIN MANAGEMENT

Course Objectives:

1. To introduce to the students the principal concepts of SCM & logistics
2. To create awareness in the application of SCM in modern business fields.
3. To understand the processes involved in logistics and supply chain management
4. To understand how to develop and manage efficient and effective supply chains
5. To understand how technology and information systems work as enablers to provide leverage in gaining and maintaining competitive advantage in the marketplace,
6. To gain adequate competency to deal with the modern concepts and trends in SCM and its implications
7. To expose students to various global supply chain strategies and operational techniques

Module I

Introduction to Logistics and Supply Chain - concept, evolution and development, difference – role, scope, functions and importance – Value Chain Concepts - Porter’s Value Chain- The new manufacturing and distribution practices in the light of globalized digital economy – Integrated logistics management – Supply Chain Management - Local and International Supply Chains-Benefits and issues- Types of supply chains and examples- Flows in SC- Decision Phases: Strategic, tactical, and operational decisions in supply chain. SCM building Blocks, Supply Chain Drivers and Obstacles, International Logistics and Supply Chain Management – The Total Cost Concept and Logistics and SCM Trade-Offs – SC Profitability, Global SCM – Demand Management in SC- Green Supply Chain Management: Concepts and Techniques – Cold Supply Chain Management: Concepts, Importance, Applications.

Module II

Key supply chain business processes (i.e., planning, sourcing, producing, distributing and paying), Managing material flow and distribution- Different views – PUSH and PULL, Cycle views - Distribution and planning Strategy- Development Strategy- Supply Chain Synchronization - Warehousing and Operations Management –Transportation Management, Inventory Management – recent developments in the above areas- Delayed Differentiation - Cross docking – Drop shipping; Packaging and its importance - SCM and Theory of Constraints- Uncertainty in SCM - Management of Uncertainty in SCM- Supply chain Risk- Supply chain vulnerabilities, Risk mitigation and resilience.- Quick Response Logistics

Module III

Purchasing and Supplier Management, Procurement – Strategies - Sourcing and supplies management, outsourcing, postponement decisions and strategies - Global Sourcing, e-sourcing and procurement- VMI- Vendor identification, selection, evaluation, development, Supplier Relationship Management, Supplier Quality Management, Supply Chain Performance, SC Excellence- Benchmarking -Supply Chain Coordination, collaboration and Integration - Impact of Variability in Supply Chains- Supply Chain disruption- Bull Whip effect, components, measures, and design issues -Role of IT- Logistics and Supply Chain Information systems, E-Business- Concepts and Applications of RFID, GIS, GPS - E-Commerce- ERP, SFA- Safety and Security in CS.

Module IV

Forecasting: Techniques and systems design, Customer Service Management and measurements, CRM, Manufacturing Logistics, Pricing Strategies, Negotiation, SCM relationships- 3PL, 4PL and emergence of 5 PL, Strategic Partnerships, Co-makerships – SC partnerships - SCM Network design and Facilities development, SCM Planning and development Strategies- Designing supply chain Network – Design Decision in supply chain network, Factors influencing network design. Frame work for Network design decisions, Designing Global Network – Off shoring decisions- Network Synchronisation- total cost considerations; Supply Chain uncertainties- Supply Chain Vulnerabilities – Simulation and Optimization – SC modeling - SCM models, SCOR model – Retail Supply Chains- Importance of pricing strategy in SCM and SC Costing - Activity Base Costing – Reverse Logistics and reverse flows in SCM-importance and Applications

Module V

Extended Enterprises – Logistics and SC Information systems- SC DSS - Comprehensive Information System Integration- Industry 4.0 and SCM: Importance and Applications- Digital Supply Chain Management - Supply Chain 4.0 - Impact of disruptive digital technologies - Impact of Internet – Digital Transformation in SC- IT enabled SCM – E-SCM-Virtual SCM-e-sourcing – e-procurement- Business Intelligence- Digital Business- Lean, agile and Leagile SCM- Blockchain, ERP, IoT, IIoT, AI & Machine learning, Automation -Robotics and RPA - autonomous mobile robots-**Immersive technologies**, Intelligent things and SCM, Automated Vehicles, Simulation -SCM software – Applications of Cloud computing, SC Analytics -- supply chain resilience and

sustainability - recent developments- Future of SCM - Some of the current topics related to logistics and supply chain management.

References

1. Martin Christopher, *Logistics and Supply Chain Management*
2. James F. Roerch and Copacino, *Logistics Hand Book*
3. Jeremy F. Shapiro, *Modeling the Supply Chain*
4. N. Chandrasekharan, *Supply Chain Management*
5. Bowersox, Closs, Cooper, *Supply Chain Logistics Management*, McGraw Hill.
6. Donald J Bowersox, David J Closs, *Logistical Management (The integrated Supply Chain Process)*, TMH
7. Sunil Chopra, Peter Meindl, *Supply Chain Management (Strategy, Planning and Operation)*, Pearson Education, India.
8. Burt, Dobbler, Starling, *World Class Supply Management*, TMH.
9. Martin Christopher, *Logistics and Supply Chain Management*.
10. N. Chandrasekharan, *Supply Chain Management*
11. Janat Shah – *Supply Chain Management* – Pearson Publications
12. John J. Coyle, C. John Langley, Brian J. Gibson, Robert A. Novack, *A Logistics Approach top Supply Chain Management*

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Purchasing and Materials Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Production and Operations, Inventory, Warehousing, Transportation, Customer service, Optimization with reference to Materials
CO2	Understanding	Develop a sound understanding of the important role of Purchasing and materials management in today's business environment. Become familiar with current Purchasing and materials management trends. Understand and apply the current Purchasing and materials management theories, practices and concepts
CO3	Applying	Effectively apply knowledge of research outcomes and methods of Materials requirement analysis and Materials management decision analysis; Demonstrate cognitive skills to demonstrate mastery of Purchasing and materials management and related business theories and to reflect critically on both theory and professional practice.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze and synthesize complex information, problems, concepts and theories and to apply theories and practices of Purchasing and materials management to different contextual problems in business situations.
CO5	Evaluating	Apply technical knowledge and use data, theories and models to evaluate and implement, appropriate solutions to problems related to Purchasing and materials management. Evaluate the impact of the decisions in Purchasing and materials management on other functional areas.
CO6	Creating	Demonstrate and use cognitive, technical and creative skills to conceive and develop solutions to complex problems related to Purchasing and materials management.

2. PURCHASING AND MATERIALS MANAGEMENT

Objectives: The key objective of this course is to acquaint the students with decision-making for effective and efficient purchase, storage and flow of materials in manufacturing and service organisations. Cost-reduction techniques in Pre-Purchase, Purchase and Post-Purchase systems, Modern material planning and delivery systems like MRP and JIT and material handling and logistics systems.

Module I: Role, Scope and Importance of the Function & Purchase and Materials Management Objectives of Materials Management, the materials cycle, organisation for Materials Management, Transportation Management, Ware housing, Organisation & Control for logistic Management, Material handling. Logistics.

Module II: Classification of Materials and Estimation of Demand Classification of Material, classification and coding systems, specification of materials, standardisation, elements of value analysis/Engineering & Quality control. Estimation of demands, concepts of dependent and independent demands. ABC,VED,FSN analysis. Materials audit.

Module III: Procurement: Purchasing policies and practices, make/buy/lease decisions, location and selection of suppliers, buying the right material at the optimum price. Vendor rating and source development. Imports, procurement in shortage situation, hedging ethical and legal aspects of purchasing lead time analysis, paper work and record of purchasing department, cost of acquisition. Capital Equipment purchase

Module IV: Inventory Control System of stock replenishment, cost of inventory holding and of stock out, Inventory control principles, Basic EOQ formula, Adaptation of discount and other price factors, other considerations in determining order quantities, service levels and safety stock, considerations for dependent demand items, order quantities in fixed interval replenishment systems.

Module V: Materials Requirement Planning Layout of stores and warehouses, storage facilities, Material handling in stores, physical control of stock, preservation of stores, accounting and other record of stores. Appreciation of use of computer for maintenance of records and for generating outputs for decision making. Material Handling, Traffic and Transportation, Disposal of Scrap, Surplus and Obsolete Materials. JIT Purchasing.

References

1. Gokarn P.R. : Essentials of Materials Management, Somaliya Publications.
2. Westing J.H & Fine : Purchasing Management 4th Edition, John-Wiley & Sons, 1976.
3. Menon K. S. : Purchasing and Inventory Control 2nd Edn., Wheeler Publishers, 1983.
4. Gopalakrishnan P. and Sudaresan M.: Materials Management - An Integrated Approach, Prentice Hall of India.
5. Stars M.K. & Miller D.W. : Inventory Control, Prentice Hall, 1974.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Quality Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Management of Quality in both Manufacturing and Service Industries. Recalling the history of development of Quality Management practices and its future directions.
CO2	Understanding	Develop a sound understanding of the important role of Management of Quality in today's business environment. Become familiar accepted definitions of Quality and with the approaches, tools and techniques used for measuring, controlling and improving Quality in Manufacturing and Service settings.
CO3	Applying	Effectively apply knowledge of research outcomes and with the approaches, tools and techniques used for detecting issues, measuring, controlling and improving Quality in Manufacturing and Service settings.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze and synthesize complex information, analyze problems, and practices of Quality Management to contextual problems related to Quality in business situations.
CO5	Evaluating	Apply technical knowledge and use data, theories and models to evaluate and implement, appropriate solutions to problems related to Quality management. Evaluate the impact of the decisions in Quality management on other functional areas.
CO6	Creating	Demonstrate and use cognitive, technical and creative skills to conceive and develop solutions to complex problems related to Quality management.

3. QUALITY MANAGEMENT

Objective: The objective of this course is to expose the multi-disciplinary students joining MBA to the Principles of Quality Management, to equip the students with an understanding for statistical Quality Control, to develop in the students an understanding of Benchmarking, Total Quality Management and ISO - 9000 and other modern quality management methods and systems.

Module I: Policy and Organization of Quality concept and objectives, quality organization and Programmes, Quality circles, training for quality, quality related budgets and costs, value engineering.

Module II: Quality in Engineering Design and Manufacture Design objectives, National and international engineering design standards, statutory provisions and obligations. Quality control in design, Control of Engineering changes and design modifications. Product Reliability. Taguchi's loss function, FMEA, TPM, Zero defects and Six sigma.

Module III: Quality Functions in Manufacturing and Statistical Quality Control Quality of Bought - out materials, Quality of bought - out services, Inspection, Metrology, Functional testing, Managing non- conformance. Control charts for variables and attributes, Process capability analysis, acceptance sampling. The Quality Problem Solving Process.

Module IV: Total Quality Management Strategic Quality Planning, Introduction to TQM, Organizing for TQM, Benefits of TQM, , Kaizen, Benchmarking, Organizing for TQM Quality Circles, Kaizen, Benchmarking for quality improvement, TQM in service organisations, Training for TQM. Implementing a TQM program. TPM.

Module V: ISO:9000 ISO:14000 and other Quality standards. ISO - 9000, Baldrige Award, Balanced Score card, ISO - 9000 Vs the Baldrige Award. ISO 14000, Management systems for Health and Safety. Auditing and certification process. Six Sigma Initiatives.

References

1. James R. Evans and William M. Lindsay, JaicoThe Management and Control of Quality, 2nd Edn. Publishing House, Mumbai, 1994.
2. J.M. Juran and Frank K. Gryna Quality Planning and Analysis, Tata McGraw, Hill, Mumbai, 1970.
3. Bertrand L. Hansen and Prabhakar M. Ghare, Quality Control and Application, Prentice- Hall (I), New Delhi 1993.
4. Ed. Dennis Lock, Handbook of Quality Management, Jaico Publishing House, Mumbai, 1993.
5. D. Chandra, Janakiram, Roy and Bandekov, Quality Circles, Tata - McGraw Hill, New Delhi
6. ParagDiwan, Quality in Totality, Deep & Deep Publications, New Delhi,1995
7. Joel E.Ross, Total Quality Management, Vanity Book International, New Delhi, 1996.
8. Carruba, Eugene R and Gorden, Ronald D. Product Assurance Principles: Integrating Design Assurance and Quality Assurance, New Delhi, McGraw Hill, 1991.
9. Grant, Eu-gene L and Leavenworth, Richards, Statistical Quality Control, Mc- Graw Hill, New York, 1991.
10. Ireson, W G and Coombas, C.P. Handbook of Reliability Engineering & Management, New York, McGraw Hill, 1988
11. Lochner, Robert H and matar, Joseph E. Designing for Quality, London, Champmaan&Hilll, 1990
12. Pike, John and Barnes, Richard, TQM in Action, London, Champman& Hill , 1994
13. Schmidt, Warren H.andFrinnigan, Jerome P. TQ Manager, San Francisco, Jossey Bass 1993

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		International Logistics Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Logistics Management. Recalling the types of resources used in Sea, Land and Air transport.
CO2	Understanding	Develop a sound understanding of the Characteristics and uses in operation of the important resources used in Logistics such as in different systems for transport of Goods over land, Sea and Air. The current ways of operation of the Logistics systems, in India and Internationally. Typically understand the cargo movement systems using different modes of transport and the role of storage in it.
CO3	Applying	Effectively apply Logistics related knowledge and solution approaches, tools and techniques used for planning, directing and controlling operations in a Logistic system.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze and synthesize complex information related to practices of logistics in business situations.
CO5	Evaluating	Apply technical knowledge and use data, theories and models to evaluate and implement, appropriate solutions to problems related to Logistics management. Evaluate the impact of the decisions in Logistics management on other functional areas.
CO6	Creating	Demonstrate and use cognitive, technical and creative skills to conceive and develop solutions to complex problems related to Logistics Management.

4. INTERNATIONAL LOGISTICS MANAGEMENT

Objective: The objective of this course is to impart a general and clear idea of international logistics system and management.

Module I: Integrated logistics management – concept, evolution and development; Importance of logistics management in International business, International Logistics: functions and intermediaries. Issues involved in movement of goods. Logistics

information system – positioning information in logistics; logistics information systems design; I.T. in logistics; strategic information linkage. Total cost approach to Logistics. Liabilities of carriers. Marine Insurance for Cargo. Warehousing, repacking and other value added service provided by logistics service providers. 3 PL and 4 PL logistics service. Performance measurement of logistic systems.

Module II: The general structure of shipping industry; cargo types; vessels and vessel characteristics; linear operations and tramp operations; chartering of bulk ocean carriers; the ocean linear conference system; freight structure and practices; coordination; role of intermediaries – forwarding and clearing agents; freight brokers; stevedores and shippers agents. Containerisation types of Containers and ICDs. Layout and working of container terminals. Port system and sub systems, port organization and management. Responsibilities of port trusts, Growth and status of Ports in India, Inland water transport. Issues in Sea transport. Regulatory authorities for sea transport and their roles.

Module III: Introduction to Road transport system, Classification of Vehicles. Road network in India: types of roads, Road transport companies and their operation in Full truckload business and in less than truckload business. Road parcel service business. Fleet management systems. Integrated Logistics provided by Road transport companies. Documents and Permits required in road transport system. Problems in road transport. Regulatory authorities involved with road transport system.

Module IV: Rail Transport system, Types of railway wagons, rakes, marshalling operations and yards, Railway goods freight structure, Railway Parcel service operations. Railway goods service operations. Procedure for availing railway parcel or goods service and the documentation involved. Operations at a railway goods yard/siding. Operations and control in the railways. Organization of Indian Railways.

Module V : Introduction to Air transportation, Air transport geography, Types of Aircrafts, Airline and air cargo operations, Import and export process of cargo by air, Intermediaries in air cargo operations, freight structure, carrier and consignee liabilities. Layout of Airport: facilities in Airside and city side for passenger, cargo and aircrafts. Regulatory authorities for air transport and their roles.

References

1. James F. Robbison & William C Copaciano (editors): The Logistics Hand Book.
2. Donald F Wood et.al.: International Logistics
3. Douglas Lambert and James R Stock: Strategic Logistics Management
4. IIFT : Study of Arrangements of Shipping Conference; Dictionary of Shipping and Chartering Terms; Role of Shipping Policy in the Export Strategy of India; and Freight Tariffs and Practices of Shipping Conferences
5. J.Bes : Chartering Practice
6. E. Elgar (Cheltenham, UK and Brookfield, Vt., US) The economics of regulating road transport Book
7. Sudhir Kumar and Shagun: Bankruptcy to Billions: How the Indian Railways Transformed, Oxford India Paperbacks

8. Dilip Halder: Urban Transport in India: Crisis and Cure, Bookwell Publications
9. John G. Wensveen Air Transportation Seth Young (Author), Alexander Wells Airport Planning And Management
10. John J. Cayle, Edward J. Bardi, C, John Langloy Jr.: The Management of Business Logistics - A Supply Chain Perspective (7th Edn.), Thomson-South Western, Bangalore, 2007.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Service Operations Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Service Operations Management, in different type of service settings.
CO2	Understanding	Understand the Customer, Supplier functions, their relationship and obligations in business. Develop a sound understanding of the service process and factors such as performance, quality, reliability etc., Also understand the practices of different Service agreements and partnerships.
CO3	Applying	Effectively apply the learning of Service Operations Management to Customer- Supplier situations to design appropriate solutions to problems.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze Service systems to find their strengths and weaknesses.
CO5	Evaluating	Ability to analyze performance of service systems and to find design and operational weaknesses in them.
CO6	Creating	Demonstrate and use of Knowledge of Service Operations Management conceive and develop solutions to complex problems related to Services operations.

5. SERVICE OPERATIONS MANAGEMENT

Objective: The aim of this course is to expose students to the managerial issues and challenges specific to management of operations in service organizations and also to equip them to understand how service performance can be improved by studying service design and delivery systems.

Module I: Service operations management- introduction- Types of services. Service process types. Service concept

Module II: Customer and supplier relationships- customer segmentation, retention. Managing customer and business relationships. Customer expectation, customer

satisfaction and service quality factors. Managing service experiences Types of supply relationships. Managing service supply chains, intermediaries. Supply partnerships, supply level agreements.

Module III: New service development, Service process- analyzing service process, engineering, controlling and repositioning service processes. Six sigma for service process improvement front office back office interface. Off shoring. Outsourcing.

Module IV: Site selection. Supporting facility design. Operational improvement- service recovery. Service guarantees. Advanced models- Data envelopment analysis.

Module V: Matching supply and demand. Yield management. Inventory management in services. Waiting line management- capacity management, managing bottlenecks and ques.

References

1. Robert Johnston, Graham Clark. Service Operations management, Pearson Education. 2010.
2. Mettres, King metters, Pullman and Walton. Service Operations Management, Cengage learning 2010.
2. Chase, Jacobs and Acquilano, Operations Management for Competitive Advantage, Tata McGraw Hill, 2010.
3. Krajweski, Ritzman and Malhotra, Operations Management, Process and Value chains, Pearson Education 2010

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Simulation and Modelling	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Simulation and Modelling with emphasis on discrete event simulation.
CO2	Understanding	Develop a sound understanding of the characteristics and functions of the tools and techniques used in Simulation and the steps in building and using a simulation model. Understand the data requirements for building a simulation model.
CO3	Applying	Effectively apply Modeling and Simulation to study small problems related to services and manufacturing involving queues, buffers, machines transport etc.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze systems using their Models and simulation after proper testing and validation.
CO5	Evaluating	Ability to design experiments to evaluate, appropriate solutions to problems related studied using.
CO6	Creating	Demonstrate and use of Modeling and Simulation to conceive and develop solutions to complex problems related to manufacturing and Services operations.

6. SIMULATION AND MODELLING

Objective: The objective of this course is to teach students methods for modeling of systems using discrete event simulation. Emphasis of the course will be on modeling and on the use of simulation software. The students are expected to understand the importance of simulation in manufacturing, telecommunication, IT and service industries etc. By the end of the course students will be able to formulate simulation model for a given problem, implement the model in software and perform simulation experiments and analyse results and draw conclusions.

Module I: Introduction to Simulation and Modeling: Simulation – introduction, deciding where simulation is appropriate and not appropriate, advantages and disadvantage, application areas, history of simulation software, an evaluation and selection technique

for simulation software, general – purpose simulation packages. System and system environment, components of system, type of systems, model of a system, types of models and steps in simulation study. Manual Simulation of Systems: Simulation of Queuing Systems such as single channel and multi channel queue, lead time demand, inventory system, reliability problem, timeshared computer model, job-shop model.

Module II: Discrete Event Formalisms: Concepts of discrete event simulation, model components, a discrete event system simulation, simulation world views or formalisms, simulation of single channel queue, multi channel queue, inventory system and dump truck problem using event scheduling approach, Random Number Generation and its use in simulation. Introduction to different techniques to generate random variate.

Module III: Input Modelling: Introduction, steps to build a useful model of input data, data collection, identifying the distribution with data, parameter estimation, suggested estimators, goodness of fit tests, selection input model without data, covariance and correlation, multivariate and time series input models. Verification and Validation of Simulation Model: Introduction, modelbuilding, verification of simulation models, calibration and validation of models:-validation process, face validity, validation of model, validating input-output transformation, ttest, power of test, input output validation using historical data and Turing test.

Module IV: Output Analysis: Experimenting with simulation models, Types of simulations with respect to output analysis, stochastic nature of output data, measure of performance and their estimation, output analysis of terminating simulators, output analysis for steady state simulation.

Module V: Case Studies: Simulation of manufacturing systems, Simulation of Material Handling system, Simulation of computer systems, Simulation of super market, and some service sector examples. Lab exercises in Simulation and mini simulation project.

References

1. Banks J., Carson J. S., Nelson B. L., and Nicol D. M., Discrete Event System Simulation, 3rd edition, Pearson Education, 2007.
2. Averill M Law Simulation modeling and analysis McGraw Hill, 2008. 3. Banks J (Ed.) Handbook of Simulation John Wiley, New York, 1998.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Enterprise Resource Planning	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to ICT, Information Systems, Comparison and Applications of various IS, Various technologies. Technical aspect of telecommunication systems, internet and their roles in business and Management environment. Recall the concepts of MRP and MRPII
CO2	Understanding	Develop a sound understanding of the important role of ERP in today's business environment. Become familiar with current ERP trends. Make basic use of Enterprise software, and its role in integrating business functions. Analyze the strategic options for ERP identification and adoption. Design the ERP implementation strategies. Create reengineered business processes for successful ERP implementation. Understand and be able to articulate the life cycle stages of any ERP implementation. Understand the concept of integrated business processes in relation to the business functions.
CO3	Applying	Apply the principles of ERP systems, their major components, and the relationships among these components; with the knowledge of typical ERP systems, and the advantages and limitations of implementing ERP systems. To comprehend the technical aspects of ERP systems. To be able to map business processes using ERP concepts and techniques.
CO4	Analyzing	Know and be able to apply key technical terminology in enterprise information systems as they apply in different ERP products and development methods Understand key differences between the major ERP application and issues specific to these applications their configuration and management. Analyze a current architecture and perform an effective gap analysis before an ERP implementation. Be able to map enterprise architectural resources to a contemporary Enterprise Architecture mapping tool.

CO5	Evaluating	Effectively describe problems typical of ERP implementation projects and translate this information and use this information to anticipate and articulate the challenges associated with post-implementation management of ERP systems. Synthesize prior theoretical and experiential knowledge in IT development and project management with the current literature on Enterprise System development. Be able to evaluate the progress of an ongoing ERP implementation project.
CO6	Creating	<p>Analyze ERP systems and Implementation with creativity and initiative especially in new situations of professional practice; and Recommend or make decisions concerning supply chain designs and operations with high level personal autonomy and accountability.</p> <p>To comprehend the technical aspects of ERP systems; To understand concepts of reengineering and how they relate to ERP system implementations; To be able to map business processes using process mapping techniques; To be able to design the steps and activities in the ERP life cycle; To be able to identify and describe typical functionality in an ERP system; To obtain practical hands-on experience with one of the ERP packages</p> <p>Become competent in applying ERP knowledge in real business environment. Able to integrate business processes in relation to the business functions. Acquire knowledge about the requirements analysis, the planning of business resources and the technology of ERP systems. Know how to implement ERP systems in business. Know the basic operation of ERP software. Know the procedure for handling integrated processes in ERP environment</p>

7. ENTERPRISE RESOURCE PLANNING

Objective: To make the students able to participate in planning and implementation of advanced enterprise-wide systems and technologies in their career. The course will help both functional area and IT managers understand the respective role of users, enterprise architects, developers and managers in the selection, preparation, implementation and management of large and complex enterprise applications. Also to expose the students to the technical aspects of ERP systems, particularly to those that helps in the process of infrastructure planning, selection, implementation, pitfalls, and administration of these systems.

Module – I:

Evolution of ERP, MRP and MRP II, problems of system Islands, need for system integration and interface, Enterprise wide software solutions, difference between Integrated and traditional information systems, early and new ERP Packages, Evolution of ERP, Growth, Future, emerging trends of ERP- Over view of ERP packages, ERP products and markets - players and characteristics. Benefits of ERP implementation. Critical success factors, pitfalls - Challenges and issues - Competitive advantage, Impact on Organization Performance – Business Processes -Business transformation Processes and Enabling role of IT, Digital Transformation and ERP-Case studies.

Module – II:

Importance of 3 P's : Product, Process, and People, - Selection of ERP products, Consultants & Vendors - Opportunities and problems in ERP selection and implementation; ERP implementation; identifying ERP benefits team formation- Consultant intervention—concept of business process – rethinking of processes – Business Process Reengineering (BPR) Concepts; The emergence of reengineering, Identification of reengineering need preparing for reengineering, Implementing change – Steps of BPR- Role of various stakeholders- change management – Resistance to Change - Integrating with other systems; Post ERP implementation- Training

Module – III:

Functional architecture -Modules in ERP; business Modules of ERP package; salient features of each modules of ERP, Comparison of various ERP Modules-. Implementation of ERP systems – Implementation Life Cycle and frame work- Implementation Strategy- Importance of training- Business process modeling, process mapping- Gap analysis, Framework for ERP implementation, business process, Emerging trends in business process, Selection of ERP- Process of ERP implementation—managing changes in IT organization- user interfaces- Preparing IT infrastructure measuring benefits of ERP, Implementation Obstacles, Risk factors.

Module IV:

Technical Architecture of ERP systems- communication and networking facilities- distributed computing, client server systems, Concepts of Business objects, distributed object, Concept of database management systems, different types- relational database-computing architecture, data mining and warehousing, EDI – internet and related technologies- Web based technologies, Cloud Architecture- SaaS, Paas, Iaas - Cloud ERP and its Advantages- Mobile ERP, SOA, Open ERP- Web based ERP, e-ERP- Customization, Configuration, Integration

Module – V:

ERP and Supply Chain management- Extending scope of ERP through SCM., The concept of value chain differentiation between ERP and SCM –issues in selection and implementation of SCM solutions – CRM concepts and CRM solutions – Digital Business-E-Business and ERP – ERP II, ERP III, Industry 4.0 and ERP – ERP4.0, Intelligent ERP- Business Analytics and ERP - BI and applications -- business

opportunities – basic and advanced business models on internet — Big Data and its impact - security and privacy issues – Disruptive digital technologies and its impact on ERP, Recent Developments- Future and Growth of ERP- role of ERP in international Business, Some of the current topics related to ERP- case studies

References

1. Hammer, Micheal and JamtsChamby, *Reengineering the corporation*,
2. Leon, alexix *Countdown 2000*, Tata McGraw
3. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY.2000
4. Alexis Leon, *ERP Demystified*, Tata McGraw Hill, New Delhi.
5. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
6. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
7. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY, 2000
8. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
9. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
10. Luvai F. Motiwalla : *Enterprise Systems for Management*
11. Mary Sumner : *Enterprise Resources Planning*
12. Rahul V. Altekar : *Enterprise Resources Planning*
13. JyotindraZaveri : *Enterprise Resources Planning*
14. Ashim Raj Singla : *Enterprise Resources Planning*
15. D.P. Goyal : *Enterprise Resources Planning*

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Project Management	3	EC	50	50

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

Course Outcome	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Project and Project Management. They should also remember basic techniques like NPV, WBS, PERT/CPM, EVA.
CO2	Understanding	Enable the incumbents to understand the concepts delivered at the remembrance level to make them cognitively fit for application. They should be able to understand the importance of conducting project feasibility studies, preparing project plan and conducting project analysis.
CO3	Applying	Once the student has understood the specifics of various tools and techniques to be applied in a particular project decision context, they should be able to apply the technique and generate results. Here students are trained on conducting a real project feasibility study, preparing project schedules and conducting progress analysis. Cases and problems sets will guide them through this process. The outcome is developing application skills in the project context.
CO4	Analysing	Impart skills to analyze the project data to explore and identify bottlenecks and performance constraints. Use a range of tools like WBS, PERT CPM, Critical Chain, EVA etc to analyze the data Project management packages will also be covered which will help them in performing these analyses. This will reinforce their application skills and help them to develop an analytical mindset to try analyzing real life data with the tools and techniques studied.

CO5	Evaluating	Evaluate the practical implications of the results found from the analysis of data. They should be able to do a cost benefit analysis of various decision options, perform risk analysis with respect to each proposed solution and arrive at the most feasible alternative.
CO6	Creating	Generate new project proposals, project financing options and project plans based on a new idea. This will help both future project managers and entrepreneurs to start from a clean state in developing new projects.

8. PROJECT MANAGEMENT

Project Management deals with seeking methods of planning, organizing, and controlling non-routine tasks. The management of a project differs in several ways from management of a typical enterprise.

The general objectives of this course include to understand key Project Management concepts in the Project lifecycle, to identify managerial roles and responsibilities of executing a project, to learn the concepts in scheduling tasks, preparing budgets and allocating resources, to understand Project monitoring techniques, to develop working competence in the use of a Project Management Software.

Module I: Basic concepts in project: Project, Project Management, PMBOK, Project Triad, Project Life cycle, Project Stake holders.

Module II: Project selection. Why the project, project feasibility, numeric and non-numeric models of project selection, financial models, project portfolio

Module III: Project planning: Project charter, project plan, Work Breakdown Structure, project schedule, Network Diagrams, Critical chain approach, Preparing the Budget, role of project manager

Module IV: Project Execution:

Resource allocation and resource management, project organization, Managing the team, risk management, project communication.

Module V: Project Monitoring and Control: Progress reporting, Earned value approach, Project control, Change Management, project closure, project auditing

References:

1. Project Management: A Managerial Approach, Jack Meredith and Samuel Mantel Jr, 6th ed., Wiley.
2. Project Management The Managerial Process, Gray and Larson, McGraw Hill
3. Project Management: Achieving competitive advantage , Jeffrey K Pinto, Pearson Education
4. Project Management, Gido and Clements, Cenage Learning

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Supply Chain Analytics	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recall descriptive statistics, various methods, analytical methods, various distributions, regression and methods, correlation and techniques, forecasting etc. Recall the concepts and applications of Supply Chain. Various models and components of SC. Concepts of Inventory, Transportation, warehousing, distribution, Logistics, Sc networks etc.
CO2	Understanding	Enable all participants to recognize, understand and apply the language, theory and models of the field of SC analytics; Foster an ability to critically analyze, synthesize and solve complex unstructured SC problems; encourage an aptitude for business improvement, innovation and entrepreneurial action. Learn to leverage and access data to optimize and improve supply chain efficiency. Supply chain analytics to bring effectiveness in the business operation through data-enabled decisions at all levels of the business
CO3	Applying	Identify and describe complex business problems in terms of analytical models. Apply appropriate analytical methods to find solutions to business problems that achieve stated objectives. To equip students with the “importance and role of supply chain analytics” in the modern business enterprises and how business firms can take advantage with the help of supply chain analytics. Further, for students who wish to specialize in analytics, the course provides a strong foundation for the application of supply chain analytics with analytical platforms. Translate results of SC analytic projects into effective courses of action. Apply descriptive, predictive, and prescriptive analytics to business problems for input into management decision-making processes. How tools like Excel, python, SAS and R help with conducting SC analytics

CO4	Analysing	Analyze and evaluate appropriate business strategies, practices, and theories that inform and guide organizations to ensure sustainability; To become familiar with the processes needed to develop, report, and analyze business data; To analyze the different types of analytics and the tools available to analyze them.
CO5	Evaluating	Evaluation of various alternatives and select the best alternatives, Conduct what if analysis. Design a solution to a business dilemma, incorporating management practices and theories with principles of Supply Chain and Logistics
CO6	Creating	<p>Create business reports that effectively communicate business strategies, practices, and goals using emerging technology and management theories. To gain an understanding of how managers use SC analytics to formulate and solve business problems and to support managerial decision making. Create talents and skilled professionals who can deal with the changing marketing scenario, access, and leverage the data to improve and optimize the supply chain efficiency in the business</p> <p>On successfully completing this course you will be able to:</p> <ul style="list-style-type: none"> • Understand the importance of the basics of Business Analytics and Optimization • Understand the importance of the basics of Supply Chain Analytics and Optimization • Analyze the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and its fit with competitive strategy. • Explain the role and applications of Descriptive Analytics in a SC • Explain the role and applications of Predictive Analytics in a SC • Explain the role and applications of Prescriptive Analytics in a SC • familiarize the tools like Excel, python, SAS and R help with conducting SC analytics

9. SUPPLY CHAIN ANALYTICS

Course Description: This course is designed to help students master the analytical tools and techniques within optimization and simulation that are useful in designing and managing supply chains. In the first part of the course, students will learn how to formulate and solve prescriptive optimization models using linear, integer and mixed integer programs. The emphasis will be on how these models can be used in some fundamental supply chain applications such as transportation, capacity allocation, production planning, network flow, aggregate planning, sales & operations planning, and network design. The second part of the course will focus on simulation and basics of queuing models to help students better manage processes and operations in supply chains. Students will learn to fit distributions to processes when there is uncertainty present, generate output distributions using simulation models given the distributions of inputs, and analyse and interpret the results of Monte Carlo and discrete-event simulations. They will also learn about concepts such as process variability, Little's law, capacity, utilization, bottlenecks through basic queuing simulations, and will be able to quantify the impact of variability in supply chain operations.

Objectives

- To provide a strong foundation in supply chain analytics in order to handle complex data bases, build advanced analytical models and deliver effective visualization product and comprehensive reports.
- To equip students with an understanding of the “importance and role of supply chain analytics” in the modern business enterprises and how business firms can take advantage with the help of supply chain analytics. Further, for students who wish to specialize in analytics, the course provides a strong foundation for the application of supply chain analytics with analytical platforms.

On successfully completing this course you will be able to:

- understand the importance of the basics of Business Analytics and Optimization
- understand the importance of the basics of Supply Chain Analytics and Optimization
- analyze the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and its fit with competitive strategy.
- explain the role and applications of Descriptive Analytics in a Supply Chain
- explain the role and applications of Predictive Analytics in a Supply Chain
- explain the role and applications of Prescriptive Analytics in a Supply Chain
- use analytical tools like R, Python, SAS and MS excel efficiently in order to take managerial decisions more effectively
- Exposure to various Visualization Tools.

Module I

Introduction to Supply Chain Analytics: Supply Chain Management – An Overview
Supply Chain Analysis -Types of Supply Chains- Advanced Planning -Definition, relevance and scope
Supply Chain Analytics, recent trends in Supply Chain Analytics. – Importance of SC Analytics- Introduction to mathematical modelling as a tool to address challenges in production logistics and supply chains. Approaches for Optimization and Simulation- Modelling– Techniques -Problem formulation and choice of modelling- Linear, dynamic, non-linear and stochastic programming - Modelling software- Overview of different Analytic Models - Descriptive models, Predictive Models, Prescriptive Models- Applications in SC-Decision Analytics, Diagnostics Analytics, **Cognitive analytics**- Applications

Module II

Overview of Supply Chain Models and Modelling Systems: Descriptive models, Predictive Models, Prescriptive Modelling – Data summarization methods – Data description- Data Visualization - Visualization methods and techniques – Principal components -charts and graphs, data queries – sorting and filtering, summarizing data – Important techniques for exploration - Optimization modes, Transportation, Linear Programming- Assignment and Transshipment Problems, Shortest Path, Maximum Flow, Minimum Cost Flow, Problems Aggregate Planning, Sales & Operations Planning -Prescriptive Modelling with Mixed Integer Programming, Off-the shelf modelling system (SLIM), Supply chain operations reference model (SCOR), The network KEIRETSU, Nature-Inspired Intelligence in Supply Chain Management -Prescriptive Modelling, Simulation and Optimization- Monte Carlo Simulation, Queuing Models, Impact of Variability in Supply Chains- Bullwhip effect.

Module III

Flow and network modelling – Network Design- Some analytical results and use of discrete event simulation - Stochastic inventory models -Bullwhip effects – Time series analysis- Forecasting- Applications in Inventory Management -Reliability and maintenance of the production line - Synchronization of maintenance and production activities- Multivariate regression analysis for analysis of performance data. Statistical techniques for estimation of model parameters-AI& Machine learning and Big Data- Models and visualization of cyber physical systems in real time- Multi-criteria Decision making models– Hierarchical decisions making- Decision trees analysis - Expected Utility theory. Concepts of Advanced Planning Systems -Structure of Advanced Planning Systems- Strategic Network Planning- Demand Planning -Master Planning -Demand Fulfilment and ATP- Production Planning and Scheduling -Purchasing and Material Requirements Planning -Distribution and Transport Planning -Coordination and Integration Collaborative Planning- Implementing Advanced Planning Systems

Module IV

Application of Supply Chain Models: A Calibration Model Establishes Position and Performance Gap, Models for Purchasing, Procurement, and Strategic Sourcing, Logistics Models, from Manufacturing to Accepted Delivery, Models for Forecasting, Demand Management, and Capacity Planning, Models for Order Management and Inventory Management- Network planning and design - Supply Chain and Logistics Networks design- Models for Sales and Operations Planning, Advanced Planning and Scheduling Models, Models for Supplier Relationship Management, Models for Customer Relationship Management, Models for Collaborative Design and Manufacturing, Collaborative Planning, Forecasting, and Replenishment Models- Decision Tree analysis- Heuristics optimization- Interpretation of Managerial implication of results of analytics- Industry 4.0 and SC analytics – Importance and Applications.

Module V

Introduction to SC Analytics tools : different types, Applications – R programming: use of Rstudio, Simple arithmetic operation and array operation, R as a calculator -Vectors, Matrices, Data frames, Lists Packages and functions -Reading and writing data - Data Visualization, Data Modelling- Applications in SC analytics - Problems - Python programming: arithmetic operations and array operations, Use of matplotlib for plots and charts –Applications in SC analytics - Problems - Spreadsheet Modelling and Analysis- Data Analysis using MS Excel : Analyzing Data, Creating Charts and Graphics and Producing Report with Pivot Table- VLOOKUP and HLOOKUP- Statistical analysis of Data- Goal seek analysis, what-if analysis - SAS : Concepts and Applications – Data Modelling- Applications in SC analytics - Problems – Familiarization with Visualization tools - Rattle, Tableau and PowerBI – Lean thinking, Value stream mapping - Applications- Applications in SC analytics - ProblemsLook at Future State of Supply Chain Modelling: Recent developments in theory technology and practices. Future developments and expected improvement in efficiency levels and operational simplicity- Recent Developments and Current Topics in SC Analytics.

References:

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2. Operations Research: Applications and Algorithms, 4th Edition, Winston, Cengage Learning, 2013.
3. Supply Chain Management: Strategy, Planning, and Operation, 6th Edition, Chopra and Meindl, Prentice Hall, 2015
4. Adam, Everette E and Ronald J Ebert. Production and Operations Management: Concepts, Models, and Behavior. PHI, 2013.
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6. Bozarth, Cecil. Introduction to Operations and Supply Chain Management (3/e) Pearson, 2011.

7. Chase, Richard B. Operations Management for Competitive Advantage. Tata McGraw Hill, 2014.
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12. Stevenson, William J. Operations Management. McGraw Hill, 2011.
13. Jeremy F. Shapiro. Modeling the Supply Chain. Duxbury Thomson Learning
14. D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi, and Ravi Shankar, Designing and Managing the Supply Chain concepts, Strategies and Case studies, Third Edition, Tata McGraw Hill, New Delhi, 2015.
15. Rahul Saxena • Anand Srinivasan, Business Analytics, 2014
16. PurbaHalady Rao, Business Analytics: An Application Focus, PHI Learning,2014
17. Jeremy F. Shapiro. Modeling the Supply Chain. Duxbury Thomson Learning
18. <https://www.tableau.com/products/trial>
19. <https://udemy.com/course/business-data-analysis-using-microsoft-power-bi>
20. Data Science for Business, Provost and Fawcett: O'Reilly
21. Data Mining for Business Intelligence, Concepts, Techniques and Applications, Shmueli, Patel, and Bruce: Wiley
22. Management Science: The Art of Modeling with Spreadsheets, Powell and Baker: Wiley

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Customer Relationship Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to CRM processes, Cross Selling, Cross Selling, Customer life time value, Analytical CRM and many other CRM tools.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to Customer Relationship management planning development and implementation process.
CO3	Applying	Develop application skills in CRM based on the understanding of the different CRM frameworks and analytical tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life CRM design problems and opportunities encountered by managers, with the metrics and other established frameworks relevant to making effective strategic marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of CRM rollout for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven CRM practices and. CRM budget planning and CRM return on investment objectives.

10. CUSTOMER RELATIONSHIP MANAGEMENT

Objective:

The aim of this course is for students to fully understand how a Customer Relationship Management Programme should be formulated and implemented. The course will emphasize developing the knowledge and skills needed to create a successful CRM programme.

Module I:

CRM concepts: Acquiring customers, customer loyalty, and optimizing customer relationships, Strategic frame work of CRM – origins, the role of CRM. Types of CRM. Key cross functional CRM processes

Module II:

CRM strategy: CRM strategy development process. Customer strategy. The CRM value creation process -Customer Profitability, customer acquisition and retention. Cross Selling Customer segment life time value.

Module III:

The multi-channel integration process- customers and the use of channels, sales force, call center, internet, website, direct mail, e-commerce, m-commerce. channel integration, channel strategies- role of customer channel experience and channel categories.

Module IV:

Analytical CRM- information management process in CRM. The data repository- data marts, data warehouse. Analytical tools for datamining- visualization tools, segmentation, prediction tools, neural networks, decision trees, affinity grouping, churn management, customer profiling and profitability analysis, OLAP. Data protection, privacy codes of practice.

Module V:

IT systems – front office and back office applications-sales force automation, call center management, marketing automation campaign management,. Selecting a CRM solution. Organising for CRM implementation. CRM change and project management. Establishing a CRM performance monitoring system-standards, metrics and key performance indicators. CRM budget and CRM return on investment.

References

1. Peelen E. D., *Customer relationship management*, Pearson Education 2010.
2. Adrian Payne, *Hand Book of CRM- Achieving Excellence Through Customer Management*, Butterworth Hienennan,
3. Francis Buttle ,*Customer Relationship Management Concepts and Technologies*, Butterworth Hienennan
4. Paul Greenberg fourth edition, *CRM at the Speed of Light*, Tata McGraw Hill.

11.2.13 SYLLABI OF ELECTIVE COURSES IN INFORMATION TECHNOLOGY AREA

Elective Courses in Information Technology Area

1. Enterprise Resource Planning
2. Strategic Management of Information Technology
3. Data Base Management Systems
4. Business Process Reengineering
5. System Analysis and Design
6. Technical Foundation for E-Business
7. Data Mining for Business Intelligence
8. Advanced Data Analytics for Business Decisions
9. Technology Management
10. E-Commerce
11. Customer Relationship Management
12. Digital Marketing

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Enterprise Resource Planning	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to ICT, Information Systems, Comparison and Applications of various IS, Various technologies. Technical aspect of telecommunication systems, internet and their roles in business and Management environment. Recall the concepts of MRP and MRPII
CO2	Understanding	Develop a sound understanding of the important role of ERP in today's business environment. Become familiar with current ERP trends. Make basic use of Enterprise software, and its role in integrating business functions. Analyze the strategic options for ERP identification and adoption. Design the ERP implementation strategies. Create reengineered business processes for successful ERP implementation. Understand and be able to articulate the life cycle stages of any ERP implementation. Understand the concept of integrated business processes in relation to the business functions.
CO3	Applying	Apply the principles of ERP systems, their major components, and the relationships among these components; with the knowledge of typical ERP systems, and the advantages and limitations of implementing ERP systems. To comprehend the technical aspects of ERP systems. To be able to map business processes using ERP concepts and techniques.
CO4	Analysing	Know and be able to apply key technical terminology in enterprise information systems as they apply in different ERP products and development methods Understand key differences between the major ERP application and issues specific to these applications their configuration and management. Analyze a current architecture and perform an effective gap analysis before an ERP implementation. Be able to map enterprise architectural resources to a contemporary Enterprise Architecture mapping tool.

CO5	Evaluating	Effectively describe problems typical of ERP implementation projects and translate this information and use this information to anticipate and articulate the challenges associated with post-implementation management of ERP systems. Synthesize prior theoretical and experiential knowledge in IT development and project management with the current literature on Enterprise System development. Be able to evaluate the progress of an on going ERP implementation project.
CO6	Creating	<p>Analyze ERP systems and Implementation with creativity and initiative especially in new situations of professional practice; and Recommend or make decisions concerning supply chain designs and operations with high level personal autonomy and accountability.</p> <p>To comprehend the technical aspects of ERP systems; To understand concepts of reengineering and how they relate to ERP system implementations; To be able to map business processes using process mapping techniques; To be able to design the steps and activities in the ERP life cycle; To be able to identify and describe typical functionality in an ERP system; To obtain practical hands-on experience with one of the ERP packages.</p> <p>Become competent in applying ERP knowledge in real business environment. Able to integrate business processes in relation to the business functions. Acquire knowledge about the requirements analysis, the planning of business resources and the technology of ERP systems. Know how to implement ERP systems in business. Know the basic operation of ERP software. Know the procedure for handling integrated processes in ERP environment.</p>

1. ENTERPRISE RESOURCE PLANNING

Objective:

To make the students able to participate in planning and implementation of advanced enterprise-wide systems and technologies in their career. The course will help both functional area and IT managers understand the respective role of users, enterprise architects, developers and managers in the selection, preparation, implementation and management of large and complex enterprise applications. Also to expose the students to the technical aspects of ERP systems, particularly to those that helps in the process of

infrastructure planning, selection, implementation, pitfalls, and administration of these systems.

Module – I:

Evolution of ERP, MRP and MRP II, problems of system Islands, need for system integration and interface, Enterprise wide software solutions, difference between Integrated and traditional information systems, early and new ERP Packages, Over view of ERP packages, ERP products and markets - players and characteristics. Benefits of ERP implementations. Critical success factors, pitfalls - Challenges and issues - Competitive advantage, Impact on Organization Performance – Business transformation Processes and Enabling role of IT, Digital Transformation and ERP-Case studies.

Module – II:

Importance of 3 P's : Product, Process, and People, - Selection of ERP products & Consultants - Opportunities and problems in ERP selection and implementation; ERP implementation; identifying ERP benefits team formation-Consultant intervention—concept of business process – rethinking of processes – Business Process Reengineering (BPR) Concepts; The emergence of reengineering, Identification of reengineering need preparing for reengineering, Implementing change – Role of various stakeholders-change management – Resistance to Change - Integrating with other systems; Post ERP implementation- Training

Module – III:

Modules in ERP; business Modules of ERP package; Functional architecture, salient features of each modules of ERP, Comparison of ERP packages. Implementation of ERP systems, Business process modeling, Gap analysis, Framework for ERP implementation, business process, Emerging trends in business process, Selection ERP Process of ERP implementation—managing changes in IT organization- user interfaces- Preparing IT infrastructure measuring benefits of ERP, Implementation Obstacles, Risk factors

Module IV:

Technical Architecture of ERP systems- communication and networking facilities-distributed computing, client server systems, Concepts of Business objects, distributed object, Concept of database management systems, different types- relational database-computing architecture, data mining and warehousing, EDI – internet and related technologies- Web based technologies, Cloud Architecture- SaaS, Paas, Iaas, Mobile ERP, SOA, Open ERP- Customization, Configuration, Integartion

Module – V:

ERP and Supply Chain management- Extending scope of ERP through SCM., The concept of value chain differentiation between ERP and SCM –issues in selection and implementation of SCM solutions – CRM concepts and CRM solutions - E-Business and ERP – Industry 4.0 and ERP – ERP4.0, Intelligent ERP, Business Analytics and ERP - BI and applications -- business opportunities – basic and advanced business models on internet — Big Data and its impact - security and privacy issues – Disruptive digital

technologies and its impact on ERP, Recent Developments- Future and Growth of ERP- role of ERP in international Business, Some of the current topics related to ERP- case studies

References

1. Hammer, Micheal and JamtsChamby, *Reengineering the corporation*,
2. Leon, alexix *Countdown 2000*, Tata McGraw
3. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY.2000
4. Alexis Leon, *ERP Demystified*, Tata McGraw Hill, New Delhi.
5. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
6. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
7. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY, 2000
8. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
9. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
10. Luvai F. Motiwalla : *Enterprise Systems for Management*

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Strategic Management of Information Technology	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the important terminologies, Integrating technologies, applications, theories and services from ICTs in business or multidisciplinary environments which enable the IT vision and strategic plan development.
CO2	Understanding	Develop a sound understanding of the intimate relationship between business processes, organizational systems and ways of working with the world of ICT . Understanding importance of new generation technologies, intermediate software and services for a successful business
CO3	Applying	To apply the know-how on how strategic direction is supported by ICT and, on the other hand, to understand the importance of strategic direction in the ICT function. Should be able to unite business and technology for generating a common vision.
CO4	Analyzing	Analyzing the IT needs that are required in a business environment and understanding on how the information systems are built. Analyzing the organization's current situation and establish improvements for its processes using ICT tools.
CO5	Evaluating	Evaluate security mechanisms in the treatment of and access to information in a local or distributed processing system. Evaluate how technology can be used to achieve the strategically objectives based on the needs of the diverse business areas.
CO6	Creating	To be able to design a strategic plan centered on a business goals and technical management.

2. STRATEGIC MANAGEMENT OF INFORMATION TECHNOLOGY

Objective: This course is aimed at developing an understanding of use of Information Technology as a strategic tool for business management. The course focuses on development of Information Technology leadership. It also to enable the participants understand the process of formulating and implementing IT strategies in organizations.

Module – I: Introduction to IT applications – transaction processing – IS for managerial decisions - Sustaining competitive Advantage by use of IT, -Key issues in Information Systems management and the role of the CIO; Learning Organizations and Role of Information technology in Business Transformation.

Module – II: Planning for critical success factors – IT planning frame works - Analytical Framework for Strategic IT Initiatives; Frame work focusing on stages of growth – Value chain analysis – Porter’s five forces model management planning and control needs, Creativity.

Module – III: IT implementation – gap analysis - implementation frame work – implementation strategies - BPR- managing change – post implementation issues - Framework for appraising IT implementation- evaluation of inter organizational systems – project planning with IT – application with emerging technologies – IT outsourcing strategies, Information Partnerships, value added partnerships

Module – IV: Introduction to Security: Need for security and control, Risks to Information system data and resources, Definitions of Information security, computer crimes and virus, Internal control Types of security; Physical Security Threats to security, Physical access, Fire, and theft protection Environment hazards; Logical Security:: Threats to security, access control – identification, Authentication, Authorization, Password control and management Access control software; Data Security: Threats to security, Access controls, Back-up and recovery strategies, Data input /output control Data encryption; Tele-communication Security Physical security, Logical Access security, Dial-in access security, network management control, Authentication protocols, internet/intranet/extranet security; Computer Configuration and Operation Security Hardware/Software security, Start up/Shut down procedures, journals, Back up recovery strategies; personal Security: Threats Security, Protection from people, Protection of employees; Security Planning: Risk and Security policy, Security management, Business continuity planning, Security audit

Module - V: Group decision organization communication and group work support – impact of IT on organizations and support -Managing in the Market space; national Information Infrastructure and IT Policy at the national Level; Planning for Strategic IT Resource; Managing the IT Function- IT enabled restructuring- Virtual organization, IT innovation and Knowledge management

References

1. Galliers R D Strategic Information Management Challenges and Strategies Information System, Oxford, Butterworth-Heinemann, 1994.
2. McKemney James : Waves of Change: Business Evolution through Information Technology Boston, HBS Press 1995
3. Neuman, Seev Strategic Information systems: Competition through Information technologies New York, MacMillan College, 1994
4. Nolan Richard L Creative Destructor: A six stage process for transforming the organization Boston, HBS Press 1995.

5. Parker, Marilyn m. Strategic Transformation and Information technology, Paradigms for Performing while Transforming Englewood Cliffs, New Jersey, Prentice hall Inc. 1996
6. Somogyi, E K and Wallers, Robert, Towards Strategic Information systems, Tunbridge, Kent Publishing 1987
7. Ward, John Strategic Planning for Information Systems, Chichester, John Wiley, 1996.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Database Management System	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the important terminologies in like the E-R model Relational query languages, ACID properties etc.
CO2	Understanding	Understand the concept of normalization, the layered architecture of database, differences is various models in DBMS
CO3	Applying	To apply the know-how on how to build small relational database tables with suitable data types,, identifying the primary keys and the required foreign keys
CO4	Analyzing	Analyzing the existing tables of a medium complicated database system, and understand the reason for the various database tables and schemas created.
CO5	Evaluating	Evaluate and compare existing database implementation to identify the potential risks, inconsistencies and gaps in the database system.
CO6	Creating	Design and build and new database model and implement the same based on the business requirements, ensuring security, flexibility, consistency, atomicity and scalability.

3. DATA BASE MANAGEMENT SYSTEMS

Objective: This course has been designed to introduce the participants with the applications of systems designed to manage the data resources of organizations. It provides the participants an opportunity to study the hands-on implementation of a database in corporate environment. Also to expose the participants to a RDBMS and a query language for database management.

Module I : Introduction Data processing Concepts; Data Structures; File processing and Access methods; Taxonomy of Data Management Systems; Database and DBMS Software, Different types of database systems. Three layered Architecture, Advantages and Disadvantages of a Database, History; Data Modeling – Languages, Various Data Management Models. Database administration and database users.

Model – II : Data Models Object Oriented and Record Based models, E-R Model and E-R diagram examples and Exercises, Hierarchical Model, Network Model and Relational Model; Normalization techniques – First Normal Form, Second Normal Form and the Third normal Form, Examples and Exercises, Transaction management, process and their

Communications Interface with Database Management Systems; Properties of a Transaction, Commit and Rollback, Concurrency, Locking, Access Control Data Integrity, Integrity Constraints, Auditing, Backup and Recovery; data Dictionary – System Catalogue.

Module – III Reduction of schema to tables, relational Database, relational models-structure of relational database. Refresher to RDBMS: Defining a data base, defining columns and keys, structure of a relational database- normalising the design, minimizing redundancy, organization of data in RDBMS, Query languages for Relational Database management Systems; Structured Query Language. Distributed data Base Systems On-line Bases Object Oriented Data Bases.

Module –IV Distributed Data base and Distributed Data Access. Distributed data Processing Systems and a need for database Environment for such a System, Transaction concepts- Physical database Structure; states – concurrency controls – query optimization - Study of a relational Data base management Systems for Successful Implementation of Distributed Systems.

Module - V Approaches to database design. Managerial Issues Related to Data Base management; Evaluation criteria; performance Analysis; database back up Recovery Issues; Reorganization Problems; Implementation and maintenance issues; Database Administration. Emerging trends in database management – object oriented database – DSS – data mining – data warehousing – multimedia database – geographic database – distributed information systems

References

1. Coad, Peter and Edward, Yourdon, Object-Oriented Analysis 2nd ed. Englewood Cliff, New jersey, Yourdon Press, 1991.
2. Kroenke, David M Database Processing Fundamentals, Design, Implementation 4th ed. New York, McMillam, 1992
3. McFadden, Fred R and hoffer, Jeffrey, A Database management. 3rd ed. Redwood City, BenjaminCummings, 1991
4. Pratt, Philip J.A. Guide to SQL Boston, Boyd and Fraser, 1990
5. Salemi Joe Client/Server Data bases Emeryville, Califaornia, Ziff-Davis press, 1993
6. Systems and Developers Manuals for an RDBMS such as Oracle

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Business Process Re-Engineering	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recall history, scope and career path of BPM. Types, nature, and the importance of business processes with respect to time and space. Different types of BPMS, Knowledge Management, Business and IT alignment, Process Analysis, Process Design and Improvement, BPM Strategy, Business Intelligence and ERP systems
CO2	Understanding	Explain the concepts of various types of business processes, BPM strategies. Process management frameworks and process improvement methodologies. Should be able to clearly interpret As-is and To-be process gap analysis and summarize various aspects in the management of BPM projects
CO3	Applying	Apply information, methods, concepts, theories and techniques of BPM for process analysis, process modeling, process design and improvement and develop BPM strategy and implement process management.
CO4	Analyzing	Make comparison, interpretation and contrasting of facts, information, and knowledge to make analytical decisions. Analyze different models and point out their similarities and differences.
CO5	Evaluating	Compare different situations and develop efficient models choosing an appropriate approach or model and explain the functioning of the model, its benefits and drawbacks. Evaluate different modeling tools, techniques, and BPM standards and make appropriate choices based on the context of the projects.
CO6	Creating	Create new processes, models, or to modify/re-engineer the existing processes and models, and forecast their impact on organizational performance. Create process diagrams of As-is and To-be process diagrams and conduct a gap analysis.

4. BUSINESS PROCESS RE-ENGINEERING

Objective: This course has been designed to develop an appreciation of process view of business and redesign thereof. The participants would be able to develop an understanding of the use of information technology for process redesign and improvement. To provide a greater understanding of effective solutions to change problems that need to combine technological, organizational and people-orientated strategies by adopting a process based approach to change management. To introduce the contingencies that affect management and the most effective measures for dealing with them. To introduce strategic IS/IT planning and how it must relate to business strategy. To demonstrate the use and validity of organizational development models through current real-life case studies.

Module I: Introduction to BPR Historical background: Nature, significance and rationale of business process reengineering (BPR), Fundamentals of BPR. Conceptual Foundation of Business Process Reengineering; Role of Information Technology in BPR; process Improvement and Process Redesign- Reengineering and its relationship with functional areas of business, suggested reengineering framework. Deterministic machines, complex dynamic system, interacting feedback loops and social constructs perspectives of BPR

Module II: Managing Process Flows Business Process and Flows - Through put rate, work-in-process, Cycle Time, Little's Law. Cycle Time and Capacity Analysis – Cycle Time Analysis, Capacity Analysis. Managing Cycle Time and Capacity – Cycle Time Reduction, Theory of Constraints. Major issues in process redesign: Business vision and process objectives, Processes to be redesigned, Measuring existing processes, Role of information technology (IT) and identifying IT levers

Module III: Implementation Process Work flow Management systems in BPR, steps of BPR - Redesign of business processes – systematic or clean sheet, main and supporting processes, rationale of BPR, key enablers of BPR, technology for BPR, critical success factors, cross functional teams, mentoring, facilitating, models and methodologies of BPR, tools and techniques of BPR. Designing and building a prototype of the new process: BPR phases, Relationship between BPR phases.

Module IV: Making effective BPR Typical BPR activities within phases: Change management, Performance management, and programme management -Virtual ingredient – people, top management's involvement, involvement of consultants, empowerment and autonomy, the IT 'black hole', using process Simulation to minimize the risk –Business Process Map and Simulation Model, Parameter Analysis, Simulation and Key performance Indicators. BPR Implementation Methodology, Business process Improvement, Business Process Redesign; Man Management for BPR Implementation, Re-organizaing People and Managing Change

Module V: ERP and BPR Business process management, process centric organizations, business process maturity model, business process performance measurement. BPR and continuous improvement: Co-ordination and complementary efforts, IT capabilities and their organizational impacts, Implementation of BPR, Stages of implementation and critical aspects, Case studies on BPR. ERP in Modeling Business Processes, , Description

of the case company, Business Case, Five-stage Model of AS-IS / TO-BE Analysis, Managing Implementation.

References

1. Laguna Business Process Modelling, Simulation and Design, 2005, Pearson.
2. Chan Meng Khoong, Reengineering in action, 1st edition, 2009, Cambridge.
3. Charles Poirier Business Process Management Applied, 2005, Cengage.
4. Martyn A. Ould Business Process Management, 2010, BCS Viva Books.
5. Tony Carter, The Aftermath of Reengineering, 2007, Viva Books.
6. Dey Business Process Reengineering, 2006, Wiley.
7. K. SridharaBhat, Business Process Reengineering, 2007, HPH.
8. Saxena K.B.C., Business Process Outsourcing, 2007, Excel.
9. MahadeoJaiswal, Enterprise Resource Planning, 2005, Mac Millan.
10. MS.Jayaraman, et.al; Business Process Reengineering, 1994, TMH.
11. Varun Grover, M. Lynne Markus, Business Process Transformation, 2010, PHI.
12. Daniel minoli, Business Process Reengineering 2010, Routledge.
13. S. Balasubramanian and R. Radhakrishnan, Business Process Reengineering- Text and Cases, PHI, 2008

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		System Analysis and Design	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	State the different types of information and various phases of information systems development; recognize types of model like data flow diagram (DFD) and a class diagram (CLD).
CO2	Understanding	Summarize the main points of the system development process. Explain the symbols on a DFD or CLD and can interpret such a model. Describe an information model to an end-user.
CO3	Applying	Apply the knowhow to create a DFD or CLD based on a prepared narrative, where the key facts are given and extraneous information is removed.
CO4	Analyzing	Gather and draw out significant information regarding requirements from users. Ability able to separate minutiae from relevant facts in users' explanations and recognize inconsistencies or anomalies among users' requirements and choose the correct information models.
CO5	Evaluating	Critique and judge the quality of material given, by applying rules, heuristics, and established criteria like technical/syntactical correctness of the model and accuracy with which the explicit and implied requirements are captured.
CO6	Creating	Move beyond the "as is" system and to conceive the "to be." Organize and relate inputs from users, theories, principles and concepts, to define a new system. Interpret written documents and observations and iterate between modeling and requirements gathering to fill in gaps and resolve inconsistencies.

5. SYSTEM ANALYSIS AND DESIGN

Objective: The course is aimed at developing an appreciation of Analysis and Design of computer based Information systems. This course helps the students to understand the complete aspects of designing an Information Systems and its Implementation.

Module I: Types of information: Operational, tactical, strategic and statutory – why do we need Information systems – management structure – requirements of information at

different Levels of management – functional allocation of management – requirements of Information for various functions – qualities of information – Overview of systems analysis and Design; Software applications today-the changing scenarios- Different methodologies and Structured system analysis- Role of systems analyst – attributes of a systems analyst-software project selection

Module II: Details of SDLC approach, Business Systems Concept Systems Development Life Cycle -Problem identification – Requirements determination – requirements specifications – feasibility analysis – final specifications — system design – system implementation – system evaluation – system modification.– tools used in system analysis)- Strategies – methods – documenting study – system requirements Specification – from narratives of requirements to classification of requirements as strategic, tactical, operational and statutory- hardware and software study and selection Deciding project goals – examining alternative solutions – cost – benefit analysis – Quantifications of costs and benefits – payback period – system proposal preparation for Managements – parts and documentation of a proposal – tools for prototype creation-

Module III: Data flow diagrams – case study for use of DFD, good conventions – levelling of DFDs – levelling rules – logical and physical DFDs – software tools to create DFDs Procedure specifications in structured English – examples and cases – decision tables for complex logical specifications – specification oriented design vs procedure oriented design- Entity relationship model – E-R diagrams – relationships cardinality and participation – normalizing relations – various normal forms and their need – some examples of relational data base design. Coding techniques – requirements of coding schemes – error detection of codes – validating input data – input data controls interactive data input Output devices – designing output reports – screen design – graphical user interfaces – interactive I/O on terminals.

Module IV: Data Dictionaries; Process Organisation and Intersections; Decision Analysis; Decision Trees and Tables; Expansion, Explosion and Normalization Detailed Design Modulation; Module Specification File Design; Data Abase Design system Control and Quality Assurance; What are objects? – Why objects? – Objects and their properties – classes – inheritance – polymorphism – how to identify objects in an application – how to model systems using objects – some cases of object oriented system modelling- Documentation Tools; Testing techniques Available; System Controls and Audit Trails; System Administration and Training; Conversion and Operations Plan hardware and Software Selection; hardware Acquisition Bench marking, Vendor Selection, Operating System Selection, Language Processors Performance and Acceptance Testing Criteria, managing data Processing in an Organization; Data Processing Setup;

Module V: Audit and security of information systems – why controls are needed – objectives of control – techniques used in control – auditing information systems – auditing around, Introduction to Security: Need for security and control, Types of security and Threats -Risks to Information system data and resources, Definitions of Information security, through and with the computer – Security Planning: Risk and Security policy, Security management, Business continuity planning, Security audit-testing information systems – types of tests – Implementation- how to generate tests –

security of information systems – disaster recovery – business process continuity- Project management Techniques for Managing Software Projects. Complete system analysis and design case study– walk through the entire life cycle.

References

1. Awad Elias M. Systems Analysis and design, New Delhi, Prentice hall of India, 2010
2. Coad Peter and Edward, Yourdon, Object-Oriented Analysis, Englewood Cliff, New Jersey, Yourdon Press 2009
3. Hawsryszkiewyez, I.T. Introduction to Systems analysis and design. New Delhi, Prentice hall of India,2011
4. Marco, T.D. Structured Analysis & System Specification, New Delhi, Yourdon Press, 2007
5. Rajaraman, V. Analysis and Design of information systems New Delhi, Prentice hall of India, 2008
6. Van Over, David Foundations of business Systems Fort Worth, Dryden Press, 2009
7. Whitten J L etc. System Analysis and Design methods New Delhi, Galgotia, 2010

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Technical Foundation for E-Business	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the important terminologies like B2C, B2B, C2C,P2P, M-Commerce, E-Payment, ISP and e-services
CO2	Understanding	Describe the motivation of E-business and E-Commerce. List the different models in e-commerce, e-services, e-payment and digital marketing.
CO3	Applying	Recognize various elements that determine whether the traditional business or e-business is more effective.
CO4	Analyzing	Analyze the risks elements for a business case and also identify the differencing factors offered by web technology.
CO5	Evaluating	Evaluate and choose the best e-business plan, based on the various plan submitted taking into consideration the various advantages and disadvantage of each elements of the model.
CO6	Creating	Assess the effectiveness of an e-business plan suggest improvements. Prepare a complete business plan and design for an e-business project

6. TECHNICAL FOUNDATION FOR E-BUSINESS

Objective: The objective of the course is to acquaint the students with E-Business in competing International and domestic markets.

Module I: Introduction to E-Commerce and E- Business : Definition – competing in the digital economy - Forces Fuelling E-commerce – E- Business Models - Environment of E- Business, Economics and social impact of E- Business – opportunities and Challenges- types of E commerce. B2C, B2B, C2C, P2P, M Commerce.- Delivery systems in E commerce- Marketing and branding strategies in E Commerce.

Module II: Industry framework – types –Structure and organization of E-Business, Communications - Internet Service Providers – Internet access providers – Internet Vs. Online Services, WWW: Concepts – Technology – Applications and services offered in the Internet. EDI, EFT, Electronic Payment Systems. – Industry applications like on line

banking and other business applications. Electronic Payment Technology – Digital Cash – Electronic check – On-line Credit Card; Electronic Commerce and Banking; Changing dynamics in the banking Industry – Home banking Implementation approaches – Open Vs. Closed models Management issues in online banking

Module III: Electronic Commerce and Retailing – changing retail Industry Dynamics – Online retailing management challenges – Electronic Commerce and online publishing: Online publishing Strategies – Approaches – Advertising and online publishing - Digital copyrights and Electronic publishing Intranets- Databases, Data mining Data ware housing- Internet Service Providers Supply chain management –Managing retail supply chains – Supply chain application Supply chain Integration and coordination. Software Intranets and customer asset Management - Customer asset management basic and coordination, role of IT – CRM - online sales force – online customer service and support – Technology and Marketing Strategy: Intranets and manufacturing Integrated logistics, - agile manufacturing, Internet Marketing

Module IV: Emerging Business requirements – Manufacturing Information Systems – Intranet based manufacturing logistics Management; Intranets and Corporate Finance: Financial Systems – Financial Intranets – Software modules in Financial Information System – Transaction Accounting – Inventory Accounting Payment Management – Treasury and Cash management – Human Resource Management systems – Operations and manufacturing, size – structure of Financial Software markets – The Corporate Digital Library – Intelligent Agents- Online Auctions, Portals and Communities,

Module V: Business Models in E Commerce, Emerging legal frame work of E Commerce. Ethical Political and social Issues of E Commerce. Salient features of web programming – Multimedia Technologies – Concepts of Network programming languages – Servers Security aspects of server including proxy servers and firewalls – RDBMS concepts - Cyber laws in different countries – Mobile Commerce – Revenue models – E- Business Models - Optimization - Developing and putting on line a site. Domain registration, hiring web space, promoting the site to develop traffic.

References

1. Laudon, Kenneth C and Traver Carol, E Commerce-Business, Technology and Society , Pearson 2010
2. Cady, G H and Part McGreger, The Internet, BPB Pub. Delhi,2009
3. Carpenter Phil e Brands, HBS Press, Boston, 2010
4. Keen, Peter and Mark McDonald The e-Process Edge, Delhi, Tata McGraw-Hill, 2010
5. Mann, Catherine, L Global Electronic Commerce, Institute for International Economics, Washington, DC 2008
6. Oberoi, Sundeep e-Security and You, Delhi, Tata McGraw-Hill, 2009
7. Rich, Jason R. Starting an E-Commerce Business, IDG Books, Delhi, 2009
8. Samantha Shurety, E-business with Net Commerce Addison Wesley, Singapore, 2009

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Data Mining for Business Intelligence	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the important terminologies like OLAP, OLTP, data partitioning, regression tree, neural networks.
CO2	Understanding	Understand the functionality of the various data mining and data-warehousing component. Explain the various classifications and prediction models.
CO3	Applying	Appreciate the strengths and limitations of various data mining and data warehousing models
CO4	Analyzing	Analyse the various techniques and methodologies used of data mining and business intelligence based different data..
CO5	Evaluating	Compare different approaches of data ware housing and data mining with various technologies and choose the right approach
CO6	Creating	Prepare a detailed plan and design strategy to unearth valuable insights for raw structured/unstructured data for varying sources.

7. DATA MINING FOR BUSINESS INTELLIGENCE

Objective: The aim of this course is to familiarize students with various data mining techniques used in different business applications. The emphasis will be on how to uncover information from large databases collected in online marketing, retailing and financial markets.

Module I: Introduction to -data mining. Overview of data mining process. Data partitioning Training, validation and holdout samples, Data Mining Applications in Marketing and Customer Relationship Management, Exploratory data analysis, Data pre-processing Visualization Variable reduction, principal components

Module II: Supervised learning - Classification and Prediction, Simple Classification Schemes, Naïve Bayes, • K-Nearest Neighbors, Classification and Prediction, Classification and Regression trees, CHAID, CART

Module III: Classification and Prediction Logistic regression, Discriminant analysis
Artificial Neural Networks Neural Networks for Directed Data Mining Reducing
Exposure to Credit Risk

Module IV: Affinity Analysis, Market Basket Analysis, Retention and Churn -Different
Kinds of Churn Model, Cross-selling, Up-selling, and Making Recommendations,
Association Rules.

Module V: Unsupervised Learning, Matching Campaigns to Customers K-means
clustering, Hierarchical clustering Hazard Functions and Survival Analysis in Marketing

References

1. Nitin R. Patel and Peter C. Bruce Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner by Galit Shmueli, Wiley, 2007.
2. Michael J.A. Berry, Gordon Linoff, Data Mining Techniques: For Marketing, Sales, and Customer Relationship Management, Wiley Publishing.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Advanced Data Analytics for Business Decisions	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Recollect the basic statistical terminologies like regression and reduction and techniques like ANOVA and MANOVA
CO2	Understanding	Knowledge of concept fundamentals for different types of analytics for decision-making.
CO3	Applying	Apply and appreciate relevant data analytics techniques. Demonstrate relevant scaling & measurement techniques and the use of appropriate sampling techniques
CO4	Analyzing	Synthesize different techniques of coding, editing, tabulation and analysis for enabling right business decisions.
CO5	Evaluating	Compare the statistical reports identify the deficiencies and propose ways to better it.
CO6	Creating	Prepare report for making business decision based on statistical analysis which includes various parametric test and nonparametric test and ANOVA technique

8. ADVANCED DATA ANALYTICS FOR BUSINESS DECISIONS

Objective: The objective of the course is to introduce multivariate data analysis techniques and their applications in business. The emphasis of the course will be more on development of data analytics/research appreciation among management graduates. Knowledge of specific statistical tools will also be disseminated as a part of the overall objective of the course.

Module I: An overview of basic statistical tools: Classification of techniques, ANOVA, Correlation, introducing multivariate data analysis, assumptions.

Module II: Regression. Simple regression, multiple regression, Discriminant analysis, logistic regression, MANOVA

Module III: Reduction techniques: Factor Analysis - assumptions, deriving factors, Eigen value, rotation, interpretation. Cluster Analysis- objectives, design, assumptions, interpretation- Other emerging techniques

Module IV: Structural Equation Modelling: What is SEM, stages in modelling, Confirmatory Factor Analysis, measurement model, path model, fit indices

Module V: Conjoint Analysis -objectives, design, assumptions, interpretation. Multidimensional Scaling- objectives, design, assumptions, interpretation- Other emerging techniques.

References

1. Hair, Anderson, Tatham& Black Multivariate Data Analysis, Pearson
2. Naresh Malhotra, Marketing Research: An Applied Orientation, Prentice Hall
3. Levin Richard and Rubin David S.- Statistics for Management, Prentice Hall

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Technology Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Management of Technology in both Manufacturing and Service Industries.
CO2	Understanding	Develop a sound understanding of the important role of Management of Technology in today's business environment. Become familiar with the approaches, tools and techniques used in Technology Management, such as Technology Forecasting, Technology Search, Technology Transfer etc.,
CO3	Applying	Effectively apply knowledge of Technology Management to carry out Technology Forecast and Technology search. Preparing Technology Plan for and organization.
CO4	Analysing	Analyse data and other inputs to gain understanding and uncover Technology Management related problems.
CO5	Evaluating	Evaluate alternative solutions or decision choices in Technology Management and help in better decision making using scientific tools and techniques.
CO6	Creating	Develop technology Management plans for Manufacturing Organisations.

9. TECHNOLOGY MANAGEMENT

Objective: Technology is a key resource in the development of a nation. It is therefore important that this key resource be managed well. This course aims at developing the MBA students an understanding of the need for science and technology management, and science and technology strategy; characteristics of science and technology management problems and the solution methodologies available; technology forecasting and its use in planning and decision making in business and government; management of research and development and the issues involved; and Design and Implementation of Technology strategies.

Module I: Introduction to Management of Science and Technology, Impact of science and technology on society, Technology forecasting techniques. S and T Policy of India. Manor S and T Institutions in India. S & T and their management in selected sectors such as Telecom, Agriculture and Health.

Module II: Integrating Technology and Strategy, Technology and the manager, designing a technological strategy, selection of technology. Contemporary global and local technology management issues.

Module III: Managing R& D, study of innovations and management of innovating organizations. Patents for Technologies.

Module IV: Developing new products and new businesses, Interfaces: marketing, engineering, manufacturing. The new product development learning cycle. Corporate venturing process.

Module V: Technology Transfer, Technology transfer mechanisms and methods, Implementation and assimilation of technology transferred. Agencies for aiding technology transfer.

References

1. Joseph P. Martino, Technological Forecasting for Decision Making, 2nd Edn.
2. Robert A Burgelman, and Modesto A Maidque, Strategic Management of Technology and Innovation
3. Articles in Journals on Technology Management, Strategic Management, and Harward Business Review.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		E-Commerce	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to E-commerce like B2C, B2B, C2C, P2P, M Commerce. Internet protocols, Electronic Payment Technology etc.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to generate insights for designing effective ecommerce solutions.
CO3	Applying	Develop application skills in understanding e-commerce technology tools and solutions in different e-commerce domains.
CO4	Analysing	Impart skills to analyse the real life e-commerce n development, planning and implementation issues encountered by managers, studying cases and application exercises.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues related to e-commerce strategic thinking and action.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of evolving e-commerce technology options and other technology infrastructure development platforms.

10. E-COMMERCE

Objective: The objective of the course is to acquaint the students with the use of E-Commerce in competing markets.

Module I: Introduction to E-Commerce:

Types of E commerce. B2C, B2B, C2C, P2P, M Commerce. Issues in E Commerce Collapse of the DotCom Bubble and the lessons for future- . Business Models in E

Commerce, Emerging legal frame work of E Commerce. Ethical Political and social Issues of E Commerce.

Module II: Technology Infrastructure for E Commerce:

The internet, technology and standards. Internet protocols. Markup languages. Web servers, browsers and clients. Search engines and E mail, Bots, Emerging applications like streaming media, distributed computing, E Learning.

Internet Service Providers – Internet access providers – Internet Vs. Online Services; Concepts – Technology – Applications –

Developing and putting on line a site. Domain registration, hiring web space, promoting the site to develop traffic.

Module III: E Commerce payment systems:

Electronic Payment Systems: Electronic Payment Technology – Digital Cash – Electronic check – On-line Credit Card; Electronic Commerce and Banking; Changing dynamics in the banking Industry – Home banking Implementation approaches – Open Vs. Closed models Management issues in online banking Electronic Commerce and Retailing – Delivery systems in E commerce. Logistics of delivery.

Module IV : Marketing for E Commerce:

Marketing for E Commerce. Promoting the products and services, Internet marketing technologies. Web transaction logs and customer profiling and targeting. Databases, Data mining Data ware housing, Data analysis, mailings and spam. Marketing and branding strategies in E Commerce. On line marketing research, Digital copyrights and Electronic publishing.

Module V: E Commerce some areas of business:

Retailing on the web and On line shops, Online services –travel services, on line financial services, Career and job search services. B2B Applications, Supply chain management, CRM, Online Auctions, Portals and Communities, Emerging trends in E-Commerce

References

1. Laudon, Kenneth C and Traver Carol, *E Commerce-Business, Technology and Society*, Pearson
2. Cady, G H and Part McGreger, *The Internet*, BPB Pub. Delhi
3. Carpenter Phil *e Brands*, HBS Press, Boston
4. Keen, Peter and Mark McDonald *The e-Process Edge*, Tata McGraw-Hill, Delhi
5. Mann, Catherine, L *Global Electronic Commerce*, Institute for International Economics, Washington, DC
6. Oberoi, Sundeep-*Security and You*, Tata McGraw-Hill, Delhi
7. Rich, Jason R. *Starting an E-Commerce Business*, IDG Books, Delhi

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Customer Relationship Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to CRM processes, Cross Selling, Cross Selling, Customer life time value, Analytical CRM and many other CRM tools.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to Customer Relationship management planning development and implementation process.
CO3	Applying	Develop application skills in CRM based on the understanding of the different CRM frameworks and analytical tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life CRM design problems and opportunities encountered by managers, with the metrics and other established frameworks relevant to making effective strategic marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of CRM rollout for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven CRM practices and. CRM budget planning and CRM return on investment objectives.

11. CUSTOMER RELATIONSHIP MANAGEMENT

Objective:

The aim of this course is for students to fully understand how a Customer Relationship Management Programme should be formulated and implemented. The course will emphasize developing the knowledge and skills needed to create a successful CRM programme.

Module I:

CRM concepts: Acquiring customers, customer loyalty, and optimizing customer relationships, Strategic frame work of CRM – origins, the role of CRM. Types of CRM. Key cross functional CRM processes

Module II:

CRM strategy: CRM strategy development process. Customer strategy. The CRM value creation process -Customer Profitability, customer acquisition and retention. Cross Selling Customer segment life time value.

Module III:

The multi-channel integration process- customers and the use of channels, sales force, call center, internet, website, direct mail, e-commerce, m-commerce. channel integration, channel strategies- role of customer channel experience and channel categories.

Module IV:

Analytical CRM- information management process in CRM. The data repository- data marts, data warehouse. Analytical tools for datamining- visualization tools, segmentation, prediction tools, nural networks, decision trees, affinity grouping, churn management, customer profiling and profitability analysis, OLAP. Data protection, privacy codes of practice.

Module V:

IT systems – front office and back office applications-sales force automation, call center management, marketing automation campaign management,. Selecting a CRM solution. Organising for CRM implementation. CRM change and project management. Establishing a CRM performance monitoring system-standards, metrics and key performance indicators. CRM budget and CRM return on investment.

References

1. Peelen E. D., *Customer relationship management*, Pearson Education 2010.
2. Adrian Payne, *Hand Book of CRM- Achieving Excellence Through Customer Management*, Butterworth Hienennan,
3. Francis Buttle ,*Customer Relationship Management Concepts and Technologies*, Butterworth Hienennan
4. Paul Greenberg fourth edition, *CRM at the Speed of Light*, Tata McGraw Hill.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Digital Marketing	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to search engine optimization, search advertising, display advertising, social media Marketing, web analytics, content marketing and campaign management and many other digital marketing tools.
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to digital marketing campaign planning development and implementation process.
CO3	Applying	Develop application skills in digital marketing based on the understanding of the different digital marketing tools applied with the help of short cases and application exercises and mini projects.
CO4	Analysing	Impart skills to analyse the real life digital marketing problems and opportunities encountered by marketing managers, with the metrics and other established frameworks relevant to making effective digital marketing decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of digital marketing campaign rollout for meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain of metrics driven digital marketing practices and innovative content and other digital assets creation process.

12. DIGITAL MARKETING

Objective:

The course aims to acquaint students with the various internet and e-commerce business models and the process of marketing through Internet, Social Media and Mobile Marketing relevant for 'Business to Business' (B2B), 'Business to Consumer' (B2C) and 'Not-for-Profit' businesses.

Module I:

Overview of Digital marketing, the online environment – tools and techniques; characteristics of digital marketing and new media; digital marketing and e-commerce evolution and growth; history. Major e-commerce B2C and B2B business models.

Module II:

Understanding online consumer behavior – B2C and B2B buying process. Website planning design and development - process tools and techniques. Different websites, functions and design issues. Content Marketing Strategy, e-CRM basics.

Module III:

Paid and non-paid ; inbound and outbound digital marketing campaigns . Search Engine Optimization (SEO): On- site and off-site optimization. Online display advertising PPC- Search engine advertising, and Network advertising .Affiliate Marketing programmes.

Module IV:

Social Media Marketing - Understanding various social media platforms – marketing through Facebook, Youtube, Twitter, LinkedIn and Pinterest. Viral Marketing, Online PR and Reputation Management;

Module V:

Website Analytics- Google Analytic account - Google Analytics Reports .Mobile marketing-features tools and campaign planning; Local and location based Mobile Marketing tools and techniques. Measuring success of mobile marketing campaigns. Email Marketing-tools and techniques and process.

References

1. Dave Chaffey and PR Smith *E marketing excellence planning and optimizing your digital marketing*: Butterworth-Heinemann , Elsevier
2. Damian Ryan and Calvin Jones, *Understanding digital marketing: marketing strategies for engaging the digital generation*, KOGAN PAGE, London. 2014.
3. Damian Ryan and Calvin Jones, *The best digital marketing campaigns in the world: mastering the art of customer engagement*, KOGAN PAGE London.2014
4. Kenneth laudon and GuericoTraver*E-commerce Business , technology and society*, Pearson 11th edition,2015

11.2.14 SYLLABI OF ELECTIVE COURSES IN INTERNATIONAL BUSINESS AREA

Elective Courses in International Business Area

1. International Finance
2. Supply Chain Management
3. International Logistics Management
4. Global Human Resource Management
5. International Marketing
6. Export Import Policies and Procedures
7. Enterprise Resource Planning

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		International Finance	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Enumerate the key concepts related to Behavioral Finance
CO2	Understanding	The role of key finance organizations in the global economic system and international capital and foreign exchange market
CO3	Applying	Apply knowledge of foreign exchange hedging to identify and manage the foreign exchange risks faced by globally active firms
CO4	Analysing	key operations of foreign exchange market tools and strategies
CO5	Evaluating	current conditions in developing emerging markets, and evaluate present and future opportunities and risks for international financial activities like Forex and financial flows
CO6	Creating	framework to support successful decision-making in all relevant functions and financial activities within the competitively international environment

1. INTERNATIONAL FINANCE

Objective: Objective of this course is to provide knowledge on the international monetary system, to analyse the nature and functioning of foreign exchange markets, determination of exchange rates and to manage foreign exchange risk.

Module I: Introduction to International Financial System

Global Economy - A Historical Perspective; Financial Globalization- The Missing Link Experiences from India; Openness of Indian Economy Indicators of Openness of Indian Economy; Developments in the international monetary system

Module II: Balance of Payments:

Balance of payments – significance- preparation of BOP statement – Link between BOP and the economy.

Module III: Foreign Exchange Market and Exchange Rate Mechanism:

Exchange Rate Mechanism: Exchange rate quotations, direct and indirect quotes, bid and ask quote, Nominal, real and effective exchange rates, Determination of exchange rate in the spot and forward markets, Factors influencing exchange rate.

Foreign Exchange Market: Meaning, Features, Major participants

Spot Market: Meaning, Features, Currency arbitrage: Forward Market: Meaning, Features, Arbitrage in forward market; Market for Currency Futures: Meaning, Forward and Futures Contracts, Hedging in currency Futures Market; Market for Currency Options: Types of Option Market, Types of Options, Option pricing, Hedging with Currency Options.

Module IV: Foreign Exchange Exposure Management:

Meaning, Types of Exposure, Hedging of exposure.

Module V: International Investment and Financing Decision:

Significance, Factors affecting international investment, Cost Benefits of Foreign Direct Investment, Strategies for FDI, Mode of Investment.

International Portfolio Investment: Concept of optimal portfolio, Measurement of Returns, Measurement of risk.

International Financial market Instruments: International Equities, International Bonds, Short term and medium term instruments.

Financial Swaps: Meaning, Interest rate Swap and Hedging, Currency Swap, Management of Interest rate risk.

References

1. Maurice D. Levi: International Finance – The Markets and Financial Management of Multinational Business
2. Alan C. Shapiro: Multinational Financial Management, Printice Hall of India
3. Keith Pilbeam: International Finance,
4. Prakash G. Apte: International Financial Management, Tata McGraw-Hill Education Private Ltd., New Delhi
5. Vyuptakesh Sharan: International Financial Management, PHI Learning Private Limited, New Delhi
6. Thummuluri Siddaiah: International Financial Management, Pearson
7. Francis Cherunilam: International Economics, Tata McGraw-Hill Education Private Ltd., New Delhi

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Supply Chain Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Production and Operations, Inventory, Warehousing. Transportation, Customer service, Optimization
CO2	Understanding	Develop a sound understanding of the important role of supply chain management in today's business environment. Become familiar with current supply chain management trends Understand and apply the current supply chain theories, practices and concepts
CO3	Applying	Effectively apply knowledge of research principles and methods of supply chain analysis and business decision analysis; Demonstrate cognitive skills to demonstrate mastery of SCM and related business theories and to reflect critically on both theory and professional practice. Demonstrate and use cognitive, technical and creative skills to generate and evaluate complex supply chains at an abstract and at a practical level;
CO4	Analysing	Use cognitive, technical and creative skills to investigate, analyse and synthesize complex information, problems, concepts and theories and to apply theories of SCM to different contextual problems in supply chains and their business applications; and
CO5	Evaluating	Apply technical and communication skills to design, evaluate, implement, analyze, theories about new and emerging developments in SCM and the analysis of SCM problems and opportunities;
CO6	Creating	Analyze SCM with creativity and initiative especially in new situations of professional practice; and Recommend or make decisions concerning supply chain designs and operations with high level personal autonomy and accountability. <ul style="list-style-type: none"> • be able to communicate about professional issues relevant to SCM and logistics, on an expert- as well as a common level • be able to apply acquired knowledge and skills

		<p>within new areas of research and applications</p> <ul style="list-style-type: none"> • be able to read scientific papers and other academic work with a critical view • have advanced knowledge about supply chains and logistics in general • have extensive knowledge of scientific theories and methods relevant to managing supply chains and operations within such chains • have advanced knowledge of the relations between supply chains and relevant theories within economics and business administration
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2. SUPPLY CHAIN MANAGEMENT

Course Objectives:

1. To introduce to the students the principal concepts of SCM & logistics
2. To create awareness in the application of SCM in modern business fields.
3. To understand the processes involved in logistics and supply chain management
4. To understand how to develop and manage efficient and effective supply chains
5. To understand how technology and information systems work as enablers to provide leverage in gaining and maintaining competitive advantage in the marketplace,
6. To gain adequate competency to deal with the modern concepts and trends in SCM and its implications
7. To expose students to various global supply chain strategies and operational techniques

Module I

Introduction to Logistics and Supply Chain - concept, evolution and development, difference – role, scope, functions and importance – Value Chain Concepts - Porter’s Value Chain- The new manufacturing and distribution practices in the light of globalized digital economy – Integrated logistics management – Supply Chain Management - Local and International Supply Chains-Benefits and issues- Types of supply chains and examples- Flows in SC- Decision Phases: Strategic, tactical, and operational decisions in supply chain. SCM building Blocks, Supply Chain Drivers and Obstacles, International Logistics and Supply Chain Management – The Total Cost Concept and Logistics and SCM Trade-Offs – SC Profitability, Global SCM – Demand Management in SC- Green Supply Chain Management: Concepts and Techniques – Cold Supply Chain Management: Concepts, Importance, Applications.

Module II

Key supply chain business processes (i.e., planning, sourcing, producing, distributing and paying), Managing material flow and distribution- Different views – PUSH and PULL, Cycle views - Distribution and planning Strategy- Development Strategy- Supply Chain Synchronization - Warehousing and Operations Management –Transportation Management, Inventory Management – recent developments in the above areas- Delayed Differentiation - Cross docking – Drop shipping; Packaging and its importance - SCM and Theory of Constraints- Uncertainty in SCM - Management of Uncertainty in SCM- Supply chain Risk- Supply chain vulnerabilities, Risk mitigation and resilience.- Quick Response Logistics.

Module III

Purchasing and Supplier Management, Procurement – Strategies - Sourcing and supplies management, outsourcing, postponement decisions and strategies - Global Sourcing, e-sourcing and procurement- VMI- Vender identification, selection, evaluation, development, Supplier Relationship Management, Supplier Quality Management, Supply Chain Performance, SC Excellence- Benchmarking -Supply Chain Coordination, collaboration and Integration - Impact of Variability in Supply Chains- Supply Chain disruption- Bull Whip effect, components, measures, and design issues -Role of IT- Logistics and Supply Chain Information systems, E-Business- Concepts and Applications of RFID, GIS, GPS - E-Commerce- ERP, SFA- Safety and Security in CS.

Module IV

Forecasting: Techniques and systems design, Customer Service Management and measurements, CRM, Manufacturing Logistics, Pricing Strategies, Negotiation, SCM relationships- 3PL, 4PL and emergence of 5 PL, Strategic Partnerships, Co-makerships – SC partnerships - SCM Network design and Facilities development, SCM Planning and development Strategies- Designing supply chain Network – Design Decision in supply chain network, Factors influencing network design. Frame work for Network design decisions, Designing Global Network – Off shoring decisions- Network Synchronisation- total cost considerations; Supply Chain uncertainties- Supply Chain Vulnerabilities – Simulation and Optimization – SC modeling - SCM models, SCOR model – Retail Supply Chains- Importance of pricing strategy in SCM and SC Costing - Activity Base Costing – Reverse Logistics and reverse flows in SCM-importance and Applications.

Module V

Extended Enterprises – Logistics and SC Information systems- SC DSS - Comprehensive Information System Integration- Industry 4.0 and SCM: Importance and Applications- Digital Supply Chain Management - Supply Chain 4.0 - Impact of disruptive digital technologies - Impact of Internet – Digital Transformation in SC- IT enabled SCM – E-SCM-Virtual SCM-e-sourcing – e-procurement- Business Intelligence- Digital Business-

Lean, agile and Leagile SCM- Blockchain, ERP, IoT, IIoT, AI & Machine learning, Automation -Robotics and RPA - autonomous mobile robots-**Immersive technologies**, Intelligent things and SCM, Automated Vehicles, Simulation -SCM software – Applications of Cloud computing, SC Analytics -- supply chain resilience and sustainability - recent developments- Future of SCM - Some of the current topics related to logistics and supply chain management.

References

1. Martin Christopher, *Logistics and Supply Chain Management*
2. James F. Roerch and Copacino, *Logistics Hand Book*
3. Jeremy F. Shapiro, *Modeling the Supply Chain*
4. N. Channrasekharan, *Supply Chain Management*
5. Bowersox, Closs, Cooper, *Supply Chain Logistics Management*, McGraw Hill.
6. Donald J Bowersox, David J Closs, *Logistical Management (The integrated Supply Chain Process)*, TMH
7. Sunil Chopra, Peter Meindl, *Supply Chain Management (Strategy, Planning and Operation)*, Pearson Education, India.
8. Burt, Dobbler, Starling, *World Class Supply Management*, TMH.
9. Martin Christopher, *Logistics and Supply Chain Management*.
10. N. Chandrasekharan, *Supply Chain Management*
11. Janat Shah – *Supply Chain Management – Pearson Publications*
12. John J. Coyle, C. John Langley, Brian J. Gibson, Robert A. Novack, *A Logistics Approach top Supply Chain Management*

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		International Logistics Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Logistics Management. Recalling the types of resources used in Sea, Land and Air transport.
CO2	Understanding	Develop a sound understanding of the Characteristics and uses in operation of the important resources used in Logistics such as in different systems for transport of Goods over land, Sea and Air. The current ways of operation of the Logistics systems, in India and Internationally. Typically understand the cargo movement systems using different modes of transport and the role of storage in it.
CO3	Applying	Effectively apply Logistics related knowledge and solution approaches, tools and techniques used for planning, directing and controlling operations in a Logistic system.
CO4	Analysing	Use cognitive skills, technical knowledge to investigate, analyze and synthesize complex information related to practices of Logistics in business situations.
CO5	Evaluating	Apply technical knowledge and use data, theories and models to evaluate and implement, appropriate solutions to problems related to Logistics management. Evaluate the impact of the decisions in Logistics management on other functional areas.
CO6	Creating	Demonstrate and use cognitive, technical and creative skills to conceive and develop solutions to complex problems related to Logistics Management.

3. INTERNATIONAL LOGISTICS MANAGEMENT

Objective: The objective of this course is to impart a general and clear idea of international logistics system and management.

Module I: Integrated logistics management – concept, evolution and development; Importance of logistics management in International business, International Logistics: functions and intermediaries. Issues involved in movement of goods. Logistics information system – positioning information in logistics; logistics information systems design; I.T. in logistics; strategic information linkage. Total cost approach to Logistics. Liabilities of carriers. Marine Insurance for Cargo. Warehousing, repacking and other value added service provided by logistics service providers. 3 PL and 4 PL logistics service. Performance measurement of logistic systems.

Module II: The general structure of shipping industry; cargo types; vessels and vessel characteristics; linear operations and tramp operations; chartering of bulk ocean carriers; the ocean linear conference system; freight structure and practices; coordination; role of intermediaries – forwarding and clearing agents; freight brokers; stevedores and shippers agents. Containerisation types of Containers and ICDs. Layout and working of container terminals. Port system and sub systems, port organization and management. Responsibilities of port trusts, Growth and status of Ports in India, Inland water transport. Issues in Sea transport. Regulatory authorities for sea transport and their roles.

Module III: Introduction to Road transport system, Classification of Vehicles. Road network in India: types of roads, Road transport companies and their operation in Full truckload business and in less than truckload business. Road parcel service business. Fleet management systems. Integrated Logistics provided by Road transport companies. Documents and Permits required in road transport system. Problems in road transport. Regulatory authorities involved with road transport system.

Module IV: Rail Transport system, Types of railway wagons, rakes, marshalling operations and yards, Railway goods freight structure, Railway Parcel service operations. Railway goods service operations. Procedure for availing railway parcel or goods service and the documentation involved. Operations at a railway goods yard/siding. Operations and control in the railways. Organization of Indian Railways.

Module V : Introduction to Air transportation, Air transport geography, Types of Aircrafts, Airline and air cargo operations, Import and export process of cargo by air, Intermediaries in air cargo operations, freight structure, carrier and consignee liabilities. Layout of Airport: facilities in Airside and city side for passenger, cargo and aircrafts. Regulatory authorities for air transport and their roles.

References

1. James F. Robbison & William C Copaciono (editors): The Logistics Hand Book.
2. Donald F Wood et.al.: International Logistics
3. Douglas Lambert and James R Stock: Strategic Logistics Management

4. IIFT : Study of Arrangements of Shipping Conference; Dictionary of Shipping and Chartering Terms; Role of Shipping Policy in the Export Strategy of India; and Freight Tariffs and Practices of Shipping Conferences
5. J.Bes : Chartering Practice
6. E. Elgar (Cheltenham, UK and Brookfield, Vt., US) The economics of regulating road transport Book
7. Sudhir Kumar and Shagun: Bankruptcy to Billions: How the Indian Railways Transformed, Oxford India Paperbacks
8. DilipHalder: Urban Transport in India: Crisis and Cure, Bookwell Publications
9. John G. Wensveen Air Transportation Seth Young (Author), Alexander Wells Airport Planning And Management
10. John J. Cayle, Edward J.Bardi, C, John Langloy Jr.: The Management of Business Logistics - A Supply Chain Perspective (7th Edn.), Thomson-South Western, Bangalore, 2007.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Global Human Resource Management	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Equip the student in remembering basic concepts related to global human resource management in the context of international mergers and acquisitions, technological advancements, employee discipline and cultural convergence.
CO2	Understanding	Enable the students to understand intricate concepts in global human resource management to excel in international business scenario.
CO3	Applying	Develop application skills in various global human resource management strategies to build a future ready, competent and diverse workforce
CO4	Analyzing	Provide the skills to analyze and narrow down different issues related to global human resource management affecting organization operating at international level.
CO5	Evaluating	To help the students in building the skill to evaluate the impact of relevant global human resource management interventions that support futuristic business strategies.
CO6	Creating	Create unique ways to develop and share creative global human resource management strategies for future business enhancement.

4. GLOBAL HUMAN RESOURCE MANAGEMENT

Objective: This paper helps the students to learn how environmental and institutional constrains, including culture, impact human resource planning and other human resource functions of international firms.

Module I : Key perspectives in Global HRM – Factors influencing the need for Global HRM – Domestic Vs. Global HRM

Module II : International merger & acquisitions and Global HRM – Competitive HR strategies of MNCs – Global HRP – Global staffing – Global training and development – Global performance management – Global compensation management.

Module III : Technological advancements and Global HRM – Impacts of demographic changes and migration – Offshore sourcing – Managing international assignments including career planning.

Module IV : Employee discipline in Global HRM – Cross-national cooperation and conflicts – Workplace discrimination

Module V : Cultural convergence and divergence in Global HRM – Hofstede’s cultural dimensions – Grievance handling in Global HRM - Global employee relations - Global HRM challenges and trends – Case studies

References

1. Charles M. Vance and Yongsun Paik (2009), Managing a Global Workforce, PHI, New Delhi. 2. Biswajeet Pattanayak (2004), Human Resource Management, PHI, New Delhi.
2. Amitabh DeoKodwani and Senthil Kumar, S. (2006), Global Human Resource Management, ICFAI University Press
3. Hugh Scullion and David G. Collings (2011), Global Talent Management, Routledge
4. Peter J. Dowling, Marion Festing, and Sr. Allen D. Engle (2008), International Human Resource Management, Cengage Learning.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		International Marketing	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to International Marketing , like International market segmentation and market coverage strategies
CO2	Understanding	Enable the students to understand comprehensively the concepts delivered at the remembrance level and their relationship to international marketing strategy development process.
CO3	Applying	Develop application skills in International Marketing based on the understanding of the different contents delivered with the help of short cases and application exercises.
CO4	Analysing	Impart skills to analyse the real life International marketing problems and opportunities encountered in the light of emerging International business environment.
CO5	Evaluating	Make the students capable to evaluate the impact of their decisions made in the context of implementation issues and implication on meeting the long term and short term objectives of the firm.
CO6	Creating	Encourage creativity and breakthrough thinking for generating innovative ideas in the domain International marketing strategies.

5. INTERNATIONAL MARKETING

Objective: The objective of this course is to expose the participants to the application of marketing principles to the International Marketing environments and to the different foreign market entry and operating strategies.

Module I: Introduction to International Business: why go international? Special problems/features of international marketing vis-à-vis domestic marketing; stages of

internationalization; international marketing orientations; international marketing research; case discussion on impact of environmental factors on international business.

Module II: Market analysis and selection; market entry and operating strategies; exporting licensing; contract manufacturing; foreign assembly; foreign production; joint ventures; production in free areas; third country location; counter trade; strategic alliance etc.

Module III: International market segmentation and market coverage strategies; differentiated marketing; undifferentiated marketing; concentrated marketing; niche marketing; product strategies; international marketing and Product Life Cycle management; pricing methods and strategies.

Module IV: Promotion strategies; distribution strategies; practices in international promotion and distribution.

Module V: Global organization, international marketing organization; export department; subsidiary; foreign branches/offices; emerging trends in international marketing; internationalization strategies of Indian firms/strategies of MNCs.

References

1. Cateora, Philip; International Marketing (Richard D Irwin)
2. Keegan, J. Warren: Global Marketing Management (Prentice Hall of India)
3. SakOnk visit and John J. Shaw : International Marketing (Prentice Hall of India)
4. J.P. Jeannet and Hennessey; Global Marketing Strategies.
5. Majaro, Simon : International Marketing (George Atten & Unwin)
6. Francis Cherunilam : International Marketing (Himalaya Publishing)
7. Francis Cherunilam : International Business (Himalaya Publishing)

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Export and Import– Policies and Procedures	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Explain the basic concepts and terms related to export and import trade related to global markets.
CO2	Understanding	Understand the export-import procedures, and also the role and functions of various institutions involved in the promotion of foreign trade in India
CO3	Applying	Analyze and compare the relative benefits of various credit and incentive schemes that can be availed by Indian exporters and importers in order to remain competitive in the global market.
CO4	Analysing	Make informed judgment on the role of Foreign Trade Policy in the promotion of exports thereby the consolidation of the Balance Sheet of a country.
CO5	Evaluating	Make informed judgment on the role of Foreign Trade Policy in the promotion of exports thereby the consolidation of the Balance Sheet of a country.
CO6	Creating	Create new ideas and design strategic trade plans to capitalize the vast and immense opportunities offered in a globalized market setting.

6. EXPORT AND IMPORT – POLICIES AND PROCEDURES

Course Objective: The objective of this course is to give students a thorough understanding on India’s Foreign Trade policy, Export-Import procedures and Documentations, Pricing and Payment Terms, and Institutional Framework for the promotion of foreign trade in India.

Module – I International Trade-Reasons, Features, Benefits, Advantages. Trade Creation vs Trade Diversion. Registration Formalities, Export Licensing, Types of Exporters-Manufacturer\Merchant Exporter. Methods of Exporting.

Module – 2 Documentation – Aligned Document System-commercial and Regulatory Documents, Certificate of Origin, Bill of Lading, GR Form, Shipping Bill, Consular

invoice. Pricing-Factors, Objectives, Strategies. Payment Terms-L\C, D\A, D\P. Sale Terms, ICCand Price Quotations, F.O.B, C.I.F, C&F. Financing-Pre-Shipment and post shipment. MarineInsurance, Credit, Exchange Rate.

Module – 3 Foreign Trade Policy (Latest)- Highlights, Special Focus Initiatives, Export incentives, Schemes, Assistance viz. MEIS, SEIS, DBK, Institutional Frame Work, Export Promotion Councils, Commodity Boards, DGFT, FIEO, ICA, ECGC, EXIM Bank

Module – 4 Processing of an Export Order. Quality Control, Pre-Shipment Inspection, INCOTERMS. Realizing Payment of Export Proceeds, Negotiation of Documents CHA, SEZ, EOU, Deemed Exports, Town of Export Excellence, EPCG Schemes and Other Incentives for Exporters. Retirement of Export Documents

Module -5 Imports – Categories of Importers, Preliminaries, Procedures, Policies, Prohibited\Negative\Centralized List. Documentation-Bill of Entry, Customs Formalities, Warehousing of Imported Goods, Retirement of Import Documents. Excise Formalities. Import restrictions, Trading Blocs, Tariff and Non-Tariff Barriers, European Union, NAFTA.

References

1. Handbook of Import-Export Procedures, Ministry of Commerce, Government of India, New Delhi
2. Export Import Procedures and Documentation, Khushpat S, Jain, Himalaya Publishing House
3. Export Marketing, TASBalagopal,Himalaya Publishing House
4. International Marketing (Text and Cases), Francis Cherunilam, Himalaya Publishing House
5. Export: What, Where and How, Paras Ram, Anupam Publishers
6. Exports – Do it Yourself, Mahajan M.I., Snow White Publications
7. Export Documentation and Procedures, , Nabhi Publications
8. International Marketing Management, R.L. Varshney, Sultan Chand
9. International Marketing, Terpstra, Holt Saunders
10. Export Management, D.C. Kapoor, Vikas Publishing House

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Enterprise Resource Planning	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to ICT, Information Systems, Comparison and Applications of various IS, Various technologies. Technical aspect of telecommunication systems, internet and their roles in business and Management environment. Recall the concepts of MRP and MRPII
CO2	Understanding	Develop a sound understanding of the important role of ERP in today's business environment. Become familiar with current ERP trends. Make basic use of Enterprise software, and its role in integrating business functions. Analyze the strategic options for ERP identification and adoption. Design the ERP implementation strategies. Create reengineered business processes for successful ERP implementation. Understand and be able to articulate the life cycle stages of any ERP implementation. Understand the concept of integrated business processes in relation to the business functions.
CO3	Applying	Apply the principles of ERP systems, their major components, and the relationships among these components; with the knowledge of typical ERP systems, and the advantages and limitations of implementing ERP systems. To comprehend the technical aspects of ERP systems. To be able to map business processes using ERP concepts and techniques.
CO4	Analyzing	Know and be able to apply key technical terminology in enterprise information systems as they apply in different ERP products and development methods Understand key differences between the major ERP application and issues specific to these applications their configuration and management. Analyze a current architecture and perform an effective gap analysis before an ERP implementation. Be able to map enterprise architectural resources to a contemporary Enterprise Architecture mapping tool.

CO5	Evaluating	Effectively describe problems typical of ERP implementation projects and translate this information and use this information to anticipate and articulate the challenges associated with post-implementation management of ERP systems. Synthesize prior theoretical and experiential knowledge in IT development and project management with the current literature on Enterprise System development. Be able to evaluate the progress of an ongoing ERP implementation project.
CO6	Creating	<p>Analyze ERP systems and Implementation with creativity and initiative especially in new situations of professional practice; and Recommend or make decisions concerning supply chain designs and operations with high level personal autonomy and accountability.</p> <p>To comprehend the technical aspects of ERP systems; To understand concepts of reengineering and how they relate to ERP system implementations; To be able to map business processes using process mapping techniques; To be able to design the steps and activities in the ERP life cycle; To be able to identify and describe typical functionality in an ERP system; To obtain practical hands-on experience with one of the ERP packages</p> <p>Become competent in applying ERP knowledge in real business environment. Able to integrate business processes in relation to the business functions. Acquire knowledge about the requirements analysis, the planning of business resources and the technology of ERP systems. Know how to implement ERP systems in business. Know the basic operation of ERP software. Know the procedure for handling integrated processes in ERP environment</p>

7. ENTERPRISE RESOURCE PLANNING

Objective: To make the students able to participate in planning and implementation of advanced enterprise-wide systems and technologies in their career. The course will help both functional area and IT managers understand the respective role of users, enterprise architects, developers and managers in the selection, preparation, implementation and management of large and complex enterprise applications. Also to expose the students to the technical aspects of ERP systems, particularly to those that helps in the process of infrastructure planning, selection, implementation, pitfalls, and administration of these systems.

Module – I:

Evolution of ERP, MRP and MRP II, problems of system Islands, need for system integration and interface, Enterprise wide software solutions, difference between Integrated and traditional information systems, early and new ERP Packages, Evolution of ERP, Growth, Future, emerging trends of ERP- Over view of ERP packages, ERP products and markets - players and characteristics. Benefits of ERP implementation. Critical success factors, pitfalls - Challenges and issues - Competitive advantage, Impact on Organization Performance – Business Processes -Business transformation Processes and Enabling role of IT, Digital Transformation and ERP-Case studies.

Module – II:

Importance of 3 P's : Product, Process, and People, - Selection of ERP products, Consultants & Vendors - Opportunities and problems in ERP selection and implementation; ERP implementation; identifying ERP benefits team formation- Consultant intervention—concept of business process – rethinking of processes – Business Process Reengineering (BPR) Concepts; The emergence of reengineering, Identification of reengineering need preparing for reengineering, Implementing change – Steps of BPR- Role of various stakeholders- change management – Resistance to Change - Integrating with other systems; Post ERP implementation- Training

Module – III:

Functional architecture -Modules in ERP; business Modules of ERP package; salient features of each modules of ERP, Comparison of various ERP Modules-. Implementation of ERP systems – Implementation Life Cycle and frame work- Implementation Strategy- Importance of training- Business process modeling, process mapping- Gap analysis, Framework for ERP implementation, business process, Emerging trends in business process, Selection of ERP- Process of ERP implementation—managing changes in IT organization- user interfaces- Preparing IT infrastructure measuring benefits of ERP, Implementation Obstacles, Risk factors.

Module IV:

Technical Architecture of ERP systems- communication and networking facilities- distributed computing, client server systems, Concepts of Business objects, distributed object, Concept of database management systems, different types- relational database-computing architecture, data mining and warehousing, EDI – internet and related technologies- Web based technologies, Cloud Architecture- SaaS, PaaS, IaaS - Cloud ERP and its Advantages- Mobile ERP, SOA, Open ERP- Web based ERP, e-ERP- Customization, Configuration, Integration

Module – V:

ERP and Supply Chain management- Extending scope of ERP through SCM., The concept of value chain differentiation between ERP and SCM –issues in selection and implementation of SCM solutions – CRM concepts and CRM solutions – Digital Business-E-Business and ERP – ERP II, ERP III, Industry 4.0 and ERP – ERP4.0, Intelligent ERP- Business Analytics and ERP - BI and applications – business

opportunities – basic and advanced business models on internet — Big Data and its impact - security and privacy issues – Disruptive digital technologies and its impact on ERP, Recent Developments- Future and Growth of ERP- role of ERP in international Business, Some of the current topics related to ERP- case studies

References

1. Hammer, Micheal and Jamts Chamby, *Reengineering the corporation*,
2. Leon, alexix *Countdown 2000*, Tata McGraw
3. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY.2000
4. Alexis Leon, *ERP Demystified*, Tata McGraw Hill, New Delhi.
5. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
6. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
7. Ptak, Carol A. & Eli Schragenheim, *Enterprise Systems for Management*, St. Lucie Press NY, 2000
8. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
9. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.
10. Luvai F. Motiwalla : *Enterprise Systems for Management*
11. Mary Sumner : *Enterprise Resources Planning*
12. Rahul V. Altekar : *Enterprise Resources Planning*
13. JyotindraZaveri : *Enterprise Resources Planning*
14. Ashim Raj Singla : *Enterprise Resources Planning*
15. D.P. Goyal : *Enterprise Resources Planning*

11.2.15 SYLLABI OF ELECTIVE COURSES IN GENERAL MANAGEMENT AREA

Elective Courses in General Management Area

1. Technology Innovation and Entrepreneurship
2. Corporate Social Responsibility
3. Management of NGOs
4. Management Consulting

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Technology Innovation and Entrepreneurship	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to Technology Innovation and entrepreneurship, Entrepreneur, characteristics, traits, theories, concept of innovation, entrepreneurship environment, sources of ideas, starting a business, sources of funds, government support for entrepreneurship
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in entrepreneurship based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the real time data to explore and establish relationships in the areas of entrepreneurship decisions.
CO5	Evaluating	Make the students capable to evaluate various business ideas and select the most appropriate one on the basis of opportunity identification, opportunity evaluation and feasibility studies
CO6	Creating	Generate new technology business ideas or use innovations to build business ideas and create business plans and proposals for starting business or business expansion/diversification.

1. TECHNOLOGY INNOVATION AND ENTREPRENEURSHIP

Objective: The objective of this course is to expose the students to the innovations and developments in the field of entrepreneurship in India. Student will also be familiarised with the process of developing an enterprise.

Module I

Entrepreneurship and its role in economic development. Entrepreneurial climate in India; Ease of doing business, Competitiveness, Government support for entrepreneurship, Startup India Programme, Standup India, Udyamimitra, PMMY, Business Incubation and other schemes.

Module II

Entrepreneurship Definition; Entrepreneurial traits, types and significance; Entrepreneurial characteristics, Qualities and functions of entrepreneurs. Entrepreneurial Behaviours and entrepreneurial motivation. Entrepreneurship Theories, Entrepreneurship types-Social entrepreneurship and Technology entrepreneurship-Family business-Startups.

Module III

Innovation and entrepreneurship- types of innovation-creativity-challenges of innovation management-steps in innovation management-technology and innovation-new business models

Module IV

Search for business idea, sources of Ideas, design thinking, lean start-ups-feasibility study, idea processing, input requirements. Business Plans, Sources of Finance- venture capital, angel investment, crowd funding. Mechanics of setting of new enterprises – forms of business organisation. Business plan –elements-technical-marketing-financial - Practical exercises on preparation of Business plans

Module V:

Protection of Intellectual Property Rights, Patent, Trademark and copyrights. Managerial problems of new enterprises; production purchasing, financing labour and marketing problems.

MSME Policy; Govt. Policy towards SSI's entrepreneurial input; technical assistance, marketing assistance, sickness of units and remedial assistance, Training of Target groups.

References

1. Cliffton, Davis S and Fylie, David E. *Project Feasibility Analysis*, John Wiley, NewYork, 1977
2. Drucker, Peter, *Innovation and Entrepreneurship*, Heinemann, London, 1985
3. McClelland, D C and Winter, W G., *Motivating Economic Achievement*, Free Press,New York, 1969
4. Pareek, Udai and Venkateswara Rao T., *Developing Entrepreneurship – A Handbook on Learning Systems*, Learning Systems, Delhi, 1978
5. Kaplan, J.M and Warren A.C., *Patterns of Entrepreneurship Management*, John Wiley & Sons Inc, 2013
6. Charantimath Poornima M, *Entrepreneurship Development and Small Business Enterprises*, Pearson, 2018

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Corporate Social Responsibility	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to taxonomy, structure, strategy, implementation and management of corporate social responsibility.
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in CSR creation and management based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse case studies on company CSR to explore and establish relationships in the areas of financial decisions.
CO5	Evaluating	Make the students capable to evaluate the impact of CSR of corporate using cases- how they implemented CSR, evaluations of activities carried out.
CO6	Creating	Generate new ideas and create financial plans and proposals for new ideas for delivering CSR to corporate.

2. CORPORATE SOCIAL RESPONSIBILITY

Objective: The students will get the theories, key ideas and practices in the field about CSR; understand the logic of practicing CSR, and get to know how to use CSR as a strategic tool.

Module I: Introduction: Meaning of CSR - Taxonomy of corporate responsibilities – Need for CSR – Evolution of CSR – CSR Framework – Stages of CSR - CSR as a balancing act to satisfy the stakeholders – CSR Models - CSR generations - Drivers of

CSR – Myths and realities about CSR – Moral, rational and economic arguments of CSR - Criticisms of CSR.

Module II: Structure of CSR: Qualities of a good CSR – Structuring the CSR – Strategic CSR – CSR Standards – CSR variations between companies, industries and cultures - Influence of national and regional variance in CSR.

Module III: Managing the CSR: CSR and business ethics - CSR and Corporate governance - Global Sullivan Principles - Caux Round Table - Principles of Global CSR- UN Global Compact - Global Reporting Initiative (GRI) - Social Accountability 8000 - ISO 26000 – Social accounting.

Module IV: Implementing CSR: CSR and sustainable development - CSR and corporate sustainability – Socially responsible investment

Module V: Issues and Challenges in CSR: CSR Audit - International scenario on CSR – Current trends, issues and case studies.

References

1. Michael Blowfield and Alan Murray, Corporate Responsibility: A Critical Introduction, Oxford University Press, 2009.
2. William B. Werther, JR and David Chandler, Strategic Corporate Social Responsibility: Stakeholder in a Global Environment, Sage Publications, 2009.
3. Sharma J. P., Corporate Governance, Business Ethics and Corporate Social Responsibility, Ane Books, 2011
4. Sumita Reddy, Corporate Social Responsibility: Contemporary Insights (Edited Volume), The ICAI University Press, 2004.
5. RenuJatana and David Crowther, Corporate Social Responsibility: Theory and Practice with Case Studies (Edited Volume), Deep & Deep Publications, 2008.

Semester	Course Code	Course Title	Credit	CC/EC	Marks	
					Internal	External
		Management of NGOs	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to NGOs formation, management and legal structure
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in formation and management of NGOs based on the understanding of the different contents delivered to apply them with illustrations and cases.
CO4	Analysing	Impart skills to analyse the cases of NGOs to explore the possible cases in formation, management and monitoring an NGO
CO5	Evaluating	Make the students capable to evaluate the NGOs, their performance, focus and working and on creating project proposals
CO6	Creating	Generate new ideas and create projects and proposals for formation of NGOs after identifying real time issues to address

3. MANAGEMENT OF NGOs

Objective: In the last ten years, NGOs have become a force for transformation in global politics and economics. With this growth has come an ever more pressing requirement for effective management among NGOs and their operations. This course will equip the students to understand the role and place of NGOs in society, evaluate their efficiency and effectiveness, and to develop a short-term and long-term business plan for an NGO.

Module I: Introduction Definition of NGO - Different perspective of NGOs - Role and Functions of NGOs - Forms of NGOs – Evolution of NGOs in India – Who are stakeholders NGOs? - Value of NGOs in the real world? - Difference between and NGOs and for-profit companies – Civil society vs. NGOs – NGOs vs. Community-Based Organisations (CBOs) - Strengths and weaknesses NGOs – Social marketing.

Module II: Legal Frameworks Legal aspects for NGOs – Company Law – Memorandum of association – The Indian Trusts Act 1882 – The Foreign Contribution (Regulation) Act, 1976 – Relevant Sections of the Income Tax Act.

Module III: Project Formulation and Role of NGOs NGO project formulation - Steps in project formulation – Project formulation format – Project formulation approval - Purpose of business planning - NGOs and Media – Human Rights and NGOs – Role of NGOs in rural development and development in general - Responses of NGOs to environmental issues, women issues and natural calamities – Community awareness and participation programme (CAPP).

Module IV: Funding and Staffing Who funds? - Funding trends - Fundraising - Financial models - Who volunteers to work? Staff Motivations - Age and experience of Personnel - Paid staff - Second-generation Staff - Knowledge base - Staffing considerations.

Module V: Internal Dynamics What marks a healthy NGO? - Tools to analyze health and efficiency of an NGO - Base of support Services - Transparency – Feedback on accomplishing NGO’s mission - Problems of NGOs – Global scenario of NGOs - Current Issues, Trends, and case studies.

References

1. J.M.Ovasdi, Management of Non-Governmental Organisations, Macmillan, 2006.
2. NoorjahanBava, Non-Governmental Organisations in Development (Edited Voume), Kanishka Publishers, 1977.
3. Thomas P. Holland, Roger A. Ritvo, Nonprofit Organizations: Principles and Practices
4. Robert H. Wilbur (2000), The Complete Guide to Nonprofit Management, Bucklin & Associates, Inc
5. David Lewis, The management of non-governmental development organizations, Taylor & Francis, 2006
6. Marc Lindenberg and Coralie Bryant, Going Global: Transforming Relief and Development NGO's, Bloomfield, CT.: Kumarian Press, 2001.

Semester	Course Code	Course Title	Credit	CC/ EC	Marks	
					Internal	External
		Management Consulting	3	EC	50	50

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

Course Outcomes	Cognitive Abilities	Course Outcomes
CO1	Remembering	Ability to recall the basic concepts and terms related to management consulting, scenario, counseling and coaching as tools of consulting, consultants roles
CO2	Understanding	Enable the incumbents to understand comprehensively the concepts delivered at the remembrance level to make them cognitively fit for application.
CO3	Applying	Develop application skills in management consulting-coaching and consulting based on the understanding of the different contents delivered to apply them.
CO4	Analysing	Impart skills to analyse counseling and coaching as tools of consulting to explore the possible problem exploration
CO5	Evaluating	Make the students capable to evaluate customer needs, focus and working and on creating consulting project proposals
CO6	Creating	Generate counselling and coaching sessions and create projects and proposals for customers based on their need

4. MANAGEMENT CONSULTING

Objectives: 1. To provide an understanding of management consulting as a profession and to understand the process, role and scope of management consulting. 2. To provide an understanding of the process of consulting in sequence, bringing in the importance of each phase for the successful consulting endeavour.

Module I: Nature and purpose of technology and management consulting – what is technology consulting? Why are technology consultants used? What is management consulting, why are management consultants used. Five generic purposes. The

consulting process, Evolving concepts and scope of management consulting; The consulting industry, A historical perspective.

Module II: The current consulting scene, Range of services provided, Generalist and specialist services, Main types of consulting organization, Internal consultants, Technical and Management consulting and other professions, Training and research. The consultant-client relationship, Defining expectations and roles, the client and the consultant systems. Critical dimensions of the consultant-client relationship, Behavioural roles of the consultant, Further refinement of the role concept, Methods of influencing the client system.

Module III: Counselling and coaching as tools of consulting. Consulting and change-Understanding the nature of change. How organizations approach change. Gaining support for change, Managing conflict. Consulting and culture, Understanding and respecting culture, Levels of culture, Facing culture in consulting assignments. Entry-Initial contacts, Preliminary problem diagnosis, Terms of reference, Assignment strategy and plan, Proposal to the client, the consulting contract.

Module IV: Diagnosis-Conceptual framework of diagnosis, Diagnosing purposes and problems,Defining necessary facts, Sources and ways of obtaining facts, Data Analysis, Feedback to the client. Action Planning-Searching for possible solutions, developing and evaluating alternatives, Presenting action proposals to the client.

Module V: Implementation-The Consultant's role in implementation, Planning and monitoring, implementation, Training and developing client staff, Some tactical guidelines for introducing changes in work methods, Maintenance and control of the new practice. Termination-Time for withdrawal, Evaluation, Follow-up, Final reporting.

References:

1. F.Steele: Consulting for organizational change (Amherst,MA,University of Massachusetts Press, 1975)
2. G.Nadler and S.Hibino: Breakthrough thinking: The seven principles of creative problem solving (Rocklin,CA,Prima Publishing,1994)
3. H.J.Klein: Other people's business : A primer on management consultants (New York, MasonCharter,1977)
4. L.E.Greiner and R.O.Metzger : Consulting to management (Eaglewood Cliffs,NJ, Prentice-Hall,1983)
5. P.Block: Flawless consulting: A guide to getting your expertise used (San Francisco,CA,JosseyBass/Pfeiffer,2nd ed.,2000)
6. P.Tisdall : Agents of change : The development and practice of management consultancy (London,Heinemann,1982)

7. E.Bleach and L.Byars Swindling: The consultant's legal guide (San Francisco,CA.JosseyBass/Pfeiffer,1999)
8. H.L.Shenson: The contract and fee-setting guide for consultants and Professionals (New York,Wiley,1990)
9. J.Quay: Diagnostic interviewing for consultants and auditors (Columbus,OH,Quay Associates,1986)
10. M.Kubr and J.Prokopenko: Diagnosing management training and development needs; Concepts and techniques, Management Development Series No.27 (Geneva,ILO,1989)
11. M.Kubr: How to select and use consultants: A client's guide , Management Development Series No.31(Geneva,ILO,1993)
12. P.Block: Flawless consulting: A guide to getting your expertise used (San Francisco, CA,JosseyBass/Pfeiffer,2nd ed.2000)
13. www.icmci.org.