Programme Objectives – MBA

1. To develop creative skills, understand diversity, contemporary and humanity issues for shaping the future.
2. To work towards world issues leading to specialization / research works.
3. To integrate skills and knowledge to understand vision, mission and goals and change in attitude.
4. To know the various employability opportunities by applying their knowledge and skills in a real world situation.
5. To enable them to respect and understand the world around them to accepting responsibility, ethical and cultural values.

Programme Outcomes (PO)

1. Explain the advanced concepts, ideas of the concerned discipline such as languages, literature, history, business education, managerial skills and economics and appreciate the interrelatedness among the subjects.
2. Identify a problem, search literature, frame hypothesis, analyze it with relevant statistical tools, draw conclusions and interpret the results in written and oral form.
3. Exhibit respect to the world around them on ethical consideration and understand the creativity, diversity, contemporary issues in shaping the future of them and the society.
4. Integrate the learned skills and knowledge leading them to noticeable changes in their vision, goals, attitudes and skills.
5. Apply employability skills in viewing real world requirements, self-development and sustained living.

Programme Specific Outcomes (PSO)

1. Integrate the tools and concepts of various functional areas of Management to investigate and solve the critical and specific business problems.
2. Explore new business opportunities, design and Implement innovations in business organizations.
3. Apply analytical skills, knowledge of business theory and practices to take effective managerial decisions.
4. Evaluating legal practices, ethical and social values in business.
5. Create avenues for diversified workforce through multicultural perspective.

MBA 2023-24onwards

SEM	COURSE CODE	COURSE	COURSE TITLE	HRS/ WEE	CREDIT	MARKS		TOTAL MARKS
						CIA	ESE	
I	23MBA1CC1	Core I	Management Concepts and	4	4	25	75	100
	23MBA1CC2	Core II	Organizational Behavior	4	4	25	75	100
	23MBA1CC3	Core III	Managerial Economics	4	4	25	75	100
	23MBA1CC4	Core IV	Quantitative Techniques for	5	4	25	75	100
	23MBA1CC5	Core V	Information Systems for Business	4	4	25	75	100
	23MBA1CC6	Core VI	Accounting for Decision Making	5	4	25	75	100
	23MBA1CC7	Core VII	Legal Aspects of Business	4	4	25	75	100
	23MBA1CV1	Comprehensive Viva Voce	Comprehensive Viva Voce-I$	-	2	-	100	100
	23MBA1EL	Experiential Learning	Outbound Training (OBT)(3 days)@	-	-	-	-	-
TOTAL				**30+6**	**30**			**800**
II	23MBA2CC8	Core VIII	Operations Research	5	4	25	75	100
	23MBA2CC9	Core IX	Human Resource Management	4	4	25	75	100
	23MBA2CC10	Core X	Financial Management	5	4	25	75	100
	23MBA2CC11	Core XI	Marketing Management	4	4	25	75	100
	23MBA2CC12	Core XII	Operations Management	4	4	25	75	100
	23MBA2CC13	Core XIII	Business Research Methods	4	4	25	75	100
	23MBA2CC14P	Core XIV	Spreadsheet for Managers*** - Practical	4	4	-	100	100
	23MBA2CV2	Comprehensive Viva Voce	Comprehensive Viva Voce-II$	-	2	-	100	100
	23PCN2CO	Community Outreach	JAMCROP@	-	-	-	-	-
TOTAL				**30+6**	**30**			**800**
III	23MBA3CC15	Core XV	Business Analytics	5	4	25	75	100
	23MBA3CC16	Core XVI	International Business	5	4	25	75	100
	23MBA3CC17P	Core XVII	Data Analytics Lab*** - Practical	4	2	-	100	100
	23MBA3DE##	DSE I	Elective 1	4	4	25	75	100
	23MBA3DE##	DSE II	Elective 2	4	4	25	75	100
	23MBA3DE##	DSE III	Elective 3	4	4	25	75	100
	23MBA3DE##	DSE IV	Elective 4	4	4	25	75	100
	23MBA3CV3	Comprehensive Viva Voce	Comprehensive Viva Voce-III$	-	2	-	100	100
	23MBA3EL	Experiential Learning	Internship (4 Weeks)	-	2	-	100	100
	23MBA3EA	Extension Activity	Societal Immersion Programme (SIP) - one week@	-	-	-	-	-
	23MBA3EC1	Extra Credit Course-I#	Online Course	-	1*	-	100*	100*
TOTAL				**30+6**	**30**			**900**
IV	23MBA4CC18	Core XVIII	Strategic Management	4	3	25	75	100
	23MBA4CC19	Core XIX	Entrepreneurship and Startup	4	3	25	75	100
	23MBA4DE##	DSE V	Elective 5	4	4	25	75	100
	23MBA4DE##	DSE VI	Elective 6	4	4	25	75	100
	23MBA4DE##	DSE VII	Elective 7	4	4	25	75	100
	23MBA4DE##	DSE VIII	Elective 8	4	4	25	75	100
	23MBA4CV4	Comprehensive Viva Voce	Comprehensive Viva Voce-IV$	-	2	-	100	100
	23MBA4PW	Project	Project Work (8 Weeks)	6	5	50	150	200
	23MBACNOC	Mandatory Online	Online Course	-	1	-	100	100
	23MBA4EC2	Extra Credit Course – II #	Online Course	-	1*	-	100*	100*
TOTAL				**30+6**	**30**			**1000**
GRAND TOTAL				**-**	**120+2***			**3500**

@ Only Grades will be Given	*** Not Considered for Grand Total and CGPA**
# Programme Specific Online Course	**** Any Online Course for Enhancing Additional Skills**
## Specialization Electives	***** Fully Internal**
µActivity Based Learning (ABL)	**$ Internal Viva-voce Examination covering all the courses of Semester**

LIST OF ELECTIVES (SPECIALIZATION I & II) – SEMESTER III

Specialization I: Two Electives can be opted out of five in Specialization I

Specialization II: Two Electives can be opted out of five in Specialization II

COURSE CODE	COURSE TITLE	HRS/ WEEK	CREDIT	MARKS		TOTAL MARKS
				CIA	ESE	
Marketing (A)						
23MBA3DEA1	Consumer Behavior	4	4	25	75	100
23MBA3DEA2	Integrated Marketing Communication	4	4	25	75	100
23MBA3DEA3	Sales Management	4	4	25	75	100
23MBA3DEA4	Product and Brand Management	4	4	25	75	100
23MBA3DEA5	Digital Marketing	4	4	25	75	100
Finance and Accounting (B)						
23MBA3DEB1	Security Analysis and Portfolio	4	4	25	75	100
23MBA3DEB2	Behavioral Finance	4	4	25	75	100
23MBA3DEB3	Financial Econometrics	4	4	25	75	100
23MBA3DEB4	Financial Derivatives	4	4	25	75	100
23MBA3DEB5	Strategic Financial Management	4	4	25	75	100
OB and Human Resource (C)						
23MBA3DEC1	Change Management	4	4	25	75	100
23MBA3DEC2	Learning and Development	4	4	25	75	100
23MBA3DEC3	Strategic Human Resource Management	4	4	25	75	100
23MBA3DEC4	Talent Management	4	4	25	75	100
23MBA3DEC5	Industrial Relation and Labor Legislations	4	4	25	75	100
Systems and Operations (D)						
23MBA3DED1	Data Resource Management	4	4	25	75	100
23MBA3DED2	Decision Support System	4	4	25	75	100
23MBA3DED3	Service Operations Management	4	4	25	75	100
23MBA3DED4	Product Design and Development	4	4	25	75	100
23MBA3DED5	Total Quality Management	4	4	25	75	100
Logistics and Supply Chain Management (E)						
23MBA3DEE1	Strategic Logistics Management	4	4	25	75	100
23MBA3DEE2	Containerization & Multi-Model	4	4	25	75	100
23MBA3DEE3	Warehousing & Inventory Management	4	4	25	75	100
23MBA3DEE4	Essentials of Supply Chain Management	4	4	25	75	100
23MBA3DEE5	Supply Chain Analytics	4	4	25	75	100
Startup and Entrepreneurship (F)						
23MBA3DEF1	Family Business Management	4	4	25	75	100
23MBA3DEF2	Project management	4	4	25	75	100
23MBA3DEF3	Entrepreneurial Finance	4	4	25	75	100
23MBA3DEF4	Information Technology for	4	4	25	75	100
23MBA3DEF5	Business Plan and Modeling	4	4	25	75	100
Analytics (G)						
23MBA3DEG1	Using R-Programming in Data Analytics	4	4	25	75	100
23MBA3DEG2	Cloud Computing	4	4	25	75	100
23MBA3DEG3	Data Warehousing and Data Mining	4	4	25	75	100
23MBA3DEG4	Advanced Database Management	4	4	25	75	100
23MBA3DEG5	Data Visualization for Managers	4	4	25	75	100

LIST OF ELECTIVES (SPECIALIZATION I & II) – SEMESTER IV

Specialization I: Two Electives can be opted out of five in Specialization I

Specialization II: Two Electives can be opted out of five in Specialization II

COURSE CODE	COURSE TITLE	HRS/ WEEK	CREDIT	MARKS		TOTAL MARKS
				CIA	ESE	
Marketing (A)						
23MBA4DEA1	Retail Management	4	4	25	75	100
23MBA4DEA2	Rural and Agricultural Marketing	4	4	25	75	100
23MBA4DEA3	Customer Relationship Management	4	4	25	75	100
23MBA4DEA4	Service Marketing	4	4	25	75	100
23MBA4DEA5	Marketing Analytics	4	4	25	75	100
Finance and Accounting (B)						
23MBA4DEB1	International Trade and Finance	4	4	25	75	100
23MBA4DEB2	Financial Modelling using Spreadsheet	4	4	25	75	100
23MBA4DEB3	Enterprise Risk Management	4	4	25	75	100
23MBA4DEB4	Banking and Financial Services	4	4	25	75	100
23MBA4DEB5	Strategic Cost Management	4	4	25	75	100
OB and Human Resource (C)						
23MBA4DEC1	Performance Management	4	4	25	75	100
23MBA4DEC2	Managerial Behavior and Effectiveness	4	4	25	75	100
23MBA4DEC3	Behavior and Impression Management	4	4	25	75	100
23MBA4DEC4	HR Analytics	4	4	25	75	100
23MBA4DEC5	International Human Resource	4	4	25	75	100
Systems and Operations (D)						
23MBA4DED1	Enterprise Resoure Planning	4	4	25	75	100
23MBA4DED2	E-Business	4	4	25	75	100
23MBA4DED3	Knowledge Management System	4	4	25	75	100
23MBA4DED4	Plant Layout and Materials Management	4	4	25	75	100
23MBA4DED5	Lean Six Sigma	4	4	25	75	100
Logistics and Supply Chain Management (E)						
23MBA4DEE1	EXIM and Documentation	4	4	25	75	100
23MBA4DEE2	Transport and Distribution	4	4	25	75	100
23MBA4DEE3	Retail Logistics	4	4	25	75	100
23MBA4DEE4	Digital Supply Chain	4	4	25	75	100
23MBA4DEE5	Supply Chain Planning	4	4	25	75	100
Startup and Entrepreneurship (F)						
23MBA4DEF1	Intellectual Property Rights	4	4	25	75	100
23MBA4DEF2	Company Law	4	4	25	75	100
23MBA4DEF3	Design Thinking and Incubation	4	4	25	75	100
23MBA4DEF4	Social Entrepreneurship	4	4	25	75	100
23MBA4DEF5	Business Ethics and Corporate	4	4	25	75	100
Analytics (G)						
23MBA4DEG1	Using Python in data analytics	4	4	25	75	100
23MBA4DEG2	Artificial Intelligence and Machine	4	4	25	75	100
23MBA4DEG3	Big Data Management	4	4	25	75	100
23MBA4DEG4	Management Science	4	4	25	75	100
23MBA4DEG5	Times Series Analytics	4	4	25	75	100

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC1	CORE I	4	4	25	75	100

Course Title	MANAGEMENT CONCEPTS AND PRACTICES

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept of Management, Management: Art and Science, Management Vs Administration, Levels of Management, Functions of management, Management as a Profession, Management skills, Qualities and characteristics of managers. Evolution of Management thought: Early contributions: Taylor and Scientific Management, Fayol's Administrative Management, Bureaucracy, Human Relations, and Modern Approach, *Social responsibility of managers, Managerial Ethics* - Relevant Case Study	12
II	Concept of planning, Significance of planning, Classification of planning: Strategic plan, Tactical plan and Operational plan, Process of planning, Barriers to effective planning. *MBO, Management by Exception* - Relevant Case Study	12
III	Decision Making: Strategies of decision making, steps in rational decision-making process, Factors influencing decision making process. Organizing: Defining organising, Principles of organising, Process of organising, Types of organizational structure, Span of control, Centralization vs. Decentralization of authority. *Informal organization* - Relevant Case Study	12
IV	Staffing: Concept, Objective of staffing, System approach to staffing, Manpower planning. Directing: Concept, Techniques of directing and supervision, Types of supervision, *Essential characteristics of supervisor*. Motivation: Concept, Forms of employee motivation, Need for motivation. Theories of motivation. - Relevant Case Study	12
V	Leadership vs Management, Process of Leadership, Importance of leadership, Characteristics of an effective leader. Global Leadership: Creating a Global Leadership Vision. *Cultural Intelligence*. Controlling: Concept, Importance of controlling, Types of control, Steps in control process. - Relevant Case Study	12
VI	**Current Trends * (For CIA only)** Corporate Social Responsibility- Change Management –Agile Management	

--- Self-study Portions

Text Book(s):

1. L.M.Prasad, Principles and Practice of Management, Sultan Chand & Sons, 10th Edition, 2020.
2. R, C.Agarwal, Sanjay Gupta, Principles and Practice of Management, SBPD Publications. , 7th Edition, 2020:
3. Harold Koontz, Essentials of Management – An International, Innovation and Leadership Perspective, McGraw Hill, Edition: 11th Edition, 2020.

Reference Book(s):

1. Tony Morden, Principles of Management, Publication: Routledge, 2nd Edition, Year: 2016. .
2. J.Stewart Black and Allen Morrison, The Global leadership Challenge, Routledge, 3rd Edition, 2020

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc22_mg104/
2. https://onlinecourses.nptel.ac.in/noc23_mg33/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Recognise and Demonstrate managerial practices and their perspectives in the Work Place.	**K1 & K2**
CO2	Applying planning and managerial decision-making skills.	**K3**
CO3	Categories various decision making and Analyse organizational structure with organization goals and objectives	**K4**
CO4	Evaluate staffing and plan appropriate motivation technique	**K5**
CO5	Design right leadership style to achieve organization vision and mission	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	0	2	2	3	2	2	1.8
CO3	3	2	2	1	0	1	2	3	2	3	1.9
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**9.9/5=1.98**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.S.THOUFIQ NISHATH

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC2	CORE II	4	4	25	75	100

Course Title	ORGANISATIONAL BEHAVIOUR

SYLLABUS		
Unit	**Contents**	**Hours**
I	Organisational Behaviour - Foundations – Definition – Characteristics – Objectives - *Disciplines Contributing to Organisational Behaviour* –-Organisational Behaviour Models - Rational Economic – Social – Organisational– Self Actualization Models – Challenge and Opportunities - Role of Information technology in Organisational Behaviour - Relevant Case Study.	12
II	Organizational Structure - Meaning, Definition, Basic dimensions of structure, Common Organizational Frameworks and Structures, Organizational life cycle - Organizational Design and employees' behaviour- Concept of Personality – Determinants – Genetic – Social –Situational Dimensions– Perception – Meaning, *Process, Determinants*– Learning – Factors Determining Learning, Impact of AI on organizational learning - Relevant Case Study.	12
III	Emotions in workplace - Definition, Stress in workplace, Managing Stress, Understanding Emotions, Influence of Emotions on Behaviour - Attitude Meaning – *Nature and Characteristics of Attitudes* – Different Ways of Changing Attitudes – Values – Types and Formation of Values – Group- Meaning and Characteristics of Groups – *Reasons for Group Formation* – Stages in Group Development - Relevant Case Study.	12
IV	Interpersonal Communication – Ego States - Johari Window - Power - *Sources and Types* – Organisational Politics – Factors Contributing to Organisational Politics – Motivation – Significance – Theories – Maslow – Herzberg – Douglas McGregor - Relevant Case Study.	12
V	Organisational Change — Resistance, Overcoming Resistance – Organisational Development – Objectives, Process – Organisational Culture – Determinants - Organisational Climate - *Characteristics and Types* – Changing Organizational Climate –Conflicts in Organisations – Causes, Resolution – Cross Cultural Organizational Behaviour – Negotiating Globally - Relevant Case Study.	12
VI	**Current Trends * (For CIA only)** DEI (Diversity, Equity, and Inclusion) - Globalization and cultural diversity – Employee Wellbeing - maintaining productivity and engagement, and ensuring effective communication and collaboration	

--- Self-study Portions

Text Book(s):

1. Mary Uhl-Bien, John R. Schermerhorn Jr., Richard N. Osborn, Organizational Behavior Wiley India, 13th Edition 2022.
2. Neharika Vohra, Stephen P. Robbins, Timothy A. Judge, Organizational Behavior, Pearson Education, 18th edition, 2022.

Reference Book(s):

1. Stephen P. Robbins, Timothy A. Judge, Essentials of Organizational Behavior, Pearson Education, 14th Edition, 2017.
2. Chandan, Jit S, Organisational Behaviour, Vikas Publishing House P Ltd, 3rd Edition, 2012.
3. John R. Schermerhorn, Jr., Richard N. Osborn, Mary Uhl-Bien , Organization Behavior, John Wiley & Sons Inc, 12th Edition, 2011.

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc22_mg100

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Demonstrate the knowledge and skills needed to understand human behaviour at individual level.	**K1 & K2**
CO2	Applying the concepts of management and analyse organizational behaviours in real world situations.	**K3**
CO3	Analyse the complexities associated with management of the group behaviour in the organization.	**K4**
CO4	Interpret and practice contemporary issues in management.	**K5**
CO5	Formulating and applying managerial and leadership skills to bring out positive results in productivity and performance of the employees.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	1	0	3	2	2	2	2	1.9
CO2	2	1	2	2	3	2	3	3	2	1	2.1
CO3	1	0	2	2	2	2	2	2	2	3	1.8
CO4	2	2	1	2	2	2	3	2	2	2	2.0
CO5	2	3	2	2	1	3	2	2	2	3	2.2
Mean Overall Score											**10/5=2**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A. SELVARANI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC3	CORE III	4	4	25	75	100
Course Title	**MANAGERIAL ECONOMICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Managerial Economics - Micro and Macro Economics- Nature and Scope of Managerial Economics - Role of Managerial Economist- Significance in Decision making - Objectives of a Firm - Managerial Theories of Firm - *Profit Maximization* - Economies of Scale and Scope- Relevant case study.	12
II	Demand Analysis; Law of Demand - Determinants - Exceptions - Elasticity of Demand - Measurement - Applications in Managerial Decision making - Demand Forecasting – Methods of Demand Forecasting - Supply Analysis: Law of Supply - Factors affecting Supply - *Supply Elasticity* - Applications in Decision making - Relevant case study.	12
III	Production Concepts: Production Functions with One Variable And Two Variables – *Law Returns to Scale* - Cobb Douglas Production Function and Returns to Factors -Cost Concepts - Cost Output Relationship In The Short Run and Long Run - Saucer Shaped Short - Run Average Cost Curves–Average Total Cost Curve - Relevant Case Study.	12
IV	Markets - Perfect and Imperfect Market - Features - Determination of Price under Perfect Competition - Monopoly - Features - Pricing under Monopoly – ***Monopolistic: Features- Pricing under Monopolistic Competition* - Oligopoly - Features - Price Discrimination - Kinked Demand Curve - Pricing –Various Types of Pricing& Strategies- Relevant case study.	12
V	National Income Concepts and Methods of Measurement - Inflation - Types and Causes – Introduction to Monetary Policy and Fiscal Policy - Business Cycle - Profit concept - Innovation Theory - *Dynamic Surplus Theory*-Risk & Uncertainty Bearing Theory - Introduction to International Macro Economics - Relevant case study.	12
VI	**Current Trends * (For CIA only)** Introduction to Econometrics – Its Applications in Managerial Decisions, Industry specific applications.	

--- Self-study Portions

Text Book(s):

1. P.L.Mehta, Managerial Economics, Sultan Chand & Sons, 21st Edition 2023
2. Nick Wilkinson, Managerial Economics – Problem solving in Digital World, Cambridge University Press, 2nd Edition, 2022
3. Shaga Narayanabharathi Arjun Kumar & Gaddam Jimmy Corton, Managerial Economics, Pearson, 1st Edition, 2020

Reference Book(s):

1. Ahuja H.L, "Managerial Economics", S Chand & Company Limited, New Delhi, 2nd Edition 2017
2. Luke M. Froeb | Brian T. McCann | Michael R. Ward | Mike Shor, Managerial Economics: A Problem Solving Approach, Cenage, 5th edition, 2018
3. Varshney, K.L. Maheswari - Managerial Economics. Sultan Chand & Sons, 9th Edition, 2014

Web Resource(s):
1. https://iimbx.iimb.ac.in/catalog/introduction-to-managerial-economics/ 2. https://nptel.ac.in/courses/110/101/110101005/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Recognise the micro economic concepts include economic principles and explain the Role of Managerial Economist.	**K1, K2**
CO2	Apply the various business situations with the help of theory of demand, Supply concepts and various economic concepts.	**K3**
CO3	Distinguish the application of modern principles and methods of microeconomics to the real-world business problems in different contexts like production, cost analysis.	**K4**
CO4	Justify the various types of market structure for strategizing and wise decision making and pricing strategies that result from different market situations.	**K5**
CO5	Develop strategies and plans for the business by analysing the macro economic environment.	**K6**

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	2	3	2	3	3	2	1	2.3
CO2	3	3	2	2	2	2	2	3	2	1	2.2
CO3	2	2	1	2	3	2	1	2	2	2	1.9
CO4	2	1	2	2	2	2	2	1	2	1	1.8
CO5	3	1	2	2	3	2	3	2	2	3	2.3
									Mean Overall Score		**10.5/5 = 2.1**
									Mean Score		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Percentage of change from previous syllabus - 20%

Course Coordinator: Dr.M.SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC4	CORE IV	5	4	25	75	100
Course Title	**QUANTITATIVE TECHNIQUES FOR MANAGERS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Matrices & Determinants -Addition – Subtraction – Multiplication – Inversion of Matrices – Solution of system of linear equals with the help of Matrices and determinants. Calculus: Variables – Constants – Functions – simple differentiation of algebraic function – First & second order differentiation – Maxima & Minima of Algebraic functions.	15
II	Introduction to Statistics – Collecting & tabulating data – *Measures of Central Tendency & Dispersion – Skewness, Kurtosis*– Probability Theory: Classical Objective & Subjective Approach – Addition, Multiplication and Bayes theorem.	15
III	Discrete Distribution - Binomial, Poisson and Continuous Distribution - Normal Distribution. Sampling Distribution of mean, variance and proportion – Estimation - Types of Estimates - Point, Interval Estimate – Estimation of population mean variance and proportion.	15
IV	Testing of Hypothesis – Type I & Type II error – One & two tailed tests – Significance level – Confidence Level. – Errors in Hypothesis testing-Testing of proportion, means, variance– Z, t, F tests – Chi-Square test of independence and goodness of fit.	15
V	Theory of Correlation and Regression: *Meaning of Correlation and Regression* – Correlation Coefficient – Rank Correlation – Probable Error in Correlation- Simple Linear Regression -Modern time series analysis - Auto Correlation, Auto Regression, ARMA, ARIMA.	15

--- Self-study Portions

Text Book(s):

1. I. Levin Richard , H. Siddiqui Masood, S. Rubin David Statistics for Management, Pearson Paperback – Organizer, 8th Edition ,27 January 2017
2. Hari Kishan, A Textbook of Matrices, Atlantic Publisher & Distributors (P) Ltd, New Delhi, 2023
3. Prem. S.Mann, Introductory Statistics, 7th Edition, Wiley India, 2020.

Reference Book(s):

1. Hilmer, C. E., Hilmer, M. J., & Sharma, C. Practical Econometrics, McGraw Hill (2020)
2. Vohra N.D. "Quantitative Techniques in Management", Tata McGraw Hill Education Private Ltd., New Delhi. 7th Edition 2017.
3. Gupta S.C., "Fundamentals of Statistics", Himalaya Publishing House, New Delhi. 7th ed 2016.

Web Resource(s):

1.https://onlinecourses.nptel.ac.in/noc23_mg03/preview
2. www.predictiveanalyticstoday.com

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Explain basic mathematics for solving relevant business problems.	**K1&K2**
CO2	Apply appropriate statistical techniques to summarizes and analyse statistical data to solve practical business-related problems and to take managerial decision.	**K3**
CO3	Examine the application of Probability distribution practically and communicate effectively for decision making.	**K4**
CO4	Estimate the Hypothesis and Interpret the results of statistical tools analysis in the context in various real-time and for future business situations.	**K5**
CO5	Construct the future business scenarios by using regression and time series methods and enhance employability.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	0	2	0	2	2	3	2	2	2	1	1.6
CO2	2	2	0	2	2	3	2	3	0	2	1.8
CO3	2	2	2	3	3	2	0	3	1	2	2
CO4	2	3	2	1	3	3	2	3	1	2	2.2
CO5	0	2	1	0	3	2	2	3	2	3	1.8
									Mean Overall Score		9.44/5 =1.88
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC5	CORE V	4	4	25	75	100
Course Title	**INFORMATION SYSTEMS FOR BUSINESS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	System concepts – Information Systems (IS): Meaning, Need, Dimensions, Components, Activities, Types and Functions; Systems Approach to Problem Solving – Relevant Case Study.	12
II	Marketing Information system- Manufacturing Information System-Human Resource Information System – Accounting Information System - *Information System for Sales and Distribution*- Transaction Processing System- Relevant Case Study.	12
III	Management Information System (MIS): Characteristics, Functional Aspects, Sources, Outputs and Benefits; Decision Support system (DSS): Types of Decisions, Capabilities, Components, Types, Applications; Executive Information System (EIS): Need Identification, Characteristics, Components and Development -*Expert system* - Learning Management System- Relevant Case Study.	12
IV	IS strategy - Aligning IT with Business Objectives - Competitive Strategy concepts – Roles and Challenges of Strategic Information systems- *Breaking Business barriers*- Reengineering Business Process –Internet of Things – Relevant Case Study.	12
V	Ethical and Social Issues in IS - Security Issues in IS and Organizations - Technology Solutions: Encryption – Digital Certificates – Firewalls- *Virtual Private Network*- IS Auditing and Cyber Security – Overview of Global Information System - Relevant Case Study.	12
VI	**Current Trends * (For CIA only)** Emerging Trends: Computing, Block chain, RFA Technologies	

--- Self-study Portions

Text Book(s):

1. Ramesh Behl, James A. O'Brien, et al, 'Management Information Systems, McGraw-Hill Education, 11th Edition ,2019
2. Laudon, Management Information Systems, Pearson Education, 17th Edition, 2022
3. Karishma Gulati Trehan & Kriti Dhing, Information System Management, Sun India Publication, 1st Edition,2022

Reference Book(s):

1. Waman S Jawadekar , Sanjiva Shankar Dubey, Management Information System: Text and Cases McGraw-Hill Education, 6th Edition, 2020
2. Ashima Bhatnagar Bhatia, Meghna Sharma, Vaibhav Bansal, Information System Management, JSR Publishing, 2nd Edition ,2020
3. Randall J. Boyle David M. Kroenke, Using MIS , Pearson Education, 10th Edition, 2019

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc22_mg100

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Recognize the fundamentals of Information systems and Explain the Steps in the Systematic Approach to Problem Solving.	**K1 & K2**
CO2	Apply the Concept of the Information systems in the various functional areas of the Business.	**K3**
CO3	Distinguish the differences between MIS, DSS, EIS and ES that facilitate decision-making process.	**K4**
CO4	Justify the significant roles of Information systems in the formulation of competitive strategies.	**K5**
CO5	Develop alternative solutions for the ethical, social, and security issues In Information systems.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	0	0	3	0	3	2	0	1.6
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
Mean Overall Score											**10.5/5=2.1**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC6	CORE VI	5	4	25	75	100
Course Title	**ACCOUNTING FOR DECISION MAKING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Financial Accounting** – Definition - Accounting concepts and conventions – Journal – Subsidiary Books - Ledger - Trial balance - Final Accounts of Sole Trader - Adjustments – Bank Reconciliation Statement - *Final Accounts of Company - Companies Act 2013 Format* – Inflation Accounting – Human Resource Accounting – Relevant Case Study.	15
II	**Cost Accounting** – Objectives – Elements of cost - Classification of Cost - Methods of Costing (Theory only) – Preparation of Cost Sheet – EOQ - Methods of pricing materials issues (FIFO, LIFO, Simple and weighted average) – Labour Turnover – Overheads - Primary Distribution - Secondary Distribution - *Activity Based Costing – Target Costing*- Relevant Case Study.	15
III	**Management Accounting** – Objectives – Functions – Scope - Financial statement analysis – Comparative Financial Statement - Common Size Financial Statement - Trend Analysis - Ratio analysis – Profitability, Liquidity and Turnover ratios. Funds Flow and Cash flow statement – Preparation of Statement of changes in working capital - Calculation of funds from operations - *Calculation of cash operating profit* - Relevant Case Study.	15
IV	**Marginal costing** - Break Even Analysis – Cost Volume Profit Analysis - Managerial Application of CVP Analysis - Make or Buy Decision- Continue or Shutting down – Optimum Sales Mix - *Budgets and Budgetary control* - Functional Budgets - Cash Budget - Flexible Budget. - Relevant Case Study.	15
V	**Computerized Accounting System** - Manual Vs Computerised Accounting - *Advantages and limitations of Computerised Accounting – Applications of Computerised Accounting*- Considerations before selecting an Accounting Package - Pre-packaged Accounting Software - Features of Accounting packages – Codification and Grouping of Accounts. The Indian Accounting Standards (Ind. AS) -International Financial Reporting Standards (IFRS) - Relevant Case Study.	15

(25% Theory and 75% Problems)

--- Self-study Portions

Text Book(s):

1. S.N Maheshwari, Suneel K Maheswari and Sharad K. Maheshwari, A Textbook of Accounting for Management, Vikas Publications, (5th ed.), 2022.
2. P. Periasamy, A Textbook of Financial Cost and Management Accounting, Himalaya Publishing House, (2nd ed.), 2018.
3. G Krishna Kavitha, Computerized Accounting, Himalaya Publishing House, (1st ed.), 2021.

Reference Book(s):

1. Dr. Saroj Vats, Accounting for Managers, Red shine Publications, (1st ed.), 2020.
2. M.N Arora, A Textbook of Cost and Management Accounting, Vikas publications, (11th ed.),2021
3. M.Y. Khan, P.K. Jain, Management Accounting: Text, Problems and Cases, Tata Mcgraw hill, (7th ed.), 2017.
4. Neeraj Goyal, Rohit Sachdeva, Computerised Accounting, Kalyani Publishers, (1ST ed.), 2018.

Web Resource(s):
https://www.drnishikantjha.com/booksCollection/Textbook%20of%20Financial%20Cost%20and%20Management%20Accounting%20(%20PDFDrive%20)%20(1).pdf. https://www.pdfdrive.com/textbook-of-financial-cost-and-management-accounting-d187374748.html

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the Principles and concepts of Accounting and Explain different statements and reports Prepared for various requirements.	**K1,K2**
CO2	Apply different methods and techniques of accounting to explore the required information through manual and computerised accounting system.	**K3**
CO3	Analyse the business results with Relevant domestic and global standards in order to exhibit the level of performance of business to all interested groups.	**K4**
CO4	Evaluate the outcomes of different business operational alternatives and select the best one through appropriate decision making tool for the benefit of Investors and General public.	**K5**
CO5	Develop advanced skills in the field of Accounting with globally accepted system of recording and reporting for better employment.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	1	3	2	3	3	1	2	3	3	**2.3**
CO2	2	3	1	2	3	3	2	3	2	3	**2.4**
CO3	2	3	3	2	3	3	3	2	2	3	**2.6**
CO4	3	2	1	3	3	3	2	3	2	2	**2.4**
CO5	3	2	3	3	3	3	3	3	2	3	**2.8**
										Mean Overall score	**2.5**
										correlation	**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
I	23MBA1CC7	CORE VII	4	4	25	75	100

Course Title	LEGAL ASPECTS OF BUSINESS

SYLLABUS		
Unit	**Contents**	**Hours**
I	The Indian Contract Act, 1872 - Introduction - Definition of Contract - Agreement - Offer - Acceptance – Consideration - Capacity to Contract - Contingent Contract - Quasi Contract - Performance - Discharge - *Remedies to Breach of Contract*- Relevant Case Study.	12
II	Law of Agency - Essentials - Kinds of Agents - Rights and Duties of Agents - Creation of Agency - Termination of Agency - Sale of Goods Act: Sale and Agreement to sell - Conditions and Warrantees - Transfer of property - Finder of goods - *Performance of Contract of Sale* - Rights of an Unpaid seller – New Amendments of Sale of Goods Act - Relevant Case Study.	12
III	Negotiable Instrument Act, 1881 - Nature - Characteristics - Kinds: Promissory Notes, Bills of Exchange, Cheques, Parties to Negotiable Instruments - Law of Partnership - Essentials of Partnership - Formation - Rights and Duties of Partner - Types of Partners - Registration of Partnership - *Dissolution of Partnership* - Relevant Case Study.	12
IV	Company - Formation - Memorandum - Articles - Prospective Shares - Debentures - Directors Appointment - Powers and Duties - Meetings - Proceedings - Management - Oppression & Mismanagement - *Winding up* - Companies Act, 2013 - Introduction to Goods and Services Tax - Relevant Case Study.	12
V	The Consumer Protection Act, 1986 - Rights of Consumers - Consumer Complaint - Consumer Protection Councils - Redressal Machinery - District Forum - State Commission - National Commission – Introduction to Consumer Protection Act, 2019 - Cyber Law - New Amendments - Cyber law In India – *Information Technology Act, 2000* - Defining Cyber Crime - Types of Cyber Crimes - Relevant Case Study.	12
VI	**Current Trends *(For CIA only)** Introduction to E-Governance	

--- Self-study Portions

Text Book(s):

1. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 38th Edition, 2020
2. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill,, 6th Edition, 2018
3. M C Kuchhal & Vivek Kuchhal, Business Laws, Vikas Publishing, 6th Edition, 2021

Reference Book(s):

1. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 11th Edition, 2019
2. Sulphey M. M, Basheer, Az-Har, PHI, 5th edition, 2019
3. Richard Stim, Intellectual Property- Copy Rights, Trade Marks, and Patents, Cengage Learning, 15th edition 2017

Web Resource(s):
1. https://onlinecourses.swayam2.ac.in/cec22_mg10/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the fundamentals of legal environment and contract act and explain the essentials of the legal aspects.	**K1 & K2**
CO2	Apply the knowledge and skills in performance of agency and its purposes and understand the sale of goods act.	**K3**
CO3	Distinguish the Negotiable Instrument Act and Partnership and apply in the business	**K4**
CO4	Justify the importance of Company formation and its acts.	**K5**
CO5	Develop the understanding of the consumers' protection act, cyber laws.	**K6**

Cos	**Pos**					**PSOs**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	2	1	2	3	2	3	3	1	2.1
CO2	2	0	2	2	3	1	2	3	3	1	1.9
CO3	2	0	1	1	2	2	1	2	3	1	1.5
CO4	2	0	1	2	2	2	2	3	3	2	1.9
CO5	2	1	3	3	3	2	2	2	3	1	2.2
Mean Overall Score											**9.6 = 1.92**
Mean Score											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC8	CORE VIII	5	4	25	75	100
Course Title	**OPERATIONS RESEARCH**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Operations research – History, definition, features, models, techniques. Linear programming problem: Formulation, Graphical & Simplex solution of LPP, Duality and Dual Simplex Method.	15
II	Game Theory - 2 person zero sum game, graphical & simplex method – Markov chain Analysis – Replacement and maintenance models – Simulation: Inventory, Queuing.	15
III	*Transportation problem – Balanced and Unbalanced Transportation Problem - Transhipment Model-North West Corner, Least Cost, Vogel's Approximation Method, MODI method, Degeneracy – Assignment Model: Hungarian method, Traveling Salesman problem*.	15
IV	Network Analysis: Critical path method, Total, free and Independent Floats - PERT Problems Sequencing- Introduction-Flow-Shop sequencing- n jobs through two machines – n jobs through three machines- Job shop sequencing-two jobs through 'm' machines.	15
V	Decision Making under Certainty, uncertainty and risk – Pay off tables-Queuing Theory: Queueing systems and structures –parameter notation – Single server and multi-server models – Poisson input – Exponential service – Constant rate service – *Software Application in Operations Research – Quantitative analysis for Management*.	15

--- Self-study Portions

Text Book(s):

1. Wagner, Principles of Operations Research: With Applications to Managerial Decisions, Prentice Hall – 2020
2. Hiller and Lieberman , Introduction to Operations Research , McGraw-Hill Higher Education; 11th edition (2021)

Reference Book(s):

1. Handy A. Taha, an Introduction to Operation Research, Prentice Hall, Sixth Edition, 2000.
2. Vohra N.D. "Quantitative Techniques in Management", Tata McGraw Hill Education Private Ltd., New Delhi. 7th Edition 2017.

Web Resource(s):

1. https://onlinecourses.swayam2.ac.in/cec20_mg18/preview
2. www.prenhall.com/bp_taylor_introms_11/220/56508/14466195.cw/content/index.html
3. HOME (lindo.com)
4. https://youtu.be/nf3Hr_NGseg
5. https://youtu.be/rUVGbZJdruo
6. https://youtu.be/maYfbPbW8a4
7. https://youtu.be/NB7xuJi9I3w

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Recognize and explain the fundamental concepts and general mathematical structure of a linear programming model for the organisation.	**K1&K2**
CO2	Calculate that how to implement innovations and formulated the optimal strategies in current and future conditions business environment.	**K2**
CO3	Construct and Examine a shipping routes problem involving and to solve a profit maximization by implementing social value and make decision in organisation.	**K3&K4**
CO4	Estimate the probability of completing a current and future project with schedule date and to know how to update a project along with resource levelling and smoothing which helps to make effective decisions.	**K5**
CO5	Design to understand the trade-off between cost of service and cost of waiting time with ethical vale and create organisational employability.	**K6**

Relationship Matrix:

Course Outcomes (COs)	Programme Outcomes (POs)					Programme Specific Outcomes (PSOs)					Mean Score of Cos
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	0	0	2	0	3	2	2	2	0	1.3
CO2	2	3	2	0	0	2	3	2	1	2	1.7
CO3	2	2	2	3	0	3	1	2	3	1	1.9
CO4	0	2	3	2	2	3	1	3	1	2	1.9
CO5	2	1	2	0	3	2	0	3	2	3	1.8
									Mean Overall Score		8.6/5 =1.72
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A. SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC9	CORE IX	4	4	25	75	100

Course Title	HUMAN RESOURCE MANAGEMENT

SYLLABUS		
Unit	**Contents**	**Hours**
I	HRM: Meaning, Definition – Nature, Significance, Objectives - Scope and Functions – *Evolution and growth of Human Resource Management* – HR and Ethics - Human Capital – Human Resource Policies - HR Accounting - HR Auditing – New HR Roles : Chief Happiness officer, Diversity officer, Talent Management specialist and HR Analytics Officer - Relevant Case Study	12
II	Human Resource Planning: Nature and Importance – Need for HRP – HRP Process – Determinants of HRP -Job analysis, Job Description-Job specification - Definition- Need - advantages - Recruitment and Selection Process: Nature, Purpose and importance of Recruitment – Factors governing Recruitment – Process and Sources – E-recruitment - Selection Process - Interview Types - *****Induction and Placement*****– Knowledge Management - Relevant Case Study	12
III	Learning and Development: Definition - Purpose- Types – Steps in Training Program – Evaluation of Training Program – Career Management and Career development – Performance Management system: Performance Appraisal – *****Need- Importance- Objectives***** - Methods - Problems – Performance metrics – Relevant Case Study	12
IV	Compensation Management – Concepts and Principles; Influencing Factors; Concept of Minimum wage, Living wage, and Fair wage; Current Trends in Compensation – Methods of Payment – Incentives and Rewards - Relevant Case Study	12
V	Industrial Relations and Collective bargaining: Meaning , Importance and Factors affecting collective Bargaining - Workers participation Management - International HR Management - Domestic Vs International HRM - Workforce demographic and diversity trends, *Trends shaping HR: Digital & Social Media* - Relevant Case Study	12
VI	**Current Trends * (For CIA only)** Hybrid Culture – Workplace Flexibility - Workplace Diversity, Equity and Inclusion	

--- Self-study Portions

Text Book(s):

1. Aswathappa, K & Sadhna Dash, Human Resource Management - Text and Cases, Tata McGraw-Hill Education Private Ltd. 9th Edition, 2021
2. Gary Dessler & Biju Varrkey, Human Resource Management, Pearson Education, Sixteenth Edition, 2020
3. David A. DeCenzo, Stephen P. Robbins and Susan L. Verhulst, PHR, SHRM -CP, Fundamentals of Human Resource Management, Wiley, 13th Edition, 2019

Reference Book(s):

1. Biswajeet Pattnayak, Human Resource Management, Prentice Hall of India, 5th edition, 2018
2. Michael Armstrong, Kogan Page, A Handbook of Human Resource Management Practice, India, 14th edition, 2017
3. Prasad. L.M., Human Resource Management, Sultan and Sons, 2018

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc21_mg21/preview 2. E_BOOK_on_Human_Resource_Management_HRM_pdf, https://www.academia.edu/31368081/ 3. https://open.lib.umn.edu/humanresourcemanagement/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Demonstrate the knowledge and skills needed to effectively manage human resources.	**K1&K2**
CO2	Apply recent trends in recruitment and selection of human resources.	**K3**
CO3	Examine successful implementation of capacity development programs.	**K4**
CO4	Justify compensation plans that benefit various types of organizations	**K5**
CO5	Design industry relation by summarizing human resource trends, perspectives and policies.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO 5**	
CO1	1	2	1	2	2	2	2	2	1	3	**1.8**
CO2	1	1	2	2	2	1	2	3	2	2	**1.8**
CO3	1	2	2	2	1	2	2	3	2	3	**2.0**
CO4	2	1	1	1	2	2	2	2	2	2	**1.7**
CO5	2	1	1	2	2	2	3	2	2	3	**2.0**
										Mean Overall Score	**9.3/5=1.86**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. F. WAHIDHA BEGUM

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC10	CORE X	5	4	25	75	100
Course Title	**FINANCIAL MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Finance** – Meaning - Importance – Business Finance – Financial Management – Objectives – Nature – Scope - Significance – Finance Functions — Role of Finance Manager - Time value of money - *Liquidity Vs. Profitability - Risk and Return * - Relevant case study	15
II	**Cost of Capital** - Importance - *Factors Influencing Cost of Capital* - Computation of specific Cost of Capital –Weighted Average Cost of Capital Leverage - Operating, Financial, and Composite leverage. **Capital Structure** – #Sources of Long Term Capital# - Optimum Capital Structure, EBIT, Point of Indifference and EPS approach - Capital Structure theories – Net Income Approach, Net Operating Income Approach, MM Approach, and Traditional Approach - Relevant case study	15
III	**Capital Budgeting** - Principles and techniques – Nature, Importance - *Factors influencing capital expenditure decision* - Methods of evaluating investments - Pay Back period – Accounting Rate of Return – Net Present Value – Profitability Index – Internal Rate of Return- Relevant case study	15
IV	**Working Capital Management** – Nature, Need, and *Factors determining Working Capital*, Operating Cycle, Estimation of Working Capital requirements. **Dividend** –Forms of dividend– Dividend policy – Determinants of dividend – Theories of dividend - MM model – Walter's Model – Gordon's Model - Relevant case study	15
V	**Multinational Financial Management**- The International Flow of Funds- Agencies that Facilitate International Flows - Factors Affecting International Trade Flows – FDI and FII in India – Motives – Benefits- Challenges- Multinational Corporations - Financing MNCs Operation – *Impact on Indian Economy* - Relevant case study	15

(Theory – 40%, Problems – 60%)

--- Self-study Portions

Text Book(s):

1. Prasanna Chandra - Financial Management Theory and Practices, McGraw Hill Education (India) Private Limited, (10th ed.), 2019.
2. Khan M.Y. and Jain P.K - Basic Financial Management Tata McGraw Hill Education (India) Private Limited, (7th ed.), 2017.
3. P G Apte and Sanjeevan Kapshe , International Financial Management, Tata McGraw Hill Education (India) Private Limited (8th ed.), 2020

Reference Book(s):

1. Dr R.P. Rustagi , Fundamentals of Financial Management , Taxman publications,(17th ed.), 2022
2. S.N.Maheswari- "Financial Management Principles and Practices", Sultan Chand &co,(6thed.), 2018.
3. Shashi K. Gupta, R.K Sharma, Neeti Gupta, Advanced Financial Management, Kalyani Publishers, (1st ed.), 2016.

Web Resource(s):
1. https://www.studocu.com/in/document/karunya-institute-of-technology-and-sciences/masters-in-business-administration/finance-notes-financial-management-study-material/14029462 2. https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf 3. https://alison.com/course/introduction-to-financial-management-for-managers

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the basic concepts and theories of Financial Management and Explain the International influence on financial management	**K1,K2**
CO2	Application of different financial analysis methods and Capital Budgeting Techniques for decision-making.	**K3**
CO3	Analyze the factors influencing different financial management concepts and compare the financial results	**K4**
CO4	Evaluate the firm's earnings and returns to the shareholders in different financial situations and interpret the results thereof.	**K5**
CO5	Develop advanced Financial Management skills for decision-making related to Institutional and international finance operations.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	3	2	3	1	3	2	3	2.3
CO2	1	2	2	3	3	3	2	3	2	3	2.4
CO3	2	2	1	3	2	3	2	3	2	3	2.3
CO4	2	2	3	2	1	2	3	3	2	3	2.3
CO5	3	3	2	2	3	3	3	3	2	3	2.7
										Mean Overall score	**2.4**
										correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC11	Core XI	4	4	25	75	100
Course Title	**MARKETING MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Nature and scope of marketing- Importance of marketing-marketing concepts and its Evolution - Product vs Services- Marketing Mix- Market Planning Process –- Market Demand -*Scanning the Environment***** – Situation Analysis- Relevant case study.	12
II	Buyer Behavior- Characteristics affecting Consumer Behavior- The Five Stage model- Theories of Consumer Decision Making - Industrial Buyer Behaviour, Industrial Buying Process Model. -Market Segmentation: Basis of segmentation– Targeting – Differentiation and Positioning *Marketing Strategies: for leaders, followers, and challengers, Niche Market*. Relevant case study.	12
III	Product – Product Planning, Levels, Hierarchy, Classification, mix decision and line decisions. New Product development – Product Life Cycle (PLC) Strategies– Pricing – Objectives, Influencing factors, methods, strategies – promotional price and price war - Sales analysis- Market Share analysis. Relevant case study.	12
IV	Marketing Channels –Nature, functions - Types of Distribution channels – Distribution channel intermediaries- Promotion –communication process- Promotion mix- Advertising, Sales promotion, personal selling, Publicity and Public relations. Relevant case study.	12
V	International Marketing Opportunities and Challenges-Societal Marketing – Content Marketing - Word of Mouth Marketing - Affiliate marketing -Green Marketing - Cause Related Marketing - Sustainable Marketing – Digital Marketing – Agricultural marketing - *Rural Marketing*. Relevant case study.	12
VI	**Current Trends * (For CIA only)** AdWords marketing.	

__: Self-study Portions

Text Book(s):

1. Philip Kotler, Marketing Management (Millennium edition), Pearson17th (edition). 2018
2. Ramasamy.v.s,Namakumari.s,Marketing Management: Global Perspective Indian Context, Mac Millan Education 6th Edition 2018.

Reference Book(s):

1. R.S.N. Pillai Bagavathi Marketing Management, Kindle Edition Sultan Chand & Sons 2018
2. CB. Gupta & N. Rajan Nair, Marketing Management Text & Cases, Sultan Chand & Sons 2018
3. Boyd Walker, Marketing Management, Tata McGraw-Hill Education Private Ltd 9th ed.2006
4. Zikmundd'Amico, Marketing, South Western, Thomson Learning, 2001
5. Michael R. Czinkota& Masaaki Kotabe, Marketing Management, Vikas Thomson Learning, Thomson Learning; 2nd edition 2000.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc19_mg48/preview.
2.https://onlinecourses.swayam2.ac.in/cec21_mg25/previews

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the Evolution of marketing and Understand the dynamics of marketing concepts in business.	**K1&k2**
CO2	Identify the major influences in Consumer Behaviour And STP.	**K3**
CO3	Apply to take decisions and plan, develop, execute and control marketing strategies	**K4**
CO4	Analyze marketing strategies for developing new products and services that are consistent with evolving market needs.	**K5**
CO5	Develop the marketing research and new trends in the arena of marketing.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	0	0	2	1	0	0	2	1	0	0.8
CO2	2	0	2	0	0	1	1	2	1	0	0.9
CO3	1	3	2	2	3	2	2	3	2	2	2.2
CO4	0	2	2	3	2	2	2	2	2	2	1.9
CO5	3	3	2	2	2	1	1	2	1	2	1.9
									Mean Overall Score		7.7/5 =1.54
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC12	CORE XII	4	4	25	75	100

Course Title	OPERATIONS MANAGEMENT

SYLLABUS

Unit	Contents	Hours
I	Nature and Scope of Production and Operations Management**:** Production Function, Types of Production Systems – Decision Making in Operations Management - Appropriate Technology – Automation. Relevant Case study	12
II	Product Design: Types, Importance, Objectives, Characteristics, Factors Influencing Product Design. Capacity Planning: Factors Affecting Plant Capacity - Determination of Plant Capacity, Procedure for Capacity Planning. Plant Location: Meaning, need for Location Decisions, Factors Influencing Plant Location, Rural and Urban Location, *Government Control on Location of Industries*. Relevant Case study	12
III	Plant Layout: Introduction, Needs, Objectives of Good Layout, Factors Influencing Plant Layout, Classification of Layouts – Process, Product, Fixed and Service Layouts. Plant Maintenance: Meaning, Scope, Objectives and Types Relevant Case study	12
IV	Purchasing Management: Purchase Functions - Special Purchase System and Aspects of Purchase Management - Inventory Control: Benefits - Inventory Costs - Factors Influencing Inventory Control - Inventory Control Techniques (ABC, VED Analysis) *Materials Management*. Relevant Case study	12
V	Introduction to World class manufacturing system- Strategic planning for world class manufacturing system-Benchmarking-Recent trends in World class manufacturing system-Introduction to flexible manufacturing systems-Benefits-Major elements-FMS applications Relevant Case study	12
VI	**Current Trends * (For CIA only)** Total Quality Management - Total Productive Management - Introduction to Green Field Project – Introduction to Waste Management – Introduction to ISO * (For CIA only) – Contemporary developments related to the course during the semester concerned.	

--- Self-study Portions

Text Book(s):

1. Buffa. E.S, 'Modern Production and Operations Management'. Wiley publication, 2018.
2. Joseph G. Monks, Operations Management – Theory and Problems, Tata McGraw Hill Education Private Ltd. 7th Edition, 2016

Reference Book(s):

1. Aswathapa K., Shridharan Bhat K., Production and Operation Management, Himalaya Publishing House.2017
2. Panneerselvam, R., Production and Operations Management, PHI Learning Pvt. Ltd., Third Edition ,2017.
3. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
4. Adam and Elbert, 'Production and Operations Management', Prentice Hall, 2017.

Web Resource(s):

1. https://www.managementstudyguide.com/world-class-manufacturing.htm
2. https://www.mbaknol.com/operations-management/flexible-manufacturing-technology

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the elements of operations management and explain various transformation processes to enhance productivity and competitiveness	**K1 &K2**
CO2	Utilize various facility alternatives and their capacity decisions.	**K3**
CO3	Analyze the effect of product, process and schedule design parameters on Plant layout	**K4**
CO4	Evaluate the practical application of purchase management in inventory system	**K5**
CO5	Design a Model Plant Layout and Develop a balanced line of production & scheduling and sequencing techniques in operation environments.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	0	0	0	3	2	2	2	2	1.5
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
										Mean Overall Score	12.1/5= 2.42
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC13	CORE XIII	4	4	25	75	100

Course Title	BUSINESS RESEARCH METHODS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Nature of Business and Management Research - Introduction to Business Research methods - Concept – Nature – Scope – Need of Business research – Types of research– Role of Business research – An overview of the Research process.	12
II	Research Design: Concept – Types –exploratory, Descriptive, Experimental and Conclusive Research – Research design process- Literature review-*Research Ethics*	12
III	Measurement Scales – Types of measurement scales- Designing Questionnaire and Interview Schedule – Principles of designing Questionnaire and Interview Schedule –Limitations-*Data collection*-methods–Pilot Study-Reliability–Validity-Equivalence	12
IV	Sampling – Concept – Need and importance of Sampling – Sampling methods - Probabilistic sampling –Non-probabilistic sampling - Sampling errors-Determination of sample size-Concept Generalisation, Universalization	12
V	Data analysis –Variables-Types- Tabulation and classification– Type I and Type II Errors –Hypothesis testing- Statistical Significance –Correlation- Regression Applications of Parametric tests- student's t, Z,F–ANOVA-Non-parametric test-Chi-square test, Wald–Wolfowitz runs test: Wilcoxon signed-rank test-Application of computerized Statistical packages-Report Writing-#Journals-citations-Plagiarism-*Plagiarism softwares*	12

--- Self-study Portions

Text Book(s):

1. Donald R Cooper, Pamela S Schindler,JK Sharma, Business Research Methods, McGraw-Hill Education, 11th edition,2017.
2. Mark N.K. Saunders, Philip Lewis and Adrian Thornhill, Research Methods for Business students, Pearson Education, 8th edition, 2019

Reference Book(s):

1.William G. Zikmund: "Business Research Methods" Cengage India Private Limited,9th Edition,2013
2. Field, A. Discovering Statistics Using IBM SPSS, Sage Publications London, 4th edition 2013
3. Anil K. Mishra. "A Hand-Book of Research in SPSS", Himalayan Publishing, House, 1st edition,2012

Web Resource(s):

1. Explore Web Resources - Research Process - LibGuides at Northcentral University (nu.edu)
2. Homepage - Research-Methodology
3. NCRM online resources
4. Research Methodology - Course (swayam2.ac.in)

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Recognise the business research process and it's design	**K1, K2**
CO2	Apply the process of research design and its implications	**K3**
CO3	Examine the survey instrument with the help of Measurement scales	**K4**
CO4	Analyse and evaluate the research processes within a specific context and to apply appropriate research methods	**K5**
CO5	Construct and create a research project	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	2	1	2	2	3	2	1	1.8
CO2	2	1	1	2	1	2	2	3	2	1	1.7
CO3	2	1	1	2	1	2	2	3	2	1	1.7
CO4	3	1	1	2	1	2	2	3	2	1	1.8
CO5	3	2	2	3	3	3	3	3	2	2	2.6
										Mean Overall Score	9.6/5 = 1.92
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S. DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
II	23MBA2CC14P	CORE XIV	4	4	-	100	100
Course Title	**SPREADSHEET FOR MANAGERS – PRACTICAL**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Workbook and Worksheets –Name Manager – Working with Tables- Data Sorting and Filtering -Working with Charts –Conditional Formatting - *Key Board Shortcuts*.	12
II	Introduction to Formulas and Functions - Using Functions in Formulas –Cell References in Formulas - Text Functions - Count and Sum Formulas -Lookup Functions: VLOOKUP- HLOOKUP- Match and Index.	12
III	Spreadsheet What-If Analysis: Data tables- Scenario Manager; Analysing Data Using Goal Seek and Solver - Pivot Tables and Pivot Charts with Slicers - Worksheet and Work book protection.	12
IV	Loan Calculations: PMT, PPMT, IPMT, RATE, NPER, PV- Investment Calculations: Single deposits, Series of deposits, Simple Interest, Compound Interest - Depreciation Calculations: SLN, DB, DDB, SYD, and VDB.	12
V	Data Validation: Types of Validation criteria - Creating Drop-Down list - Data Validation Formulas; *Excel and Internet*- Decision Making: Microsoft PowerBI – Different Visuals –Charts, Graphs, Score cards – Slicers Vs. Filters –*Reporting and Design Principles* - Desktop Tableau.	12

--- Self-study Portions

Text Book(s):

1. John Walkenbach, Microsoft Excel 2016 Bible, Wiley Publishing, Inc. 1st Edition, 2015.
2. Errin O'Connor , Microsoft Power BI Dashboards Step by Step, Pearson, 1st Edition, 2020.
3. Marleen Meier, David Baldwin, Kate Strachnyi, Mastering Tableau 2021, Packt Publishing Limited, 3rd Edition, 2021.

Reference Book(s):

1. Ritu Arora, Advance Excel 2016 Training Guide, BPB Publications, 1st Edition, 2018
2. Ashwini Kumar Raj, Mastering MS Excel 2016, Bold Mind Books, 1st Edition, 2022
3. Chandraish Sinha, Mastering Power BI, BPB Publications, 1st Edition, 2021
4. David Baldwin, Mastering Tableau: Smart Business Intelligence techniques to get maximum insights from your data, Ingram short title , 3rd Edition, 2016

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc23_mg27
2. https://www.microsoft.com/en-us/download/details.aspx?id=58494

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the Basics of MS Excel and Explain the Significance of MS Excel in Business.	**K1 & K2**
CO2	Apply different types of formulas and functions in MS Excel.	**K3**
CO3	Analyse and Manipulate Data using the techniques of MS Excel.	**K4**
CO4	Interpret the results of data analysis in MS Excel.	**K5**
CO5	Design Interactive Dashboards using Data Visualization Software and gain deeper insights through Results.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	0	0	0	2	2	1	2	2	0	1	1.0
CO2	2	2	1	2	2	2	1	1	0	1	1.4
CO3	2	3	1	3	2	2	2	2	1	2	2.0
CO4	3	3	1	3	3	2	1	2	1	2	2.3
CO5	3	3	2	3	3	3	3	3	2	2	2.7
										Mean Overall Score	9.4/5=1.88
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr**.** U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3CC15	CORE XV	5	4	25	75	100

Course Title	BUSINESS ANALYTICS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Big Data - Data Science - Business Intelligence – Business Analytics; Applications of Analytics - Types of Analytics Techniques-Descriptive analytics, Diagnostic analytics, Predictive analytics, Prescriptive analytics	**15**
II	Data Issues: Organization and sources of data – Importance of data quality – Dealing with missing or incomplete data – Data Classification	**15**
III	Descriptive analysis: Overview of descriptive statistics, Data visualization – Definition, *Visualization techniques – Tables, cross tabulation, charts*.	**15**
IV	Predictive analysis: Trend lines, Regression analysis – Linear & Multiple, Forecasting techniques, Data mining – Definition, Approaches – Data Exploration & Reduction, Classification, Association Rules, *Cause - Effect modelling*.	**15**
V	Prescriptive analysis: Overview of linear optimization, linear programming, - K-Nearest Neighbours - Decision Tree - Tree structure, Criteria for splitting the Decision Node - Classification and Regression Technique (CART).	**15**

***---* Self Study Portions**

Text Book(s):

1. Jeffrey D.Camm/ James J.Cochran/ Michael J. Fry/ Jeffrey W.Ohlmann/ David R.Anderson/ Dennis J.Sweeney/ Thomas A.Williams - Essentials of Business analytics, Cengage Learning, Second edition, 2017.
2. James Evans, Business Analytics, Pearson Education, Second Edition, 2018.

Reference Book(s):

1. Bart Baesens, "Analytics in a Big Data World – The essential guide to Data Science and its Applications", Wiley Publications, 2018
2. Albright Winston, Business Analytics – Data Analysis – Data Analysis and Decision making, Cengage Learning, Reprint 2016.
3. Carter, Michael W., and Camille C. Price. *Operations research: a practical introduction*. Crc Press, 2017.
4. Ott, R. Lyman, and Micheal T. Longnecker. *An introduction to statistical methods and data analysis*. Nelson Education, 2015.
5. Tan, Pang-Ning, Michael Steinbach, and Vipin Kumar. *Introduction to data mining*. Pearson Education India, 2016.
6. Ian H. Witten, Eibe Frank,Mark A. Hall .Data Mining: Practical Machine Learning Tools and Techniques (Morgan Kaufmann Series in Data Management Systems), 4th Edition,2016

Web Resource(s):

1. https://www.simplilearn.com/iit-business-analytics-certification-program?tag=BUSINESS%20ANALYTICS

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand and remember how analytics is important in today's business environment and how it would be beneficial.	**K1&K2**
CO2	Apply data analytic techniques to solve problems in a variety of business contexts.	**K3**
CO3	Analyze appropriate types and formats of data for topical, network, burst, and temporal analysis and able to Navigate to data sources	**K4**
CO4	Evaluate the best assessment of the future.	**K5**
CO5	Create decision under various decision making environments and to understand the importance of utility theory in decision making	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	2	3	2	1	2	2	2	1	1.9
CO2	3	3	1	2	1	3	3	3	1	1	2.1
CO3	3	3	1	2	2	2	2	2	1	2	2.0
CO4	3	2	2	2	2	2	2	2	1	1	1.9
CO5	3	2	2	2	3	3	2	1	2	2	2.2
Mean Overall Score											**10.1/5=2.02**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G. SIVANESAN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3CC16	CORE XVI	5	4	25	75	100
Course Title	**INTERNATIONAL BUSINESS MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	International Business - Definition, Nature- Process of Globalization - Trends, Effects and Benefits of Globalization - Types of International Business- Challenges- Approaches to international business.	**15**
II	Mercantilism overview - Absolute Advantage Theory- Comparative Cost Theory- Hecksher - OhlinTheory- Product Cycle Theory. The Diamond Model of Michael Porter- Instruments of Trade Policy- Tariffs- Subsidies- Import Quotas- International Disputes and Arbitration -*Anti-dumping Policy.*	**15**
III	Foreign Exchange: Determinants of Foreign Exchange rate-Various types of Exchange Rate Regimes- Role of RBI in export finance-Factors Affecting Exchange Rates- Exchange Risk Management- Concepts relating to Balance of Payment – International Financial Institutions – IMF, IBRD, IDA, ADB – Objectives and Functions.	**15**
IV	International Economic Institutions: World Trade Organisation – GATT – Objectives – Evolution of WTO –functions – Principles of WTO- UNCTAD - Impact of WTO agreements on developing countries – TRIPS, TRIMS, GATS. Regional Economic Integration -Introduction, Levels of Economic Integration, Impact of EU, ASEAN**,** *SAARC in International Business*.	**15**
V	International business functional strategies- International production strategy international human resources strategy and international marketing strategy- *International Asset Protection*- Environmental issues in International Business - Recent World Trade and Foreign Investment trends.	**15**

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Text Book(s):

1. Katsioloudes, Marios, and Spyros Hadjidakis. International Business. Routledge, 2018.
2. Hill, Charles WL. "INTERNATIONAL BUSINESS." 9e McGraw-Hill 2018.

Reference Book(s):

1. Cherunilam, Francis. International business. 6e, PHI Learning Pvt. Ltd., 2020.
2. Schniederjans, Marc J., Ashlyn M. Schniederjans, and Dara G. Schniederjans. Outsourcing and insourcing inan international context. Routledge, 2015.
3. Carnoy, Martin, Jacques Hallak, and Françoise Caillods. Globalization and educational reform: Whatplanners need to know. UNESCO, International Institute for Educational Planning, 2015.
4. Ricky, W. Griffin, and Pustay W. Michael. International business: A managerial perspective. Vol. 50.Prentice Hall, 2015.
5. Neelankavil, James P. International business research. Routledge, 2015.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc20_mg54/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand concepts international business with respect to foreign Trade/international business	**K1 &K2**
CO2	Apply and Acquire knowledge about various theories of international business	**K3**
CO3	Analyse the concept of world financial environment	**K4**
CO4	Evaluate the Gain knowledge of structure and functions of TRIPS, TRIMS, WTO	**K5**
CO5	Create the various international business strategies production strategy international human resources strategy and international marketing strategy etc.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	2	3	2	3	2	1	1.9
CO2	2	1	2	2	1	2	2	3	2	3	2
CO3	3	2	2	2	2	2	2	3	2	3	2.3
CO4	1	2	2	3	2	3	2	2	2	2	2.1
CO5	2	1	1	3	3	3	1	3	2	1	2
										Mean Overall Score	**10.3/5=2.06**
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S.THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3CC17P	CORE XVII	4	2	-	100	100
Course Title	**DATA ANALYTICS LAB - PRACTICAL**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Application of SPSS and AMOS-Exploring and Visualizing Data-Simple Tabulation-Bar Charts-Pie charts-Histogram-Box and Whisker Plots-Two and three-dimensional scatter diagram-Line Plots.	**12**
II	Univariate Analytics-Simple tabulation Descriptive statistics-Measures of Central tendency-Measures of Dispersion-Testing Normality-Reliability-Equivalence	**12**
III	Interdependence Analytics-Cross tabulation-Association-Simple, Partial, Multiple, Rank Correlation analysis.	**12**
IV	Functional analytics- Simple**,** Multiple, Logistic regression analysis-Discriminant analysis-Neural Networks	**12**
V	Multivariate analytics-Factor analysis-Cluster analysis-Structural equation modelling	**12**

Text Book(s):

1. Joseph F Hair/Barry J. Babin/Rolph E. Anderson/William C. Black "Multivariate Data Analysis". Cengage India private limited,8th edition,2018
2. Jutta ArrenbergJutta Arrenberg ,Analysis of Multivariate Data with SPSS: Workbook with Detailed Examples ,Books on demand,1st edition,2020

Reference Book(s):

1. Johnson/Wichern "Applied Multivariate statistical analysis", Prentice Hall India Learning Private limited ,6th edition,2015
2. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer book archive, 2nd edition, 2007.
3. Da Ruan,,Guoqing Chen,Etienne E. Kerre,"Intelligent Data Mining", Springer-Verlag Berlin, Heidelberg, 2005.
4. Paul Zikopoulos, Dirkde Roos, Krishnan Parasuraman, Thomas Deutsch, James Giles,David Corrigan, "Harness the Power of Big Data The IBM Big Data Platform", Tata McGraw Hill Publications, 2012
5. Shanthi R, Multivariate data analysis Using SPSS and Amos, MJP Publishers,1st edition,2019

Web Resource(s):

1. https://www.simplilearn.com/resources-to-learn-data-science-online-article
2. https://www.dataschool.io/resources/
3. https://onlinecourses.nptel.ac.in/noc21_cs45/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the fundamentals of data analytics and some basic visualisation techniques.	**K1 & K2**
CO2	Apply the basic statistical concepts to solve the real life business problems	**K3**
CO3	Analyse the relationship between the variables in real world scenario.	**K4**
CO4	Evaluate the functional interdependency among the real time business variables.	**K5**
CO5	Assist to develop and create the methods and tools for the given task	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	1	1	3	3	2	2	1	1.6
CO2	1	2	2	2	1	2	3	3	2	2	2.0
CO3	3	2	2	1	1	1	3	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.1/5=2.02**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEA1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	CONSUMER BEHAVIOUR

SYLLABUS		
Unit	**Contents**	**Hours**
I	Consumer Behaviour – Concepts – Introduction and Importance of Consumer Behaviour- Dimensions of Consumer Behaviour – Application of Consumer Behaviour Knowledge in Marketing Decisions – Approaches to the Study of Consumer Behaviour. Changing Pattern of Consumer Behaviour,Consumer Black Box Model,VALS MODEL	**12**
II	Consumer Needs and Motives – Personality and Consumer Behavior – Consumer Perception Motive arousal, Maslow's Hierarchy of Needs, Freud's Theory of Motivation , Consumer Personality – Self-concept theory, Psychoanalytic Theory, Neo-Freudian Theory, Trait Theory – Learning – Consumer Attitudes – Attitude Formation and Change – Communication and Persuasion – Self Image – *Life Style Analysis*.	**12**
III	Group Dynamics and Consumer Reference Groups - – Family – Social Class - Cultural and Sub-Cultural Aspects – influence in buying patterns – Cross Cultural Consumer Behavior.	**12**
IV	Personal Influence and Opinion Leadership – Diffusion of Innovations – Consumer Decision – Making Process – Models of Consumer Decision Process – Nicosia- Howard Sheth and Engel-Kollat Model- Post Purchase Behaviour – Consumer Expectation and Satisfaction – *Managing Dissonance* – Consumer Loyalty–Types of Loyalty Programmes.	**12**
V	Consumer Protection in India - Consumerism and Consumers' Rights and Responsibilities – Online Consumer Behaviour – Organizational and Industrial Buyer Behaviour – *Consumer Behaviour in Indian Context* – Emerging Issues - Understanding the Research Framework in Consumer Behavior and Use of Consumer Characteristics in Market Segmentation.	**12**

***---* Self-study portions**

Text Book(s):

1. Jain, V., Sheth, J., & Schultz, D, "Consumer Behaviour, A Digital Native", 1st Edition, Pearson, India, 2019.
2. Mothersbaugh, D., Hawkind, D., &Mookerjee, A, "Consumer Behaviour: Building Marketing Strategy", 13th Edition, McGraw Hill, 2020.

Reference Book(s):

1. Schiffman, L., WisenblitJ,& Ramesh Kumar, S, "Consumer Behaviour", 12th Edition, Pearson, India,2019.
2. Sethna, Z & Blythe, J, "Consumer Behaviour, 4th Edition, Sage, 2020.
3. Solomon, M, "Consumer Behaviour: Buying, Having and Being", 13th Edition, Pearson, 2020
4. Włodzimierz Sroka "Perspectives on Consumer Behaviour" Springer International Publishing, 2020
5. Richard Kendall Miller, Kelli D. Washington, Consumer Behavior,Richard K Miller & Associates · 2019

Web Resource(s):
1. https://www.youtube.com/watch?v=jSrC-EWYIJQ 2. https://www.mooc-list.com/course/buyer-behaviour-and-analysis-edx 3. https://swayam.gov.in/nd2_imb20_mg20/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the basic concepts in consumer behavior.	**K1and K2**
CO2	Apply the factors of group influence and its impact on consumer decision making process.	**K3**
CO3	Analyze the impact of these factors on the purchase decisions.	**K4**
CO4	Evaluate the methods of consumer attitude formation that influence a particular purchase decision.	**K5**
CO5	Create the culture and consumer behavioral patterns.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	2	1	2	1	2	2	1	1	1.4
CO2	2	2	1	2	2	1	1	1	1	1	1.4
CO3	2	3	2	3	2	2	2	2	2	2	2.2
CO4	3	3	2	3	3	2	1	2	2	2	2.3
CO5	3	3	2	3	3	3	3	3	2	2	2.7
										Mean Overall Score	10/5=2
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr.A.S.THOUFIQ NISHATH

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEA2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**INTEGRATED MARKETING COMMUNICATION**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Integrated Marketing Communication – Concept- Communication process and promotion- determining promotion mix- Factors influencing promotion mix- Ethical issues in promotion decisions.	**12**
II	Understanding communication process-Source, Message and channel factors, Communication response hierarchy- AIDA model- Hierarchy of effect model- Innovation adoption model- information processing model- The Elaboration Likelihood (ELM) model- The Foote Cone and Belding (FCB) Model.	**12**
III	Planning for Marketing Communication (Marcom) - Establishing marcom Objectives and Budgeting for Promotional Programmes-Setting communication objectives-Sales as marcom objective-DAGMAR approach for setting ad objectives. *Budgeting for marcom-Factors influencing budget*- Method to determine marcom budget.	**12**
IV	Developing the Integrated Marketing Communication Programme- Planning and development of creative marcom- Creative strategies in advertising- sales promotion- publicity -Creative strategy in implementation and evaluation of marcom- Media planning and selection decisions- steps involved and information needed for media planning-* Measuring the effectiveness of all Promotional tools and IMC.*	**12**
V	Digital Media & Advertising-Digital Media- Evolution of Technology, Convergence of Digital Media- E- Commerce and Digital Media-Advertising on Digital Media-Social Media-Mobile Adverting, E-PR Advertising Laws & Ethics Adverting & Law- Advertising & Ethics - *Intellectual Property Rights*.	**12**

***---* Self-study Portions**

Text Book(s):

1. Belch, George and Belch, Michael, Advertising and Promotion, Tata McGraw Hill, 2019.
2. Clow, Kenneth & Black, Donald, Integrated Advertising, Promotion and Marketing Communication Pearson 2017.

Reference Book(s):

1. Kenneth Clown & Donald Bach, Integrated Marketing Communications, , Irwin/McGraw – Hill 2016.
2. Belch & Belch , Advertising and Promotions , Tata McGraw Hill,2014.
3. Rajeev Batra, John G. Myers& David A Aaker, Advertising Management, PHI,2014.
4. Otto Kleepner's, Advertising Procedure– PHI,2014.

Web Reference:

1. https://onlinecourses.nptel.ac.in/noc22_mg38/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the IMC mix and the IMC planning process.	**K1 &K2**
CO2	Apply and acquire the role of integrated marketing communications in building brand identity, brand equity	**K3**
CO3	Analyse the marketing communications mix to achieve the communications and behavioural objectives of a campaign	**K4**
CO4	Evaluate the communications effects and results of an IMC campaign to determine its success for a variety of brands.	**K5**
CO5	Create the avenues for Public Relations, Publicity and Corporate Advertising for a consumer and a business-to-business product.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	1	3	2	2	2	2	2
CO2	2	1	1	2	2	2	1	3	2	2	1.8
CO3	3	2	2	2	2	1	2	3	2	3	2.2
CO4	2	2	2	3	2	3	2	2	2	2	2.2
CO5	2	3	1	3	2	3	2	3	2	2	2.3
Mean Overall Score											**10.5/5=2.1**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr. S.THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEA3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**SALES MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Sales management an overview- Responsibilities of sales managers - sales organization-its purpose, setting up a sales organization -Types of sales organization. * Emerging Trends in sales management* - Sales Environment, Sales Planning.	**12**
II	Salesmanship – Meaning – Importance-Types of salesman–Theories of personal selling - Selling process-Steps -Selling skills & selling strategies - Selling and buying Styles- Recruitment and Selection-Training- motivation- compensation-Appraisal of performance and promotion - # Field Sales Planning#	**12**
III	Sales forecasting - Objectives - Methods and procedures of sales forecasting-sales budgets, Sales Territories and Quotas- Assigning territories –- Types of quotas and quota selling procedures- Role of technology in sales.*	**12**
IV	Channel Structures –Design – Intermediaries and their function – Types– Criteria for Selecting-Managing Channel intermediaries-Channel Conflicts and their Management-–Physical supply and Physical Distribution.	**12**
V	Concepts of Industrial Selling- Nature and characteristic of industrial goods-*Industrial Distribution channels and marketing logistics*-Role and function of channels of distribution- Sales Policies and Procedures- - E- selling - Types of E-selling -Emerging Issues in Selling Aspects- Ethical and Legal Aspects of Selling-Terms and conditions of sale- Handling complaints.	**12**

***---* Self-study Portions**

Text Book(s):

1. Richard R.Still, Edward W.Cundiff, Norman A.P.Goveni, Sales ManagementDecisions, Strategies & Cases, Prentice Hall, 6th Edition.2018.
2. Dr S L Gupta Sales and Distribution Management-An Indian perspective, ExcelBooks,2010

Reference Book(s):

1. Geoffrey Lancaster & David Jobber, Selling & Sales Management Macmillian India Ltd. 2015
2. Charles M. Futvell, Sales Management, Team work, Leadership and Technology, Thomson learning, South Western, Sixth Edition.2012
3. Ramneek Kapoor, Fundamentals of Sales Management, Mac Millan India Pvt. Ltd.2009
4. SahuP .K., Raut K.C., Salesmanship & Sales Management, Vikas Publications, Third Revised Edition.2009

Web Reference:

1. https://bookboon.com/en/search?query=sales+management.
2. https://www.tutorialspoint.com/sales_and_distribution_management/sales_and_ distrib ution_management_tutorial.pdf

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the fundamentals of sales management and sales process	**K1&K2**
CO2	Apply the importance of sales force management in organizations and role of sellingin the market.	**K3**
CO3	Analyse and Developed understanding of sale forecast and territory management	**K4**
CO4	Evaluate knowledge and understanding the area of direct marketing	**K5**
CO5	Design the modern techniques in selling.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	1	1	3	2	1	2	1	1.7
CO2	2	1	2	1	2	2	2	3	2	2	1.9
CO3	3	2	2	2	1	1	2	3	2	3	2.1
CO4	3	2	2	3	2	3	2	2	2	2	2.3
CO5	2	3	3	3	2	3	3	3	2	3	2.7
Mean Overall Score											**10.7/5=2.14**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr. S.THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEA4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**PRODUCT AND BRAND MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Basic concept of product, levels, Product-Life- Cycle: Concept, strategies related to different stages of PLC. Product Portfolio: Concept, Importance, Competition & Product Strategy. Product portfolio: Concept, benefits of Product portfolio management. Patent and IPR	**12**
II	Introduction to Brand Management – Concepts and Process – Significance of a Brand – Types of Brand – *Family Brand* - Individual Brand - Private Brand – Selection of Brand Name – Functions of a Brand – Branding Decisions.	**12**
III	Brand Vision – Brand Ambassadors – Brand as a Personality, as Trading Asset - Brand Extension – Brand Positioning – Brand Image Building - Branding Impact on Buyers, Competitors. Brand Loyalty – Loyalty Programmes – Brand Equity – Brand Audit -	**12**
IV	Brand Portfolio Management - Brand Harvesting Strategies - Share Building Strategies - Commodity to Brand the Indian Experience – Brand Protection – Trade Marks – Copy Rights .Brand Rejuvenation and Re-Launch - Brand Development Through Acquisition - Takes Over and Merger –	**12**
V	Role of Brand Mangers - Trends in Brand Management: Brand Cult, Brand Alliances – Co-Branding - Destination Branding - Brand Audit Brand Building and The Web - Branding in Different Sectors - Customer- Industrial - Retail and Service Brands – *Globalization of Brands*	**12**
VI	**Current Trends (For CIA only)** New Product Development, Types of Product -Monitoring Brand Performance over the Product Life Cycle	

***---* Self Study Portions**

Text Book(s):

1. Kevin Keller, Vanitha Swaminathan, Strategic Brand Management: Building, Measuring, and Managing Brand Equity, Global Edition, 2019
2. Tapan K. Panda, Product and Brand Management, Oxford University Press; First edition (2016)

Reference Book(s):

1. Venugopal., K, Product and brand management. New Delhi: Himalaya Publishing House, (2010).
2. Subroto Sengupta, Brand Positioning. New Delhi: Tata McGraw Hill Education Private Limited, (2005).
3. David Aaker. Brand Relevance – Making Competitors Irrelevant. Jossey Bass, (2011).
4. Kartikeya Kompella, Building Brands: A guide to increasing the financial value of brands. Viva Books Private Limited, (2006).
5. Sotiris T. Lalaounis, Strategic Brand Management and Development- Creating and Marketing Successful Brands, Taylor & Francis, 2020

Web Resource(s):
1. https://www.edx.org/course/strategic-brand-management 2. https://swayam.gov.in/nd2_imb19_mg04/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand what a product is, the various levels which make it up, and different types of products	**K1 &K2**
CO2	Apply the learnt knowledge on packaging, labeling, brand rejuvenation, success strategies that are inculcated in this course	**K3**
CO3	Analyze the concept of Branding of a product, concepts related to branding, its types.	**K4**
CO4	Evaluate alternative business models of Brands.	**K5**
CO5	Create Brand valuation strategies and Building global brands.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	2	2	2	1	2	2	1	1	1.5
CO2	2	2	2	2	2	2	1	2	1	1	1.7
CO3	2	3	1	3	2	2	3	2	2	2	2.2
CO4	3	3	2	3	3	2	2	2	1	2	2.3
CO5	3	2	2	3	3	2	2	3	2	2	2.4
										Mean Overall Score	10.1/5=2.02
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr.A.S.THOUFIQ NISHATH

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEA5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**DIGITAL MARKETING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Online Market space- Digital Marketing Strategy- Components - Opportunities for building Brand- Website - Planning and Creation- Elements of a good website-Responsive web design and its importance-Understanding user experience and user interface design- Content Marketing. In-bound Marketing.	**12**
II	Search Engine optimization - Keyword Strategy- SEO Strategy - SEO success factors - On-Page Techniques - Off-Page Techniques. Search Engine Marketing- How Search Engine works- SEM components- *PPC advertising* -Display Advertisement.	**12**
III	E- Mail Marketing - Types – E-mail Automation - Lead Generation – Integrating Email with Social Media and Mobile- Measuring and maximizing email campaign effectiveness. Mobile Marketing- Mobile Inventory/channels- Location based; Context based; Coupons and offers, Mobile Apps, *Mobile Commerce*, SMS Campaigns-Profiling and targeting.	**12**
IV	Social Media Marketing - Social Media Channels- Leveraging Social media for brand conversations and buzz Successful /benchmark Social media campaigns. Engagement Marketing-Building Customer relationships - *Creating Loyalty drivers* - Influencer Marketing.	**12**
V	Digital Transformation & Channel Attribution- Analytics of Ad-words, Email, Mobile, Social Media, Web Analytics - Changing your strategy based on analysis- Recent trends in Digital marketing. Google Analytics and other analytics tools-Understanding website traffic and user behaviour-Measuring campaign effectiveness-Reporting and data visualization.	**12**

***---* Self-study portions**

Text Book(s):

1. Seema Gupta, “Digital Marketing”, McGraw Hill, 2ndEdition, 2020
2. Ryan Deiss& Russ Henneberry, “Digital Marketing for Dummies”, Wiley Publication, 2020

Reference Book(s):

1. Simon Kingsnorth, “Digital Marketing Strategy”, Kogan Page, 2nd Edition, 2019
2. Brian Halligan&Dharmesh Shah, “Inbound Marketing Revised & Updated”, Wiley Publication, 2014
3. Jeremy Kagan&SiddharthShekar Singh, “Digital Marketing Strategy & Tactics”, Wiley, 2020
4. Francisco J. Martínez-López, Steven D'Alessandro, Advances in Digital Marketing and Ecommerce, Springer International Publishing. 2020
5. Tri Rachmadi, S.Kom, The Power Of Digital Marketing, TIGA Ebook,2020

Web Resource(s):

1. https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_ug/269
2. https://onlinecourses.swayam2.ac.in/cec23_mg08

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the role and importance of digital marketing in today's rapidly changing business environment.	**K1 &K2**
CO2	Apply the key elements of a digital marketing strategy in the business	**K3**
CO3	Analyse on how digital marketing can be utilised by organisations and how its effectiveness can measured.	**K4**
CO4	Evaluate the effectiveness of a digital marketing campaigns	**K5**
CO5	Create business strategies for successful digital marketing campaigns	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	2	2	1	2	2	1	1	1.4
CO2	2	2	2	2	2	2	2	2	1	2	1.9
CO3	2	3	1	3	2	2	2	2	1	2	2
CO4	3	3	1	3	3	2	3	2	3	2	2.5
CO5	3	2	2	3	2	3	3	2	2	2	2.4
Mean Overall Score											10.2/5=2.04
Correlation											Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. A.S.THOUFIQ NISHATH

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEB1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Investment - Speculation - Objectives - Real and Financial Assets - Securities - #Sources of Investment Information# - Risk – Types of Risk - Return and Risk - Primary Market –Procedure of Issues- Participants – Underwriting – Types - Listing of Securities – Pricing of Issues - Prospectus – Contents.	**12**
II	Secondary Market – Participants - Functions – Types of brokers - Demat account-requirement-BSE - NSE Purchase procedure-Types of orders- OTCEI - Features – Functions- *Regulatory Framework* – Security and Exchange Board of India – Functions - Fundamental analysis - Tools - Economic analysis- Forecasting techniques - Industry analysis - Company analysis	**12**
III	Technical analysis – Tools- Charting methods - Market indicators -Trend – Trend reversals – Patterns – Moving average – Exponential moving average –Oscillators – ROC – MACD– RSI - limitations - Stock market indices – Sensex – Nifty – *International indices*-Method of calculating indices.	**12**
IV	Portfolio - Concept - Types of portfolio - Portfolio selection and management –Factors - Markowitz Portfolio Selection Model- Capital Asset Pricing Model (CAPM) -Sharpe-the Single Index Model-Famma-French Three and Five factor CAPM Model.	**12**
V	Arbitrage Pricing Theory and its principles - Arbitrage Pricing Theory - Factor Analysis in Portfolio Management- Measurement of return on an individual stock- Measurement of portfolio return - Portfolio Performance Evaluation –Return per unit of risk,Sortino ratio, Jensen'sAlpha,Treynor-sharpe ratio-*Portfolio Revision#.-Investment avenues for foreign portfolio investors*	**12**

***---*Self-study portions**

Text Book(s):

1. Donald Fischer & Rohald Jordan,Security Analysis & portfolio management – Prentice Hall of India,6th edition, 2022
2. Subrata Mukherjee, Security Analysis and Portfolio Management,S.chand&Company,1st edition,2021

Reference Book(s):

1. Preethi Singh , Investment Management, Himalaya Publishing house, 20th edition 2018
2. S.Kevin, Security Analysis and Portfolio Management, PHI Learning Pvt. Ltd,2nd edition, 2015.
3. V.K.Bhalla, Investment Management: Security Analysis and Portfolio Management (Kindle Edition) - S. Chand Publishing, 2015.

4. Punithavathy Pandian , Security Analysis and Portfolio Management - Vikas Publishing, - 2nd edition ,2015.
5. Prasanna Chandra, Investment Analysis and Portfolio Management, McGraw-Hill Education,5th edition, 2017

Web Resource(s):

1. https://www.managementstudyguide.com/security-analysis-and-portfolio-management.htm
2. https://onlinecourses.nptel.ac.in/noc21_mg99/preview
3. https://www.wallstreetmojo.com/security-analysis/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basics of Investments and primary market	**K1 & K2**
CO2	Apply the knowledge and skills of trading in stock market	**K3**
CO3	Familiar to analyses with the Technical Analysis of securities	**K4**
CO4	Evaluate the Investment portfolios and it's performance of the Investment	**K5**
CO5	Construct an Investment portfolio	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	1	1	3	2	2	2	1	1.5
CO2	1	2	2	2	2	2	2	3	2	2	2.0
CO3	3	2	2	1	2	1	2	3	2	3	2.1
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
										Mean Overall Score	**9.7/5=1.94**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr.G.S DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEB2	DISCIPLINE SPECIFIC ELECTIVE	4	4	75	25	100

Course Title	BEHAVIORAL FINANCE	
SYLLABUS		
UNIT	**Details**	**No. of Hours**
I	Introduction to Behavioral Finance: Nature, Scope, Objectives and Application - Investment Decision Cycle - Judgment under Uncertainty Cognitive information perception - Peculiarities (biases) of quantitative and numerical information perception - Representativeness – Anchoring - Exponential discounting - *Hyperbolic discounting.*	**12**
II	Utility/ Preference Functions: Expected Utility Theory [EUT] and Rational Thought - Decision making under risk and uncertainty - Expected utility as a basis for decision-making – Theories based on Expected Utility Concept - *Investor rationality and market efficiency.*	**12**
III	Behavioral Finance Theory and Bubbles: Prospect Theory - SP/A Theory - Behavioral Portfolio Theory - Empirical and Statistical Detection Tests - Decision Theory Paradoxes - Nash Equilibrium- Keynesian Beauty Context - The Prisoner's Dilemma - The Monty Hall Paradox - The St. Petersburg Paradox - *The Allais Paradox - The Ellsberg Paradox.*	**12**
IV	Non-Behavioral Finance: Introduction - role of securities prices in the economy- Efficient markets hypothesis (EMH) – Definitions - EMH in supply and demand framework - Theoretical arguments for flat aggregate demand curve -*Equilibrium expected return models*.	**12**
V	Demand by Arbitrageurs and Average Investors & Contemporary Issues: Definition of arbitrageur - Long-short trades- Risk vs. Horizon - Transaction costs and short-selling costs- Fundamental risk - Noise-trader risk - Professional arbitrage - Destabilizing informed trading (positive feedback, predation)-*contemporary behavioral finance issues*	**12**

***.....* Self-study portions**

Text Book(s):

1. Prasaanna Chandra, Behavioural Finance, 2nd Edition, Paperback – 1, Mcgraw Hill, 2020
2. Shleifer, Andrei, Inefficient Markets: An Introduction to Behavioral Finance. Oxford, UK: Oxford University Press, 2000

Reference Book(s):

1. Sujata Kapoor, Jaya Mamta Prosad, Behavioural Finance, Sage Publications India Pvt. Ltd., 2019.
2. Kapoor, S., &Prasad, J. M. Behavioural finance: A review. Procedia computer science.(2017).
3. Parag Parikh, Value Investing and Behavioural Finance: Insights into Indian Stock Markets, Mcgraw Hill Education, 2017
4. Thomas Kliestik, Katerina Valaskova, and Maria Kovacova, Advances in Behavioural Finance and Economics, MDPI, 2021
5. Singh Ranjit, Behavioural Finance, PHI Learning Pvt. Ltd., 2019
6. Subrahmanyam, A. Behavioural finance: A review and synthesis. European Financial Management.(2008).

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc23_mg38/preview

Course Outcome		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the basics of Behavioral Finance	**K1,K2**
CO2	Apply the Expected Utility Theory[EUT] and Rational Thoughts	**K3**
CO3	Analyze the Compare various theories of Behavioral Finance	**K4**
CO4	Evaluate the knowledge of non-behavioral finance	**K5**
CO5	Create knowledge on arbitrage, risks in share trade, and contemporary financial issues.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO 1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	1	3	2	3	3	1	2	3	3	2.3
CO2	2	3	1	2	3	2	2	2	2	3	2.2
CO3	2	3	3	2	3	3	3	2	2	3	2.6
CO4	3	2	1	3	3	2	2	3	2	2	2.3
CO5	3	2	3	3	3	3	3	3	2	3	2.8
										Mean Overall score	**2.4**
										correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	**Low**
≥ 1.5 and < 2.5	**Medium**
≥ 2.5	**High**

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEB3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**FINANCIAL ECONOMETRICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Financial Econometrics- Time Series in Economics and Finance- Financial data and properties- Financial distributions.	**12**
II	Data analysis – components and methods -The Classical Linear Regression Model - Simple Regression Technique - Multiple Regression Technique - Regression for Panel Data and Binary variables - Problems of Regression Analysis - Heteroscedasticity - Multicollinearity - Autocorrelation.	**12**
III	Time Series Econometrics -Time Series as Stochastic Processes- Time Series Properties-Time Series model: Testing for Stationarity-Non-stationary data-Seasonal models – Model comparison and averaging - Error Correction Models	**12**
IV	Models and methods for predicting the level of future returns (Classical Linear Regression) and Time-Series Analysis (#ARMA models): specification, inference and forecasting - Models for volatility analysis and prediction (#ARCH and #GARCH models): Specification - inference- forecasting-#ARMA-#GARCH models for Risk Management: predictions of Value at Risk and Expected Shortfall.	**12**
V	*The Capital asset pricing model – Statistical framework for estimation and testing: Sharpe-Lintner version – Black version*. Size of tests – power of tests – Implementation of tests – Cross-sectional Regressions – Multifactor pricing models: Theoretical background – Estimation and testing : Portfolios as factors with a risk free asset and without a risk free asset – Macroeconomic variables as factors - Markov Chain Monte Carlo Methods with Applications-Gnu Regression, Econometrics and Time-series Library(GRETL) software.	**12**

***---*Self-study Portions #Lab-sessions**

Text Book(s):

1. J.M. Wooldridge (W), "Introductory Econometrics: A Modern Approach, (South-Western College Publishing, 7th edition,2019
2. K. Nirmal Ravi Kumar,'Econometrics" Routledge publishers,CRC-press,1st edition,2020

Reference Book(s):

1. Ramanathan, Ramu." Introductory Econometrics with Applications' S.Chand (G/L) & Company Ltd 5th edition,2005
2. Koop G, Bayesian Econometrics, John-Wiley & sons,1st edition, 2003
3. Gujarati, N. Damodar. Basic Econometrics, McGraw Hill education,5th edition,2017
4. Pindyck, Robert S. and Daniel L.Rubinfeld, Econometric Models and Economic Forecasts,McGraw Hill education,4th edition,2000
5. Stock J.M. and Mark W. Watson,' Introduction to Econometrics' Pearson International 3rd edition,2017

Web Resource(s):

1. https://onlinecourses.swayam2.ac.in/cec22_hs38/preview
2. https://www.researchgate.net/publication/259006444_Financial_Econometrics_Methods_and_Models
3. https://gretl.sourceforge.net/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the quantitative methodologies used by the students in business and management field, including data collection, data processing and analysis, model design and analytics.	**K1 & K2**
CO2	Applying the techniques for analysing quantitative data in business and management	**K3**
CO3	Analyse the suitability of particular methods to research in economics and business problems.	**K4**
CO4	Evaluate with their peers, research community, public and policymakers on making necessary judgement and corrections to policy and research	**K5**
CO5	Expected to create within academic and professional contexts, technological and socio-economic advanced knowledge.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.1/5=2.02**
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEB4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	FINANCIAL DERIVATIVES

SYLLABUS

Unit	Contents	Hours
I	Financial derivatives – Introduction; Definition – Types –Benefits of Derivatives in India- Different classification of traders - Indian Derivatives Market - Futures contract – Specifications – Daily settlement and margins – Delivery – Types of orders – Forward Market: Pricing and Trading Mechanism – Forward Contract concept – Features of Forward Contract – Classification of Forward Contracts – Forward Trading Mechanism Forward vs. futures contracts.	12
II	Hedging strategies using futures - Short and Long hedges – Basis risk – Factors affecting basis risk-Basic Risk Vs Price Risk-Cross hedging –Stock Index Futures - Forward price in investment asset - Valuing forward contracts - Futures Prices of Stock Indices - Single stock futures and Stock Index Futures-Currencies - Commodities - Convenience yield - Cost of carry.	12
III	Swaps- Concept, Evaluation and Features of Swap – Types of Financial Swaps – Interest Rate Swaps -Advantages and Disadvantages –Debt Equity Swap - Currency Swaps – Commodity Swap- Equity Swap-Credit Risk - Types of Swaps - Options - Call and Put- Mechanics of Options Trading.	12
IV	Options-Factors affecting option prices - Upper and Lower bounds –Put & Call Parity – effect on dividends – Binomial pricing model – The Black and Scholes Model – Pricing of index options-Spreads –*Sensitivity of option premia (Delta, Gamma, Lambda, Theta, Rho) *Bull - Bear – Box – Butterfly – Calendar – Diagonal combinations.	12
V	*****Derivatives in International Finance Market***-** Financial Derivatives Market in India – Need for Derivatives – Evolution of Derivatives in India -– Eligibility of Stocks – Emerging Structure of Derivatives Markets in India -Regulation of Financial Derivatives in India – Derivatives Trading at NSE/BSE - Structure of the Market – Trading systems — Regulatory Instruments.	12

--- Self-study Portions

Text Book(s):

1. Gupta S.L., Financial Derivatives, Theory, Concepts and Problems, Prentice Hall, India, 2017
2. Kevin. S Commodity and financial derivatives (2 ed.), PHI learning private limited, New Delhi. 50 ,2014

Reference Book(s):

1. Hull C. John, Basu. Options Futures and other Derivatives, Pearson Education, 8th Edition, 2013.
2. Sundaram Janakiramanan, Derivatives and Risk Management, Pearson Education, 2011
3. Vohra.N.D, Bagri.B.R., 'Futures and Options', Tata McGraw Hill Education Private Ltd, II Edition, 2011.
4. John C. Hull , Sankarshan Basu Options, Future & Other Derivatives ,X Edition , Pearson (2018)

Web Resource(s):

1. https://onlinecourses.swayam2.ac.in/cec20_mg17

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the students with the broad framework of financial derivatives market and to provide knowledge on various hedging strategies	**K1 & K2**
CO2	Apply the procedures and systems being followed in derivative markets.	**K3**
CO3	Analyse a firm foundation of the underlying concepts behind derivatives and also a detailed understanding of the main characteristics of financial derivatives and their relationships with the underlying assets.	**K4**
CO4	Evaluate the good skills on the valuation principles and models for derivatives.	**K5**
CO5	Create the derivatives for a wide range of hedging, trading and arbitrage purposes.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	1	1	3	2	1	2	1	1.7
CO2	2	1	2	1	2	2	2	3	2	2	1.9
CO3	3	2	2	2	1	1	2	3	2	3	2.1
CO4	3	2	2	3	2	3	2	2	2	2	2.3
CO5	2	3	3	3	2	3	3	3	2	3	2.7
										Mean Overall Score	**10.7/5=2.14**
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEB5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	STRATEGIC FINANCIAL MANAGEMENT	
SYLLABUS		
UNIT	**Details**	**No. of Hours**
I	Meaning of SFM – Features of SFM-Basic premises of SFM- Objectives & Goals - Major Kinds of Strategies & Policies -strategic decision-making framework- 9-s model for SFM - Strategic approach to Financial Management-Strategic Planning-Financial Forecasting Techniques-Benefits -*Steps in Financial Planning Process*.	**12**
II	Investment Decisions under Risk and Uncertainty: Techniques of Investment Decision- Risk-Adjusted Discount Rate, Certainty Equivalent Factor, Statistical Method, Sensitivity Analysis and Simulation Method.	**12**
III	Expansion and Financial Restructuring: Mergers and amalgamations - Reasons for Merger - legal procedure of Merger - Benefits and Cost of Merger - Determination of swap ratios - Evaluation of merger proposal - Corporate and distress restructuring - Ownership Restructuring-Privatization- Dynamics Restructuring-*Buy Back of Shares*.	**12**
IV	Corporate valuation - Asset approach of valuation- Stock and debt approach - Direct comparison approach - Discounted cash flow approach – *Guidelines for Corporate Valuation*-Value Based Management – Elements- Significance - EVA Approach - CAPM- Assumptions – Benefits and limitations.	**12**
V	International Trade Finance: Forms of Export Finance, Documentary Credit, Export Credit and Insurance, Bilateral Credit, Special Economic Zones, Disinvestment and their strategies – *International Tax Planning* - objectives – benefits -Corporate Governance- Fintech strategies-*Management Buyouts*	**12**

***….* Self-study portions**

Text Book(s):

1. CMA Kalyani Karna, Strategic Financial Management, Corporate, 2019
2. Sofat, Rajni, Hiro, Preeti, Strategic Financial Management, PHI New Delhi, 2nd edition,2015

Reference Book(s):

1. Girish P Jakhotiya, Strategic Financial Management, Vikas Publishing, 2019
2. Palanisamy Saravanan, Jayaprakash Sugavanam & Bharathy Jayaprakash, Strategic Financial Management, Oxford ,2014
3. Dr.Maheswari S.N., Financial Management, Sultan Chand &Co., New Delhi.2012

Web Resource(s):

1. https://archive.nptel.ac.in/courses/110/107/110107144

Course Outcome		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the concepts of Financial Management from Strategic Perspective	**K1 & K2**
CO2	Apply the Investment Decisions under risk and uncertainty situation	**K3**
CO3	Analyze the Compare various methods of expansion and restructuring	**K4**
CO4	Evaluate the Assess knowledge in various Corporate valuation methods	**K5**
CO5	Create Develop the knowledge about International Trade Finance	**K6**

Relationship Matrix:

Course Outcomes (COs)	Programme Outcomes (POs)					Programme Specific Outcomes (PSOs)					Mean Score of COs
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**	
CO1	2	1	3	2	3	3	1	2	3	3	2.3
CO2	2	3	1	2	3	2	2	2	2	3	2.2
CO3	2	3	3	2	3	3	3	2	2	3	2.6
CO4	3	2	1	3	3	2	2	3	2	2	2.3
CO5	3	2	3	3	3	3	3	3	2	3	2.8
										Mean Overall score	**2.4**
										correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEC1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	CHANGE MANAGEMENT

SYLLABUS		
Unit	**Contents**	**Hours**
I	Meaning, Nature, Forces for change- change agents- Change process-Types and forms of change Models of change- Resistance to change – individual factors – organizational factors – techniques to overcome change- Change programs –job redesign.	**12**
II	Change Models - Lewin's Model - Force Field Analysis- Systems Theory, 7 Stage Models, Burke-Litwin Model - * Comparison of Various Planned Change Models* - Change Agent-Role And Skills Of a Change Agent -HR Role as Change Agent - Impact of Change on Human Resources Planning.	**12**
III	Areas and Parties Involved in Change - Planned and Unplanned Change - Strategic Changes - *Change in Organization Culture* - Resistance to Change and Overcoming Resistance - Barriers to Organizational Change - Rethinking Resistance to Organizational Change - Strategies to Deal with Resistance.	**12**
IV	Behavioral Implications of Change - *The Positive and Negative Functions of Resistance* - Intended and Unintended Behavioral Reaction to Downsizing and Delayering -Techniques for effective implementation of change.	**12**
V	Human process interventions-Individual, group and inter-group human relations-structure and technological interventions- strategy interventions – sensitivity training – survey feedback, process consultation – team building – inter-group development.	**12**
VI	Current Trends(For CIA only) Use of digital adoption platforms to facilitate and support change – Data driven approach to change management – Humanizing Change	

…… Self Study

Text Book(s):

1. Thomas G Cumming and Christopher G Worley Organizational Development and Change, Cengage learning Publisher, 2019.
2. Kavita Singh, Organizational Change and Development,2nd edition, Excel Books 2010.

Reference Book(s):

1. Al Comeaux. Change (the) Management: Why We as Leaders Must Change for the Change, Lioncrest Publishing, 2020.
2. Bernard Burnes, Managing change| seventh edition, Pearson Education, 2020.
3. Laurie lewis ,Organizationoal Change, 2nd Edition, Wiley Blackwell ,2019.
4. Ratan Raina, Change Management and Organizational Development, Sage Publications, 2018.
5. Tupper Cawsly, Gene Deszca, Organizational change,3rd edition, Sage Publications,2015.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc23_mg37/preview
2. https://www.udemy.com/course/change-management-the-complete-guide/Smart Change Management-English-Ebook - September 2021- Publisher: Silk Road Publishing (Toronto, Canada) - Authors:Master Steve, Somayeh Amiri

Course Outcomes		
After taking this course the students will be able to		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the nature and significance of organizational change.	**K1 & K2**
CO2	Apply change models to develop strategies for organizational change.	**K3**
CO3	Analyse the impact of organizational culture and resistance to change.	**K4**
CO4	Evaluate the intended and unintended behavioral reactions to downsizing and de-layering.	**K5**
CO5	Create human process interventions to improve organizational dynamics.	**K6**

Relationship Matrix:

COs	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	1	3	2	2	3	1	1	1	1	1.7
CO2	2	3	2	3	3	3	3	3	3	1	2.6
CO3	2	1	3	1	1	3	1	1	2	1	1.6
CO4	2	3	2	3	3	3	1	1	3	1	2.2
CO5	2	1	3	1	1	3	3	1	3	3	2.1
Mean Overall Score											**2.02**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A. SELVARANI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEC2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
COURSE TITLE	LEARNING AND DEVELOPMENT						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Learning principles – Learning strategies and styles – Kolb's Learning Styles- Bloom's Taxonomy- Individual differences in the Learning process. Maximizing learning – *Recent developments in Instructional and cognitive psychology*. Model of employee behaviour–External influences –Internal factors that influence employer behaviour	**12**
II	Role Analysis: Developing the person in the role, RAT (Role Analysis Technique). Role of T & D in organization – Training Process model- Identification of Training Needs: Organizational analysis – Task Analysis – Person analysis – Prioritizing HRD needs – identifying individual's developmental needs	**12**
III	Principles of training design -defining the objectives – make / buy Decision – selecting the trainers – preparing lesson plan, training methods, materials – scheduling	**12**
IV	Training delivery methods, *principles involved in selection of various methods* – Techniques of training at different levels – Skills of an effective trainer – e learning and use of technology in training	**12**
V	Training evaluation – Purpose - Methods – stages of evaluation - Methods of training evaluation (Pre-Training, Evaluation during training, Post-training) – The Kirkpatrick Model of Evaluation and Philips Model for Learning Evaluation - Types of Evaluation Instruments and Techniques.	**12**

***---* Self Study Portions**

Text Book(s):

1. Beevers, K., Rea, A., & Hayden D, "Learning and Development Practice in the Workplace", Kogan Page, 2019
2. Ford, J K, "Learning in Organizations- An Evidence-Based Approach", Taylor & Francis, 2020.

Reference Book(s):

1. De Simone R, L., & Werner, J, M, "Human Resource Development", 6th Edition, Cengage learning, 2016.
2. Noe, R, "Employee Training & Development", 8th Edition, McGraw Hill, 2020. 5. Ross, S C, "Training and Development in Organizations - An Essential Guide for Trainers", Taylor & Francis, 2018.
3. Dr. Yogesh Pahuja, Training and Development: An Essential Guide for Students & Practitioners, Publisher: Partridge India, India 2015.
4. Elaine Biech, "Training & Development for Dummies, John Wiley & Sons, Inc., New Jersey, 2015.

Web Resource(s):

1. https://www.aihr.com/blog/learning-and-development/
2. https://onlinecourses.nptel.ac.in/noc22_hs63/preview

Course Outcomes		
After taking this course the students will be able to		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand appropriate learning styles and principles and explore the ways to maximize learning	**K1 & K2**
CO2	Apply the training and development needs of an organization and that of individuals	**K3**
CO3	Analyse the issues in designing and developing of the training and development programmes	**K4**
CO4	Evaluate the appropriate training and development activities based on the individual and organizational needs	**K5**
CO5	Create the effectiveness of training and development activities in an organization.	**K6**

Relationship Matrix:

COs	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	3	1	2	2	2	2	2	1	2	1.9
CO2	2	2	3	2	2	2	2	1	2	1	1.8
CO3	2	3	2	3	2	2	1	2	3	2	1.9
CO4	1	2	3	2	3	3	2	3	2	1	2.2
CO5	1	3	1	2	2	2	2	2	1	2	2.2
Mean Overall Score											**10.0/5=2.0**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G. SIVANESAN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEC3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**STRATEGIC HUMAN RESOURCE MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	SHRM : Definition – Nature – Aims – The evolution and Nature of Strategic Human Resource Management Competence Maturity Model and People Competency Maturity Model – The problems with SHRM - Theoretical Perspectives of SHRM – The Strategic Role of HR - SHRM Approaches - *Alternative HR Strategies*	**12**
II	Diversity and Inclusion at workplace: Diversity Management Introduction – Significance of a Diverse and inclusive workplace –Ways and approaches of Diversity Management – Biases in Organisation and Ways of their Resolution	**12**
III	Multiple Generations at Workplace: Intergenerational relationship in Organisation – Introduction – Classifications of Generations at Workforce – Types and attributes of Generations at workplace – Ways of synergizing across Generations – ways of enhancing Intergeneration synergy.	**12**
IV	Human Capital Management Strategy – Corporate Social Responsibility Strategy – Organization Development Strategy – Employee Engagement Strategy – Knowledge Management Strategy – Employee Resourcing Strategy – Talent Management Strategy – Learning and Development Strategy – Reward Strategy – *Employee Relations Strategy*.	**12**
V	Strategic International HRM: Introduction – SIHRM issues – Approaches to SIHRM - *HR outsourcing – Meaning - types – Advantages and fears of HR Outsourcing* - E-HRM - e- Employee profile– e- selection and recruitment – Virtual learning and Orientation – e - training and development – e- Performance management and Compensation design – Industry 5.0	**12**

***---* Self-study Portions**

Text Book(s):

1. Michael Armstrong, Armstrong's Handbook of Strategic Human Resource Management, 6th Edition , Kogan Page, 2016.
2. Ekta Sharma, Strategic Human Resource Management and Development, Pearson , First Edition, 2019

Reference Book(s):

1. Ananda Das Gupta Strategic Human Resource Management, 1st Edition,2020
2. Jeffrey A. Mello, Strategic Human Resource Management 4th Edition, Cengage Learning; (2014)
3. Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, 7th edition, 2016
4. Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective- Cengage Learning 4th Indian Reprint- 2013.
5. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill. 2011

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc23_mg64/unit?unit=55&lesson=57

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the relationship of HR strategy with overall corporate strategy, the strategic role of specific HR systems	**K1&K2**
CO2	To apply the theories and concepts relevant to strategic human resource management in contemporary Organizations	**K3**
CO3	Analyse the recent trends in E-HRM Practices	**K3**
CO4	Evaluate the Human Capital Strtegies to manage performance strategically	**K4**
CO5	Develop competency to implement global HR practices	**K5&K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO 5**	
CO1	2	3	2	2	2	2	2	2	1	3	2.1
CO2	2	1	2	3	2	1	2	3	2	2	2.0
CO3	1	2	2	2	3	2	2	3	2	3	2.2
CO4	2	3	2	1	2	2	2	2	2	2	2.0
CO5	2	1	3	2	2	2	3	2	2	3	2.2
										Mean Overall Score	**10.5/5=2.1**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. F. WAHIDHA BEGUM

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEC4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	TALENT MANAGEMENT

SYLLABUS		
Unit	**Contents**	**Hours**
I	Overview of Talent management, Strategic Importance of Talent, Talent imperatives, Elements of Talent management, Workforce Diversity and Talent management, Role of HR in Talent management.	**12**
II	Talent Acquisition and Workforce Planning: Identifying Talent Needs, Sourcing Talent, Recruitment, Screening and Selection. Talent Development and Deployment: *Methods of Talent Development, Types of Talent Deployment, Competency Mapping*, Competency Models, Talent Multiplication Model	**12**
III	Talent Retention and Engagement: Cost and Consequences of Talent Departure, Diagnosing Causes of Talent Departure, Measuring and Monitoring Turnover and Retention Data, Designing Engagement Strategies, Drivers of Engagement	**12**
IV	Talent and Performance – Talent and Teams – utilizing Talent Management thinking for successful Virtual Teams – Star Performers – Integrating Talent and Diversity Management – Impact of Technology on Talent Management.	**12**
V	Effectiveness of Talent Management: Measuring Contribution of Talent to Business Performance, Talent Metrics, Measuring Human Capital Investment, Transformation and reorganization of HR, *Future Challenges of talent management for the organization*.	**12**
VI	**(Only for CIA)** Role of Information Technology in Talent Acquisition	

***---* Self Study Portions**

Text Book(s):

1. David G Collings, Kamel Mellahi, Wayne F. Cascio, "The Oxford Handbook of Talent Management (Oxford Handbooks) Kindle Edition", OUP Oxford, 2017.
2. Lance Berger, Dorothy Berger, "The Talent Management Handbook: Making Culture a Competitive Advantage by Acquiring, Identifying, Developing, and Promoting the Best People", McGraw-Hill Education; 3rd edition 2017.

Reference Book(s):

1. Mark Miller, "Talent Magnet: How to Attract and Keep the Best People (The High Performance Series)", Berrett-Koehler Publishers, Oakland, California, 1st 2018.
2. Masood Hasan, Anil Kumar Singh, Somesh Dhamija, "Talent Management in India: Challenges and Opportunities" – Atlantic, 1st edition, 2019.
3. Talent Management – www.tutorialspoint.com, E – book, Tutorials Point (I) Pvt. Ltd, 2017.
4. Lawler," Reinventing Talent Management: Principles and Practices for the New World of Work ", McGraw-Hill Education, New York, United States, 1st edition, 2017.
5. Mark Wilcox, "Effective Talent Management: Aligning Strategy, People and Performance", Routledge, Abingdon, England, 1st edition- 2016.
6. Terry Bickham, "ATD Talent Management Handbook Kindle Edition", ATD Press, Alexandria, USA, 1st 2015.
7. Patrick Merlevede, "Talent Management: A focus on excellence: Managing Human Resources in Knowledge Economy", www.bookboon.com – E Book, 2014.

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc21_mg34/preview

Course Outcomes

After taking this course the students will be able to

CO No.	CO Statement	Cognitive Level (K-Level)
CO1	Remember and understand attraction, acquisition, and retention of talent in organizations.	**K1, K2**
CO2	Apply talent management process with business strategy, with culture, and with people.	**K3**
CO3	Analyze alignment of the talent management process with business strategy, with culture and with people.	**K4**
CO4	Evaluate talent in organizations as well as managing one's own talents as an individual.	**K5**
CO5	Create and develop Modern practices in Talent attraction and retention.	**K6**

COs	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	2	2	2	1	2	2	1	1.9
CO2	3	3	1	2	1	3	3	3	3	2	2.4
CO3	3	2	2	2	2	2	1	2	2	2	2
CO4	3	2	2	3	3	2	1	2	1	1	2
CO5	3	2	2	1	1	2	2	1	3	1	1.8
										Mean Overall Score	**10.1/5=2.02**
										Mean Score	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G. SIVANESAN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEC5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**INDUSTRIAL RELATION AND LABOUR LEGISLATIONS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept of Industrial relations - Determinants of IR - History of industrial relations in India – Theoretical Perspective – Approaches to IR – Scope and Functions - Major Actors and their role in IR - Industrial relations in modern era – Industrial relations and HRM/HRD	**12**
II	Trade Unions – Features, Purpose, Functions, types and structure -Theories of Trade union - Discipline and grievance Redressal Machinery: Discipline Meaning objective and principles–Approaches to discipline – Causes of Indiscipline – Disciplinary process - Grievance: Meaning - Nature and causes - Grievance Redressal Procedures – *Collective Bargaining – Concept, Essential Pre requisites for collective bargaining – Levels- Process - Advantages and Disadvantages*	**12**
III	The Industrial Relations Code 2020: Industrial Employment (standing orders) Act, 1946 – The Industrial Disputes Act 1947 : Nature, Causes & Consequences- Machinery for Prevention and Settlement of Industrial Disputes – The Trade Unions Act, 1926	**12**
IV	Industrial Safety & Health 2020: The Salient Features of Factories Act 1948- Health, Safety and Welfare - Social Security Code 2020: Employees Compensation Act, 1923(Employees' Compensation Amendments Act, 2017) The Payment of Gratuity Act, 1972 – The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 - The Maternity Benefit Act, 1961 –*The Employees' State Insurance Act, 1948* - POSH Act 2013.	**12**
V	The Code on Wages 2019: Payment of Wages Act, 1936 - The Minimum Wages Act, 1948 - The Payment of Bonus Act, 1975 – Shops and Establishment Act.	**12**

Text Book(s):

1. N. D. Kapoor, Elements of Industrial Law, Sultan Chand, New Delhi, 2020
2. S C SRINIVASTAVA, Industrial Relations and Labour Laws, vikas Publishing; Seventh edition (2020)

Reference Book(s):

1. Taxmann's, Labour Laws, Taxmann Publicaiton 2023
2. R. C. Sharma. Industrial Relations and Labour Legislations, PHI, 2019
3. S. N. Misra, Labour and Industrial Laws 29th Edition
4. Mamoria C.B. and SathishMamoria, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2016
5. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson. 2011.

Web Resource(s):

1. labour.gov.in/e-book-1

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	understanding of constitutional provisions and industrial relations legislation relating to Labour	**K1&K2**
CO2	Apply the concepts of Industrial relations and labour laws to solve Industrial issues and generate alternative decision making.	**K3**
CO3	Analyze problems and issues in the area in order to effectively manage employee relations	**K4**
CO4	Be able to evaluate work environment with reference to employee relations, objectively	**K5**
CO5	Be able to design work culture/ policies conducive to good Industrial Relations.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO 5**	
CO1	1	3	1	2	2	2	2	2	1	3	1.9
CO2	1	2	2	2	3	1	2	3	2	2	2.0
CO3	1	2	2	2	1	2	2	3	2	3	2.0
CO4	2	1	2	3	2	2	2	2	2	2	2.0
CO5	2	3	2	2	2	2	3	2	2	3	2.3
Mean Overall Score											**10.2/5=2.04**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. F. WAHIDHA BEGUM

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DED1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**DATA RESOURCE MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Overview of Database - DBMS – RDBMS - Introduction to Oracle – SQL: Introduction – DDL – DML – TCL – DQL – DCL - Data Types - SQL Commands: Create, Insert, Commit, Select, Alter, Update, Rollback, Save point, Delete, Truncate, Drop, Grant, Revoke; - *Locks in Oracle*.	**12**
II	Operators: Arithmetic Operators– Comparison Operators – Logical Operators; SQL Functions: Date functions – Numeric functions – Character functions – Conversion functions– Miscellaneous Single-Row functions - Group Functions.	**12**
III	Joins and its Types - Set operators: Union- Union all –Minus – Intersect; Sub Queries: Multiple Sub Queries - Implementation of Constraints - Building a Report in SQL* PLUS.	**12**
IV	PL / SQL: Introduction –PL / SQL blocks - Date types - Basic Programs in PL/SQL – *Control Structures*- Data base triggers: Syntax – Parts and Types of Triggers- Enabling and Disabling Triggers - Dropping Triggers;	**12**
V	From Data to Dashboard: Introduction to Data Studio Interface – Fundamentals of Data Studio - Creating Tables – Dimension and Metrics – Ranges and Comparison – Styling Options - Aggregation – Types of Visuals and Controls - Charts and Maps – Sliders and Filters – Creating complete Dashboard – Blending and sharing Dashboard	**12**

***---* Self-study Portions**

Text Book(s):

1. Allen G. Taylor , SQL All - In - One for Dummies, 3ed, Wiley, 2019.
2. Chandra B, Mastering PL/SQL through Illustrations, BPB Publications, 2020.
3. Grant Kemp & Gerry White, Google Data Studio for Beginners: Start Making Your Data Actionable, Apress, 2020.

Reference Book(s):

1. Andrew Igla, SQL/PL/SQL/ORACLE, Xlibris Publishing, 2016.
2. Jason Price, Oracle Database 12c SQL, Oracle Press, 2013.
3. John Casteel, Oracle 11g : PL/SQL Programming, Second Edition, Cengage Learning, 2013.
4. George Koch & Kevin Loney, ORACLE9i, The complete reference, TMH, New Delhi, 2002.
5. Lee Hurst, Hands on With Google Data Studio: A Data Citizen's Survival, Willey, 2020.

Web Resource(s):

1. https://onlinecourses.swayam2.ac.in/nou20_lb03
2. www.oracletutorial.com
3. https://www.tutorialspoint.com/plsql/plsql_tutorial.pdf
4. https://www.techonthenet.com/oracle/index.php
5. https://www.computer-pdf.com/exercises/oracle-11g-plsql

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basic concepts of database system and SQL.	**K1 & K2**
CO2	Apply mathematical and logical formulae and functions using SQL.	**K3**
CO3	Analyse various database schema and constraints to create reports.	**K4**
CO4	Evaluate database requirements and retrieve data using the PL/SQL programs.	**K5**
CO5	Create Interactive Dashboards using data visualization tools.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	1	1	3	1	3	2	1	2.0
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
Mean Overall Score											**10.9/5=2.2**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DED2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**DECISION SUPPORT SYSTEM**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Managerial Decision Problems - Decision Making Process – Decision Styles – *Attributes of various Computer Based Information System * - Case Discussion	**12**
II	DSS: An overview- Scope of DSS-Characteristics and Capabilities of DSS – Components of DSS-Classification of DSS – DSS Applications - MIS Versus DSS- Case Discussion.	**12**
III	Decision Support System for Materials Managers - Decision Support System for Determination of Product Mix – Product Choice and Bundling Decisions- Product Mix Decisions- Case Discussion	**12**
IV	Decision Support System for Customer Centric Value Driven Decisions - Decision Support System for Human Resources Function - *Decision Support System for Pricing Decisions*- Case Discussion.	**12**
V	KPI and Balanced Scoreboards - Design Requirements for Dashboard- Dashboard Appliances -*Group Decision Support Systems* - Case Discussion	**12**

--- **Self-study Portions**

Text Book(s):

1. Efraim Turban, Decision Support And Business Intelligence Systems, 18th Edition, Chaukhamba Auriyantaliya , 2019
2. Peter G W Keen and Thomas J Gambino, Building a Decision Support System, Franklin Classics Trade Press, 2018.

Reference Book(s):

1. Gerardus Blokdyk , Decision support systems, Third Edition, 5starcooks, 2019.
2. Ramesh E Sharda, DursunDelen and Efraim Turban, Business Intelligence and Analytics, Tenth Edition, Pearson Education, India, 2015.
3. Marakas , Decision Support Systems, Pearson, 2015.
4. Vicki L Sauter, Decision Support Systems for Business Intelligence, Second Edition, John Wiley & Sons, Inc, NJ, 2010
5. Burstein.F, and Holsapple.C.W, Handbook on Decision Support Systems – Basic Themes, Springer, 2008.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc20_mg59/
2. https://onlinecourses.nptel.ac.in/noc20_mg63/
3. https://nptel.ac.in/courses/106106093/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand different kinds of decision support systems and their functions.	**K1 & K2**
CO2	Apply the concept of DSS in decision making process.	**K3**
CO3	Analyse a typical decision situation in organisations.	**K4**
CO4	Evaluate the effectiveness of DSS in the core activities of organization.	**K5**
CO5	Create Comprehensive Dashboards based on requirements.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	1	1	3	1	3	2	1	2.0
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
									Mean Overall Score		10.9/5=2.2
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DED3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	SERVICE OPERATIONS MANAGEMENT

SYLLABUS

Unit	Contents	Hours
I	Services – Importance, role in economy, service sector – nature, growth. Nature of services distinctive characteristics, Service Package, Service classification, service-dominant logic, open-systems view. Service Strategy –Strategic service vision, competitive environment, generic strategies, winning customers; *Role of information technology*; stages in service firm competitiveness.	12
II	New Service Development – Design elements – Service Blue-printing - process structure – generic approaches. Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface– service decoupling. Technology in services – self- service, automation, e-commerce, e-business, technology innovations	12
III	Service Recovery, Service Guarantees. Process Improvement –productivity improvement - DEA, quality tools,benchmarking, Quality improvement programs	12
IV	Supporting facility -Service scopes, Facility design – nature, objectives, process analysis, service facility layout. Service Facility Location –considerations, facility location techniques metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling	12
V	Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –*Queuing systems*,	12

***---* Self-study Portions**

Text Book(s):

1. James A. Fitzsimmons, Mona J, Fitzsimmons, Sanjeev Bordoloi, Service Management – Operations, Strategy, Information Technology, McGraw-Hill Education 8th Edition 2018
2. Richard D. Metters, Successful Service Operations Management, Cengage Learning,2nd Edition, 2019

Reference Book(s):

1. Cengiz Haksever, Barry Render, Service Management, Pearson Education, 2020.
2. Robert Johnston, Graham Clark, Service Operations Management, PearsonEducation, 2nd Edition, 2020
3. Bill Hollins and Sadie Shinkins, Managing Service Operations, Sage, 2019
4. Panneerselvam, R., Production and Operations Management, PHI
5. Learning Pvt. Ltd., Third Edition, 2017.
6. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
7. Adam and Elbert, 'Production and Operations Management', Prentice Hall. 2017.

Web Resource(s):

1. https://www.managementstudyguide.com/service scope model.htm
2. https://www.mbaknol.com/operations-management/managing waiting lines-manufacturing-technology

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the nature of service operations	**K1 &K2**
CO2	Apply the ability to design services	**K3**
CO3	Analyze the inculcate quality in service design and delivery	**K4**
CO4	Evaluate the models to design service facility	**K5**
CO5	Create the sustain service business	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	1	1	1	3	2	2	2	2	1.8
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
Mean Overall Score											**12.4/5= 2.5**
Correlation											**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DED4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	PRODUCT DESIGN AND DEVELOPMENT

SYLLABUS		
Unit	**Contents**	**Hours**
I	Product design & development - characteristics, duration and cost, challenges; Development Process - Generic Process, Concept development, Adapting to product types; Product Planning - Concept Generation Evaluation - *Technology Life Cycle*; Disruptive Technologies.	**12**
II	Concept Selection – Importance, Methodology, concept Screening, Concept Scoring, Concept Testing; Product Architecture - Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning	**12**
III	PDM - concept and benefits, functions, Product data and workflow, Product reliability, CIM data, Architecture of PDM systems, Product data interchange, Portal integration, PDM acquisition and implementation; Product Life Cycle management - strategy, Change management for PLM.	**12**
IV	Design Approaches - Industrial Design, Design for Manufacturing, Value Engineering, Ergonomics, Robust Design, Design for Excellence; Collaborative Product development- Prototyping, failure rate curve, product use testing-Product development economics, scoring model, financial analysis	**12**
V	Intellectual Property and Patents -Definitions, Patent Searches, Application, Patent Ownership and Transfer, Patent Infringement, *New Developments and International Patents*	**12**

***---* Self-study Portions**

Text Book(s):

1. Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, TataMcGraw – Hill, Fourth Edition, reprint 2019
2. Kenneth B.Kahn, New Product Planning, Sage, 2020.

Reference Book(s):

1. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2018.
2. Deborah E. Bouchoux, Intellectual Property Rights, Delmar, Cengage Learning, 2020.
3. Michael Grieves, Product Life Cycle Management, Tata McGraw Hill , 2019.
4. Panneerselvam, R., Production and Operations Management, PHI
5. Learning Pvt. Ltd., Third Edition ,2017.
6. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
7. Adam and Elbert, 'Production and Operations Management', Prentice Hall., 2017.

Web Resource(s):

1. https://www.managementstudyguide.com/product design.htm
2. https://www.mbaknol.com/operations-management/managing waiting lines-manufacturing-technology life cycle

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the designing and developing the product	**K1 &K2**
CO2	Apply the basic concept of the product	**K3**
CO3	Analyze the management of product data	**K4**
CO4	Evaluate design tools to enhance product performance	**K5**
CO5	Create patenting new products.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	1	1	1	3	2	2	2	2	1.8
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
Mean Overall Score											**12.4/5= 2.5**
Correlation											**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DED5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**TOTAL QUALITY MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction - Need for quality - Evolution of quality - Definition of quality. Concept of Quality different perspectives. Concept of total Quality – Design, inputs, process and output - Attitude and involvement of top management. *Customer Focus – customer perception* - customer retention. Dimensions of product and service quality. Cost of quality.	**12**
II	*Quality Gurus* - Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, Shigeo Shingo, and Taguchi. Concepts of Quality circle, Japanese 5S principles and 8D methodology-*Seven Pillars of TQM*	**12**
III	Concepts of process capability. Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Terotechnology. Business process Improvement (BPI) – principles, applications, reengineering process, benefits and limitations	**12**
IV	Quality Tools - The seven traditional tools of quality, New management tools. Six-sigma, Bench marking, Poka-yoke, Failure Mode Effect Analysis (FMEA) – reliability, failure rate, FMEA stages, design, process and documentation.	**12**
V	Introduction Quality management systems – IS/ISO 9004:2000 – Quality System – Elements, Documentation guidelines for performance improvements. Quality Audits - QS 9000 – ISO 14000 –Concepts. TQM -culture, framework, benefits, awareness and obstacles.	**12**

***---* Self-study Portions**

Text Book(s):

1. Dale H.Besterfield, CarolBesterfield-Michna, Glen H. Besterfield, Mary Besterfield - Sacre,HemantUrdhwareshe, Rashmi Urdhwareshe, Total Quality Management (TQM), Fifth edition, Pearson Education, 2018.
2. 2.Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House,First Edition 2020

Reference Book(s):

1. PoornimaM.Charantimath, Total Quality Management, Pearson Education, Second Edition,2021
2. Douglas C. Montgomory, Introduction to Statistical Quality Control, Wiley StudentEdition4th Edition, Wiley India Pvt Limited, 2018\
3. Panneerselvam, R., Production and Operations Management, PHI
4. Learning Pvt. Ltd., Third Edition ,2017.
5. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
6. Adam and Elbert, 'Production and Operations Management', Prentice Hall., 2017.

Web Resource(s):
1. https://www.managementstudyguide.com/quality management system.htm 2. https://www.mbaknol.com/operations-management/managing waiting quality tools-technology

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the evolution of Quality management	**K1 &K2**
CO2	Apply the quality philosophies and practices	**K3**
CO3	Analyze to apply statistical process control to enhance quality	**K4**
CO4	Evaluate quality tools to enhance organization's quality performance	**K5**
CO5	Create quality management systems.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	1	1	1	3	2	2	2	2	1.8
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
Mean Overall Score											**12.4/5= 2.5**
Correlation											**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEE1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**STRATEGIC LOGISTICS MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Definition and Scope of Logistics Management - Functions & Objectives - Customer Value Chain - Service Phases and attributes - Value added logistics services – Integrating logistics into supply chain - Role of logistics in Competitive strategy - *Customer Service*	**12**
II	Warehousing Functions - Types - Site Selection - Decision Model - Layout Design - Costing: -* Material management v/s physical distribution, cost centres, nodes v/s links, logistics channel* Role of Material Handling in Logistics, Equipment and Systems - - Automated Material Handling - Material Storage Systems – Principles - Methods - ASRS	**12**
III	Transportation System - Evolution - Infrastructure and Networks Freight Management - Vehicle Routing - Forms for Inbound and out bound logistics - Transportation Selection – Modes Of Transportation – Strategic Models For Transportation And Distribution – Factors Affecting Network Effectiveness – *3 PL Advantages* – Indian Transport Infrastructure – IT Solutions – EDI, E-Commerce, E- Procurement – Bar Coding, RFID, NFC Technology.	**12**
IV	Defining Order Processing -Order Entry–Document Processing – Status Reporting – Factors Affecting Processing Time – Customer Service. Concept Of Unitization – Palletization Containerization– Functions Of Packaging - Costs Of Packaging – Package Design Considerations – Packaging Materials Strategies– Choosing Right Materials	**12**
V	Logistics Information Systems - Need - Characteristics and Design - E Logistics - Structure and Operation - Logistics Resource Management - e-LRM - Automatic Identification Technologies - Global Logistics - Operational and Strategic Issues - *Ocean and Air Transportation*- Green Logistics.	**12**
VI	**(For CIA Only)** Robot Process Automation – Data Mining – Drones and Logistics	

***---* Self-study Portions**

Text Book(s):

1. Saikumari V. S. Purushothaman, Logistics and Supply Chain Management, Sultan Chand & Sons, 1st Edition 2022.
2. Satish C. Ailawadi, Rakesh P. Singh, Logistics and Supply Chain Management, PHI Learning, 3rd Edition 2021.

Reference Book(s):

1. V.V Sople, Logistics Management, Pearson Education India, 3rd Edition, Year: 2012.
2. Ganapathi, Logistics Management, Oxford University Press, 2015
3. Martin Christopher, Logistics and Supply Chain Management, FT Publishing International, 5th Edition, 2016

4. R.H. Ballou, and Samir Business Logistics Management,5th Edition 2014
5. David B. Grant & Chee Yew Wong Sustainable Logistics and Supply Chain Management: Principles and Practices for Sustainable Operations and Management Kogan Page; 2 edition April 3, 2017

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc21_mg79/preview
2. https://shipsy.io/blogs/strategic-logistics-planning/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand and Remember strategical practices and their perspectives in the logistics management	**K1 & K2**
CO2	Apply the warehousing strategies and apply various material handling systems in the operations	**K3**
CO3	Analyze the different modes of transportation and infer their effectiveness in the network	**K4**
CO4	Evaluate the right order processing techniques and decide relevant packaging	**K5**
CO5	Create logistics desires of a company from a global perspective.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	3	3	3	2	2	2	2.3
CO2	2	1	3	2	2	2	2	1	3	2	2
CO3	3	2	3	2	2	1	2	2	2	3	2.2
CO4	2	2	2	3	2	3	2	3	2	2	2.3
CO5	2	2	3	2	2	2	3	3	2	3	2.4
										Mean Overall Score	**11.2/5=2.24**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEE2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**CONTAINERIZATION & MULTI-MODEL TRANSPORT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Containerization: Genesis, Concept, Classification, Benefits And Constraints; - Major Container Trades - Container Operators - Container Ships - Terminal - Consideration Of Container Terminal Planning - Container Distribution Container Types - ISO Container Dimension By Types - Non- Containerisable Cargo - Equipment For Non Containerisable Cargo	**12**
II	Stowage: Meaning - Stowage of cargo - Factor Consideration - Types of cargo - Cargo and Container handling equipment - - Types of Packing- Marking of cargo - Dangerous Cargo - International Code For The Maritime Transport Of Dangerous Goods (IMDG) Code - Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; Container Corporation of India Limited (CONCOR); *ICDs under CONCOR*	**12**
III	Multimodal Transport: Evolution - Modal Characteristics; Comparisons; Legal Classifications; Trade Routes - Basic Intermodal System - Modal Interface Factors outline why shipper favour Multi Modalism- Multi-Modalism Strategy- International Air Transport - Air Cargo Tariff Structure – *Freight - Definition, Rate* - Freight Structure and Practice	**12**
IV	Liners - Tramps - Specialized Vessels - Terms - Road transport vehicle - Road Transport Weight and Measurement - Rail Transport Vehicle and Equipment - Air 66 Transport - Ports - LCL - FCL - NVOCC - Freight forwarders - Consolidator - ICD - CFS- Free Trade Area - SEZ - #Factors affecting mode and route choice#	**12**
V	Corporate structures in Multimodal Transport, System required by the Transport Operator Transport Pricing- Modern Freight Tariffs, #Meeting the Demand#-Tracking the Container Fleet - International Trade Distribution- Block chain Technology – Importance of Sustainability – *Data Warehouse*	**12**

***---* Self-study Portions**

Text Book(s):

1. Ivan K. Mugabi **.**Evolution of Containerization a Stepping Stone to Multimodal Transport: The interrelationships Between Containerization and Multi-modal Transport, Lambert Academic Publishing, 1st Edition,2017.
2. HARIHARAN, K. V. (2002) A Text Book on Containerization and Multimodal Transport. Shroff Publishers and Distributors: New Delhi, Publication: Routledge, 2nd Edition, Year: 2016.

Reference Book(s):

1. Donald J. Bowerson. (2017) Logistic and Supply Chain Management: Prentice Hall of India.
2. John J. Coyle, Edward J. Bardi and C. John Langley Jr., The Management of Business Logistics - A supply chain Perspective, Thomson Business Information, 10th edition 2016
3. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 6th edition 2014
4. R.B. Handfield and E.L. Nochols, Jr. Introduction Supply Chain Management. Prentice Hall, 2nd edition (2014)

Web Resource(s):
1. https://www.aitworldwide.com/services/sea-freight/containerization 2. https://www.britannica.com/technology/containerization

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the application of containerization for cargo	**K1 & K2**
CO2	Apply the handling of cargo and various codes for containers in operations	**K3**
CO3	Analyse the different multi modal transport systems and list the freight structure	**K4**
CO4	Evaluate the ways to measure the freight with consolidators	**K5**
CO5	Create the right corporate structure and minimise the tariff	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	3	1	1	3	1	2	2	1	1.8
CO2	1	2	2	2	2	2	2	3	0	2	1.8
CO3	3	2	2	3	2	1	3	3	1	3	2.3
CO4	1	3	2	2	2	2	1	2	3	2	2
CO5	2	3	2	3	2	3	3	1	2	3	2.4
									Mean Overall Score		**10.3/5=2.06**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEE3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**WAREHOUSING & INVENTORY MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Warehouse Management – Definition, Principles, Roles, Importance of Warehouses, Need for Warehousing -Warehouse selection and planning-functions and operations of a warehouse-*Warehouse location*-Area of Warehouse-Factors affecting warehousing cost-Warehouse layout-Warehouse Analysis and Evaluation -Design principles.	**12**
II	Planning – codification and standardization of the Materials-Incoming Materials Receipts, Retrieval and Transaction Processing System-Security and Loss Prevention-Consumption Based Planning – MRP and lot sixing procedure-MRP1-MRP2-Difference between MRP1 and MRP2- Forecasting parameter and result- planned order planning file consolidation- Break bulk-Cross docking- Mixing-Assembly – competitive advantage, production support warehouse – ERP-*Role of IT in warehousing*.	**12**
III	Inventory – Definition, principles, role, functions and importance of Inventory, *Types of Inventory*, Inventory Policy, Costs Associated with Inventory-Inventory and Profitability-Impact of Inventory on total logical cost – Inventory management – objectives - importance-symptoms of poor inventory management-Improving effectiveness of inventory management.	**12**
IV	Inventory Control and models – Importance and scope of Inventory control, Selective Inventory control, Inventory Models – Economic Lot size, EOQ- Economic Batch Quantity [EBQ]-ROL – reorder Level-P Model-Q model-two bin system-fair share allocation model-MRP-ABC Analysis-Just in Time (JIT). Modern methods Kanban-DRP and ERP.	**12**
V	Inventory Methods – Inventory ranking methods and Quadrant technique-FIFO. LIFC-Weighted average method, Inventory under certainly and uncertainly-Risk Management-Work in progress inventories-Finished Goods Inventories-Spare parts inventories-Use of Computers in Inventory Management – RFID-EDI-Satellite tracking system.	**12**

***---* Self-study Portions**

Text Book(s):

1. Gwynne Richards, "Warehouse Management", 2018, Kogan Page Ltd
2. Max Muller, "Essentials of Inventory Management," 2019, Harper Collins Leadership
3. Satish C Ailawadi & Rakesh P Singh, "Logistics Management," 2nd Edition, 2012, PHI Learning Pvt. Ltd.

Reference Book(s):

1. Donald J Bowersox, David J Closs, M Bixby Cooper (2012) "Supply Chain Logistics Management", 4th Edition McGraw-Hill Higher Education.

2. Janat Shah, "Supply chain management text and cases", 2010, Pearson Publication.
3. N.V.S.Raju. (2013), Industrial Engineering and Management, CengageLearning India Pt. Ltd, New Delhi, ISBN-13: 978-81-315-1948-6
4. N.V.S.Raju. (2018), Operations Research, Theory and Practice, BSPublications, Hyderabad, India, and CRC Publication (Aunit of Taylor&Francis) ISBN: 978-93-5230-190-4
5. Jeroen P.van den Berg, "Highly Competitive Warehouse Management", 2012, Management Outlook.

Web Resource(s):

1. https://archive.nptel.ac.in/courses/110/105/110105095/
2. https://onlinecourses.nptel.ac.in/noc20_mg17/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the basics of warehouse management its location, layout and principles of warehouse design.	**K1 & K2**
CO2	Applying the various elements of standardization, codification, safety and security of inventory and the role of Information technology in warehouse management	**K3**
CO3	Categories the broad concepts of Inventory Management and its impact on Logistics.	**K4**
CO4	Evaluate the basic principles of various models, tools and techniques of Inventory control and inventory management.	**K5**
CO5	Design the process of various inventory ranking methods, and how to use technology in inventory control.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	1	2	3	2	2	2	2	2.1
CO2	2	1	2	2	3	2	3	3	2	1	2.1
CO3	1	2	2	2	2	2	2	2	2	3	2
CO4	2	2	1	2	2	2	3	2	2	2	2
CO5	2	3	2	2	1	3	2	2	2	3	2.2
										Mean Overall Score	**10.4/5=2.08**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEE4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	ESSENTIALS OF SUPPLY CHAIN MANAGEMENT

SYLLABUS

Unit	Contents	Hours
I	Supply Chain in Day-to-Day Life, Evolution and Landmarks, Supply Chain Management, Logistics and SCM, Value Chain, Value System and Supply Chain, Supply Chain - Macro Processes, Interface of Technology, Process, and People in Supply Chain.	12
II	Structure of a Supply Chain, Push-based Supply Chain, Managerial Levers for Achieving Cost-Efficient Supply Chain, Commodity and Cost-centric Supply Chain, Pull based Supply Chain, *Agile Supply Chain*- Pull-centric, Trade-off between Push and Pull Strategies	12
III	Designing The Distribution Network – Role Of Distribution – Factors Influencing Distribution – Design Options – Distribution Networks In Practice – Network Design In The Supply Chain – Role Of Network – Factors Affecting The Network Design Decisions – Modelling For Supply Chain	12
IV	Supply Chain Performance: Bullwhip effect and reduction, Performance measurement: Dimension, Tools of performance measurement, SCOR Model. Demand chain management, Global Supply chain- Challenges in establishing Global Supply Chain, Factors that influences designing Global Supply Chain Network.	12
V	Tierization of Suppliers, Reverse Logistics, Vendor-managed Inventory, Milk Run System, *Bar Coding*, Hub and Spoke Concept, *Trends in Use of Third-party Logistics Providers*, Fourth-party Logistics Providers, Postponement Strategy, Cross-docking, Drop-shipping, Risk-pooling, -Transhipment, Lean Operations Techniques, Green Supply Chain.	12
VI	Internet of Things(IoT) – Risk Management and Resiliency –Circular Supply Chain	

***---* Self-study Portions**

Text Book(s):

1. F. Robert Jacobs and Richard Chase, Operations and Supply Chain Management, 16th Edition, 2020
2. Michael H. Hugos, 'ESSENTIALS OF SUPPLY CHAIN MANAGEMENT, 4th Edition, Wiley, 2018

Reference Book(s):

1. W. C. Benton, 'Purchasing and Supply Chain Management'- 4th Edition, Sage Publications, USA. 2020.
2. Sunil Chopra, Peter Meindl and D.V. Kalra. "Supply Chain Management: Strategy, Planning, and Operation", Pearson Education, 5th Edition, New Delhi, 2013.
3. R.B. Handfield and E.L. Nochols, Jr. Introduction Supply Chain Management. Prentice Hall, 2 nd edition (2014)
4. Altekar, supply chain management,and concepts PHI 2013.
5. David Simchi-Levi, ―Designing & Managing Supply Chain-Concepts, Strategies‖, Tata McGraw Hill, 8th Edition, 2000

Web Resource(s):
1. https://www.investopedia.com/terms/s/scm.asp 2. https://www.michiganstateuniversityonline.com/resources/supply-chain/what-is-supply-chain-management/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the process of supply chain and remember it in real business situation.	**K1 & K2**
CO2	Apply specialised technical, analytical and creative skills which are fundamental to Problem solving and decision making.	**K3**
CO3	Analyze the distribution techniques and classify network design	**K4**
CO4	Evaluate Supply Chain Performance and its global impact	**K5**
CO5	Create corporate procurement and logistics management strategy in line with the corporate strategic objectives and goals and be able to negotiate contracts effectively	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	3	1	2	1	3	2	2	2	1	1.9
CO2	2	2	2	1	1	2	3	2	2	2	1.9
CO3	3	2	2	2	2	1	2	3	1	2	2
CO4	1	2	3	3	1	2	2	3	3	2	2.2
CO5	2	2	1	3	2	3	2	2	3	3	2.3
										Mean Overall Score	**10.3/5=2.06**
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEE5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	SUPPLY CHAIN ANALYTICS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to analytics – descriptive, predictive and prescriptive analytics, Data Driven Supply Chains – Basics, transforming supply chains, Barriers to implementation, Road Map.	**12**
II	Mathematical Programming Models - P-Median Methods - *Guided LP Approach* - Balmer – Wolfe Method, Greedy Drop Heuristics, Dynamic Location Models, Space Determination and Layout Methods	**12**
III	Inventory aggregation Models, Dynamic Lot sizing Methods, Multi-Echelon Inventory models, Aggregate Inventory system and LIMIT, Risk Analysis in Supply Chain - Measuring transit risks, supply risks, delivering risks, *Risk pooling strategies*.	**12**
IV	Notion of Graphs, Minimal Spanning Tree, Shortest Path Algorithms, Maximal Flow Problems, Multistage Transhipment and Transportation Problems, Set covering and Set Partitioning Problems, Traveling Salesman Algorithms, Advanced Vehicle Routing Problem Heuristics, Scheduling Algorithms Deficit function Approach and Linking Algorithms	**12**
V	Analytic Hierarchy Process(AHP), *Data Envelopment Analysis (DEA)*, Fuzzy Logic and Techniques, the analytical network process (ANP), TOPSIS-Application in SCM- LINDO software interface and features of LINDO-Connecting to data-Getting started with data-Managing metadata	**12**

***---* Self-study Portions**

Text Book(s):

1. "Supply Chain Analytics: A Systematic, Hands-On Approach" by Paul Broeckx and Liesbeth D'hooghe (2020)
2. "Supply Chain Management: Analytics, Models, Optimization, Simulation, and Visualization" by David M. Simchi-Levi, Xin Chen, and Julien Bramel (2019)
3. "Supply Chain Analytics: Models and Techniques for Supply Chain Decision Makers" by Paul W. M. Hofman and Michael A. van der Meer (2018)
4. Muthu Mathirajan, Chandrasekharan Rajendran, Sowmya narayanan Sadagopan, Arunachalam Ravindran, Parasuram Balasubramanian, Analytics in Operations/Supply Chain Management, I.K. International Publishing House Pvt. Ltd., 2016.

Reference Book(s):

1. Nada R. Sanders, Big data driven supply chain management: A framework for implementing analytics and turning information into intelligence, Pearson Education, 2014.
2. Gerhard J. Plenert, Supply Chain Optimization through Segmentation and Analytics, CRC Press, Taylor & Francis Group, 2014.
3. Michael Watson, Sara Lewis, Peter Cacioppi, Jay Jayaraman, Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain, Pearson Education, 2013.
4. Anna Nagurney, Min Yu, Amir H. Masoumi, Ladimer S. Nagurney, Networks against Time: Supply Chain Analytics for Perishable Products, Springer, 2013.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc20_mg27/preview
2. https://www.coursera.org/learn/supply-chain-analytics
3. https://www.lindo.com/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the supply chain analytics fundamentals	**K1 & K2**
CO2	Applying design warehouse models to enhance supply chain performance	**K3**
CO3	Analyse models and strategies in inventory management.	**K4**
CO4	Evaluate network models in transportation.	**K5**
CO5	Create make decision using multi-criteria in applications of SCM.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	1	1	2	2	3	2	2	2	1	1.8
CO2	2	3	2	1	2	2	3	2	1	2	2.0
CO3	2	2	2	3	1	3	1	2	3	1	2.0
CO4	2	2	3	2	2	3	1	3	1	2	2.1
CO5	2	1	2	2	3	2	3	3	2	3	2.3
Mean Overall Score											**10.2/5 =2.04**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S.DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEF1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	FAMILY BUSINESS MANAGEMENT

SYLLABUS

Unit	Contents	Hours
I	Introduction to Family Business-Fundamentals of a Family Business- Nature, Importance and Uniqueness of Family Business – Advantages and Disadvantages of Family Business- Types of a Family Business -The Family Dynamics Challenge – The Ownership Challenge – The Governance and Professionalism Challenge.	12
II	Diagnosing the Family Business - Creating Conditions for the Continued Spirit of Enterprise – *The 12S Model of Family Business *– Succession – Development and Selection of the Next Generation – Transferof Power.	12
III	The Future of Family Business Change, Adaptation and Innovation – *Three States of Evolution * – Family Business Governance – Boards of Directors – Family Councils – Family Offices – Family Meetings.	12
IV	Strategic Planning in Family Business – Life cycle stages influencing family business strategy Creating Value with Unique Business Models – Strategic Regeneration -Transgenerational Entrepreneurial Ventures – Estate Planning – The Owners Plan- Intrapreneurship	12
V	Management of Family Businesses- Financial and Wealth Management in the Family Business – Business Valuation - Key Nonfamily Management – Commitment to Managing the Family Business Professionally – Extending the Family Business Culture to Nonfamily Managers.	12

***---* Self-study Portions**

Text Book(s):

1. Rajiv G. Agarwal. Family Business Management, SAGE Publications India Pvt, Limited,2020
2. Leach Peter, Dixit Tatwamasi , Indian Family Business Mantras, 1/e; NewDelhi: Rupa Publications 2015

Reference Book(s):

1. Leach Peter, Dixit Tatwamasi, Indian Family Business Mantras, 1/e; NewDelhi: Rupa Publications, 2015
2. Leach Peter, Family Businesses: The Essentials, 1/e; London: Profile BooksLtd, 2007.
3. Poza J., Ernesto, Daugherty S., Mary, Family Business, 4/e; New Delhi:Cengage Learning, 2015.
4. Ernesto J.Poza, Mary S. Daughterty, Family Business, 4e, Cengage Learning, 2015.
5. Frank Hoy, Pramodita Sharma, Entrepreneurial Family Firms, Prentice Hall, 2010

Web Resource(s):

1. https://onlinecourses.swayam2.ac.in/imb23_mg62

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the need for governance and professionalism in family enterprises.	**K1 & K2**
CO2	Apply the evolution of family businesses.	**K3**
CO3	Analyse the structure of family business models.	**K4**
CO4	Evaluate the strategies for family business management.	**K5**
CO5	Create Assess family business valuation approaches.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	1	2	1	1.6
CO2	2	1	2	1	2	2	2	3	2	2	1.9
CO3	3	2	2	2	2	1	2	3	2	3	2.2
CO4	1	2	2	3	2	3	2	2	2	2	2.1
CO5	2	2	2	3	2	3	2	3	2	3	2.4
Mean Overall Score											**10.2/5=2.04**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEF2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	PROJECT MANAGEMENT

SYLLABUS

Unit	Contents	Hours
I	Project Management – Definition - Characteristics of project - Project Success - Types of Organisation Structure - Project Management Office - Stakeholders Management - Types of Projects and Project Life Cycle - Project Life Cycle Phases and Project Proposal - Steps in defining the projects *Roles and responsibilities of project manager*.	12
II	Project feasibility study - Market Feasibility - Technical Feasibility - Financial Feasibility Economic Feasibility – Managerial Feasibility-Critical Success factors - *Demand forecasting techniques*.	12
III	Project Evaluation under certainty: Net Present Value, Benefit Cost Ratio, Internal Rate of Return, Payback Period, ARR – Theoretical Framework for Project Evaluation under Risk and Uncertainty: Sensitivity Analysis, Break even analysis and Decision Tree Analysis- Project Auditing – Phases of project Audit- Project closure reports Guidelines for closeout reports.	12
IV	Developing a project plan: Developing the project network – constructing a project network – PERT – CPM – Crashing of project network – Gantt Chart- Resource leveling and resource allocation – how to avoid cost and time overruns – *Steps in Project Appraisal Process * – Project Control.	12
V	Modern development in Project Management: PMMM (project management maturity model) Model – Project Management methodologies – Continuous improvement – Capacity planning - Competency Models – Managing multiple Projects- e-markets and their role in Project management.	12

--- Self-study Portions

Text Book(s):

1. Erik Larson and Clifford Gray, Project Management: The Managerial Process 8th Edition, Tata McGraw Hill publishing 2020
2. Prasanna Chandra, Project Planning, Analysis, Selection, implementation and Review, Ninth Edition, McGraw Hill Education (India) Private Limited, 2019

Reference Book(s):

1. Harold Kerzner, Project Management A systems Approach to Planning Scheduling and Controlling, Twelfth Edition, Wiley, September 2017.
2. S. Choudhury, Project Management, McGraw Hill publishing, 2017
3. Eric Verzuh, The Fast Forward MBA in Project Management, Fifth Edition, Wiley & Sons, 2015
4. Robert D. Hisrich and Veland Ramadani, Effective Entrepreneurial Management: Strategy, Planning, Risk Management, and Organization Springer Texts in Business and Economics, 2017
5. Kalpesh Ashar, Project Management Essentials You Always Wanted to Know 4th edition, Vibrant Publishers, 2019

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc22_mg71/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the concepts of Project Life Cycle and its phases.	**K1 & K2**
CO2	Apply and Examine alternative solutions for project planning.	**K3**
CO3	Analysis techniques to identifying project risks.	**K4**
CO4	Estimate Construct the project network.	**K5**
CO5	Create and develop various project Models.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	1	3	2	2	2	2	2
CO2	2	1	1	2	2	2	1	3	2	2	1.8
CO3	3	2	2	2	2	1	2	3	2	3	2.2
CO4	2	2	2	3	2	3	2	2	2	2	2.2
CO5	2	3	1	3	2	3	2	3	2	2	2.3
										Mean Overall Score	**10.5/5=2.1**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEF3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**ENTREPRENEURIAL FINANCE**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Finance for Entrepreneurs, Developing the Business Idea/ Group formation, Organizing and Financing a new Venture, Preparing and Using Financial Statements, Evaluating Operational & Financial Performance Time value of money. Payback period - NPV of inflows - IRR concepts - Cost of acquiring capital – Planning of portfolio. Risk Analysis - Economic Risk - Industry Risk - Company Risk - Financial Risk, Capital Budgeting Techniques	**12**
II	Various sources of Finance available: Long term sources -Equity Shares, Preference Shares and debentures- Kinds Private Placements- IPO-SEBI- FDI- Institutional Finance - Banks - IDBI, IFCI, IIBI, ICICI, SIDBI, SFC's in India - Merchant Banks in India - NBFC's in India - their way of financing in India for small and medium business.	**12**
III	Short term sources: Short term sources - banks and financial Institutions that give short term finance - Bills Discounting - Factoring - Working Capital - Concepts - Importance –Cash Management - Inventory Management - Receivables Management- Crowdsourcing- .Venture Capital and Private Equity - Crowdfunding as a Source of Funding, Green Finance and Sustainable Investments - *Sources of Working Capital*.	**12**
IV	Venture capital - Meaning - origin - Importance - Benefits - Venture capital in India. Hire Purchase - Concept - Evaluation of Hire Purchase Proposals - Leasing - Overview –Tax aspects -Lease Accounting- Applications for Venture capital - *Evaluation of Leasing Proposals*	**12**
V	General considerations-Construction Financing- Long term financing - Withholding Tax Considerations - Estimating the Borrowing capacity of project - Loan repayment Parameters - Going Global: Expanding Internationally Exchange Rate Risk Management International Financing Options Cross-Border Taxation and Regulatory Considerations Case Studies of Successful International Expansion	**12**

***---* Self-study Portions**

Text Book(s):

1. Chandra, Prasanna. Financial management Tata McGraw-Hill Education, 10th edition, 2019.
2. Khan, M. Y. Indian financial system. Tata McGraw-Hill Education, 11e, 2019.

Reference Book(s):

1. Bhole, L. M. Financial institutions and markets: structure, growth and innovations, 6e. Tata McGraw-Hill Education, 2017.
2. Gordon, E., and K. Natarajan. Financial markets and services. Mumbai: Himalaya Publis House, 2020.
3. Gordon & Natarajan. Financial Markets - (BPB Publications). 2016
4. V. K. Bhalla. Investment Management - (S. Chand & Company Publishers ltd.,) 2008
5. John D Finnerty, Project Financing- Asset based Finacial Engineering- John Wiley & Sons Inc, York 2013

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc22_mg81/preview 2. https://onlinecourses.nptel.ac.in/noc22_hs110/announcements?force=true

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the fundamental financial principles essential for assessing the financial viability of entrepreneurial ventures.	**K1 & K2**
CO2	Apply financial ratio analysis to systematically evaluate and improve a business's financial health.	**K3**
CO3	Analyze a wide range of financing options, enabling informed decisions on funding sources for entrepreneurial projects.	**K4**
CO4	Evaluate risk within entrepreneurial contexts by proficiently identifying, assessing, and implementing risk mitigation strategies.	**K5**
CO5	Create and implement advanced financial modeling and analysis techniques to address complex challenges in project financing and entrepreneurial ventures.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	3	1	3	3	2	2	1	2.1
CO2	1	2	2	2	2	2	2	3	2	2	2.0
CO3	3	2	2	1	1	1	2	3	2	3	1.9
CO4	1	2	2	3	2	3	2	3	2	2	2.0
CO5	2	1	2	3	2	3	3	3	2	3	2.2
										Mean Overall Score	**10.2/5=2.04**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.JAINULLABDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEF4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	INFORMATION TECHNOLOGY FOR ENTREPRENEURS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Technology Competence Framework, Generic Technology Strategies, Human Technology for the Future. Management of Human Expectations and Technological Enhancements. Foundation Concepts - foundational concepts, information systems (IS), system components, IS resources, IS applications, *e-business*, current IS trends, IS types, managerial challenges, information technology, business competition, Internet basics	**12**
II	Information Technologies - data resources, enterprise networking, data resource management, database types, database management, data warehousing, data mining, practical applications, telecommunications trends, business value, Internet's significance. Some Trends of Technological Development.	**12**
III	Business Applications - e-Business and e-Commerce - business applications, IT integration, functional systems, *cross-functional enterprise systems*, e-Business models, CRM, ERP, SCM, essential processes, electronic payments, e-Commerce requirements. Digital Transformation of Logistics Industry, Logistics Start-ups.	**12**
IV	Development Processes - IT and IS development, Business/IT strategies, competitive advantage, business models, application planning, implementation, challenges, IS development methodologies, Systems Development Cycle, prototyping, end-user involvement, hardware, software, services evaluation	**12**
V	Innovative technologies, industry transformations- pharmaceuticals, automobiles, internet, banking, analytics, space, diagnostics, energy, crop protection, transitions, industry analysis, technology adoption, Technology- A Bridge between Equity and Growth. Global Innovation Index. Localised Globalisation.	**12**

***---* Self-study Portions**

Text Book(s):

1. Vaishali Sharma: Fundamentals Of Information Technology- Dhanpat Rai Publishing Co (P) Ltd9 Vol-1
   Edition/Reprint: 2023
2. Ramesh Behl: Information Technology for Management Tata McGraw-Hill Companies.
   3rd Edition 2020

Reference Book(s):

1. Lucas, Henry C. Information technology: Strategic decision making for managers. John Wiley & Sons, 2008.
2. Dhiraj Sharma : Foundations of IT (Excel) 2009
3. De, Rahul. "MIS: Managing information systems in business, government and society." Wiley India (2012)
4. Turban, Efraim, Ephraim McLean, and James Wetherbe. Information technology for management making connections for strategic advantage. John Wiley & Sons, Inc., 2001
5. Laudon, Kenneth C., and Jane P. Laudon. Management information system. Pearson Education India, 2015.

Web Resource(s):
1. https://backup.pondiuni.edu.in/ 2. https://nios.ac.in/media 3. https://drive.google.com/file/d/1PxhuswtGn0h1v1ChukaXGC-hMfQLCL3/view?showad=true

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand various types of computer networks and their applications.	**K1 & K2**
CO2	Apply information technologies effectively to enhance business value	**K3**
CO3	Analyse the role of e-Business and e-Commerce in modern enterprises	**K4**
CO4	Evaluate IT processes and business/IT strategies to gain a competitive advantage	**K5**
CO5	Create innovative technology solutions by examining industry transformations in different sectors	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	2	2	1	3	3	3	2	2	1	2
CO2	1	1	3	2	3	2	2	3	1	2	2
CO3	3	2	1	1	3	1	3	2	2	3	2.1
CO4	2	2	3	3	2	3	1	3	2	2	2.1
CO5	2	3	2	3	2	2	3	3	2	2	2.4
										Mean Overall Score	**10.6 / 5 = 2.12**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.JAINULLABDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEF5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	BUSINESS PLAN AND MODELING

SYLLABUS		
Unit	**Contents**	**Hours**
I	Business Plan - Need for business plan - Basic Parameters - Timing of decision undertaken project parameters - The common considerations - Factors of successful business - Capital Management- Financial Control - Anticipating Change and Adaptability	**12**
II	Business Plan Process - Sources of Information - Internet, Government Sources and Statistics - offline Research Resources - Library - Small Business Development Center-Trade and Industries Associations - *Sources of Market Research* - Evaluating Data- Benefits of Market Study - Coverage of Market Study - Information Sources	**12**
III	Business Plan Components - The Executive Summary - Company Description - Industry Analysis And Trends - Target Market - Competition - Strategic Position And Risk Assessment - Operations - Technology Plan - Management And Organization	**12**
IV	Government Incentives For Entrepreneurship, Incubation, Acceleration, Funding New Ventures – Bootstrapping, Crowd Sourcing, Angel Investors, VCs, Debt Financing , Due Diligence - Marketing Plan and Sales Strategy Understanding unit economics - Cost and Profitability	**12**
V	The importance and diversity of business model - how business model emerge - potential fatal flaws of business models - components of an effective business model - core strategy - strategic resources - *Partnership Network* - Refining the product/service - Establish the success and operational matrix.	**12**

***---* Self-study Portions**

Text Book(s):

1. Andrew Ghillyer, Business Ethics, 6th Edition, Tata McgGraw Hill Education Private Ltd., New Delhi, 2020
2. Effective Entrepreneurial Management: Strategy, Planning, Risk Management, and Organization - Robert D. Hisrich, Vel and Ramadani, Springer, 2017

Reference Book(s):

1. Dan Galai, Lior Hillel, Daphna Wiener, 'How to create a Successful Business Plan', 1st edition, World Scientific Publication Co. Pte. Ltd, Singapore, 2016.
2. Hal Shelton, 'The Secret to write a Successful Business Plan: A Pro share a step-by-step guide to creating a plan that gets results', 1st Edition, Summit Valley Press, 2014.
3. Diane Denslow, 'Writing A Business Plan'- A Practical Guide, 1st Edition, Sage Publications, Inc, University of North Florida, USA, 2017.
4. Denis Collins, Business Ethics-Best Practices For Designing And Managing Ethical Organizations.2nd Edition, , SAGE Publications, 2018.
5. Adam Bock, The Business Model Book: Design, Build and Adapt Business Ideas That Drive Business Growth (Brilliant Business), 2017

Web Resource(s):
1. Business Planning & Project Management - Course (swayam2.ac.in). 2. Innovation, Business Models and Entrepreneurship - Course (nptel.ac.in)

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the dynamics of business plan	**K1 & K2**
CO2	Apply strategies to formulate components of business plan	**K3**
CO3	Analyze the advanced strategies and specifications for the business plan process	**K4**
CO4	Evaluate the different strategies and aware of government incentives for the business	**K5**
CO5	Create the product/market fit and business models	**K6**

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	2	3	2	2	2	1	1.8
CO2	1	2	1	2	1	2	2	3	2	2	1.8
CO3	3	2	2	2	1	2	2	3	2	3	2.2
CO4	1	2	2	3	2	3	2	3	2	2	2.1
CO5	2	1	2	3	2	3	3	2	2	2	2.2
Mean Overall Score											**10.1/5=2.02**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. M. SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEG1	Discipline Specific Elective	4	4	25	75	100
Course Title	**USING R-PROGRAMMING IN DATA ANALYTICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Introduction to R & R Environment and Exploratory Data Analysis** #Overview of R Language, Installation of R and R Studio, Scripts, Data Types in R, Data Structure in R, Loading Packages, Operators and functions in R, Data Extraction and Wrangling, Exporting Data from R. Pre-processing of data, Exploratory Data Analysis.	**12**
II	**Data Visualization for insights using R** Perceptual mapping through Advanced R packages: ggplot2, Lattice, high charter, RColor Brewer, Plotly, etc. Charts, Graphs, and Maps.	**12**
III	**Inferential Statistics** Testing assumptions, Parametric and non-parametric tests, Correlation, Regression: Linear & Logistic, Dimensionality Reduction techniques: EFA & PCA, Multidimensional Scaling, ANOVA, Time Series Analysis: Stationarity, AR, MA, ARMA and ARIMA, Forecasting	**12**
IV	**Cluster Analysis and Classification** *Introduction to Cluster Analysis*, Clustering models and Analysis, Hierarchical Clustering, Non-Hierarchical Clustering, K means Clustering, C means Clustering, KNN Classification, Decision Tree and Random Forests	**12**
V	**Data Mining and Machine Learning using R** Text Mining, Text Mining Algorithms, Sentiment Analysis, Supervised and Unsupervised Machine Learning Algorithms, R-packages for Machine Learning: caret, e1071, xgboost, random Forest, data.table.#	**12**

*Self-study portion #Lab-sessions

Text Book(s):

1. William N. Venables, David M. Smith, and the R Core Team, An Introduction to R, Network Theory Ltd,3rd edition,2019
2. David Keyes, R for the Rest of US, No Starch Press, Kindle edition,2024
3. Dr. Rajeswari M ,SPSS & R Programming Lab Manual Kindle Edition,2024

Reference Book(s):

1. Kumar, M. (2022). Business Analytics using R. Excellence Brings Success ,2022
2. Wickham, H., & Grolemund, G. R for data science: import, tidy, transform, visualize, and model data. " O'Reilly Media, Inc.",2016
3. Andrie de Vries , Joris Meys , R Programming for Dummies, Wiley Publishers 2nd edition,2016

Web Resource(s):
1. https://www.r-project.org/ 2. https://onlinecourses.nptel.ac.in/noc19_ma33/preview 3. https://onlinecourses.nptel.ac.in/noc24_ma18/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand R Programming language and data wrangling in R	**K1 & K2**
CO2	apply the Business Data using R for key insights	**K3**
CO3	analyse statistical models and estimate future prospects for Business	**K4**
CO4	Evaluate the data mining techniques using R to solve real life problems	**K5**
CO5	Create machine learning techniques by using R to solve Business Analytics Problems	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	1	1	3	2	2	2	1	1.5
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	3	3	2	3	2	3	3	2	2	3	2.6
										Mean Overall Score	**10.2/5=2.04**
										Correlation	Medium
Mean Overall Score = Sum of Mean Score COs / Total Number of COs											

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEG2	Discipline Specific Elective	4	4	25	75	100
Course Title	**CLOUD COMPUTING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Basics of Cloud Computing, Cloud Models & Virtualization** Global nature of a Cloud, Evolution of Cloud Computing - System Models for Distributed and Cloud Computing, NIST Cloud Computing Reference Architecture- Cloud Deployment Models, Cloud Service Models, Cloud Service Providers -Basic Concept of Virtualization, Types of Virtualizations, Implementation Levels of Virtualization, VMM Design Requirements and Providers, Virtualization Support at the OS Level -Virtualization Structures/Tools & Mechanisms.	**12**
II	**Cloud Infrastructure, Service-Oriented Architecture & Inter-Cloud Resource Management** Cloud Computing and Service Models, Architectural Design of Compute & Storage Clouds, Layered Cloud Architecture Development, Virtualization Support and Disaster Recovery, Architectural Design Challenges -REST and Systems of Systems, Services and Web Services, Enterprise MultiTier Architecture, Grid Services and OGSA - Resource Provisioning & Platform Deployment, Virtual Machine Creation and Management, Global exchange of Cloud Resources.	**12**
III	**Cloud Programming Model, Programming Support & Security** Features of Cloud and Grid Platforms, Parallel and Distributed Programming Paradigms, MapReduce, Twister, and Iterative MapReduce, Hadoop Library from Apache, Mapping Applications to Parallel and Distributed Systems-Programming Support of Google App Engine, Programming on Amazon AWS and Microsoft Azure -*Security Overview, Cloud Security Challenges, Software-as-a-Service Security, Security Governance, Security Risk Assessment- Security monitoring, Security Architecture Design, Data Privacy, Governance, and Security, Virtual Machine Security, Application Security, Physical Security*	**12**
IV	**High Performance Computing, Enterprise HPC on the Clouds, HPC applications & other applications** History of HPC, HPC Architecture, Parallel Computing, High Performance Computing, Applied to Cloud Computing, Cloud Computing and Enterprise Architectures - Enterprise Cloud-based HPC, Adoption Issues, Performance & Optimization, Scheduling Studies, Implementations-HPC and Grid Computing, HPC and Big Data Computing, HPC and Windows, HPC and Hadoop, HPC and Grid Gain- Platform Symphony, HPC solutions on Oracle Cloud, Cassandra, Memcached, GPGPU	**12**
V	**Setting up Own Cloud** #Building an Open source based Private Cloud, Automated provisioning, Custom Images, Integration Tool- Nagio, Integration of Cloud#	**12**

*Self-study Portion #Lab-sessions

Text Book(s):
1. Cornelia Davis; Cloud Native Patterns: Designing Change-Tolerant Software, O'Reilly Media; 1st edition,2020 2. Jiongjiong Gu ,Cloud Computing Architecture: Technologies and Practice (Advances in Computer Science), Tsinghua University Press, De Gruyter publishers Kindle edition, 2024
Reference Book(s):
1. NIST Cloud Computing Reference Architecture, Recommendations of the National Institute of Standards and Technology, Fang Liu, Jin Tong, Jian Mao, Robert Bohn, John Messina, Lee Badger and Dawn Leaf, NIST Special Publication 500-292. 2. Distributed and Cloud Computing, From Parallel Processing to the Internet of Things, Kai Hwang, Geoffrey C Fox, Jack G Dongarra, Morgan Kaufmann Publishers, 1st Edition,2012
Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc21_cs14/preview 2. https://www.ibm.com/topics/cloud-computing

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand comprehensive knowledge and understanding of Cloud computing	**K1 & K2**
CO2	apply skills and the tools of Cloud Computing	**K3**
CO3	Analyse the problems and solutions to cloud application problems.	**K4**
CO4	Evaluate best practice in cloud application design and management	**K5**
CO5	Perform Big data analysis in cloud.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	2	3	2	2	2	2	2.1
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.5/5=2.1**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEG3	Discipline Specific Elective	4	4	25	75	100

Course Title	DATA WAREHOUSING AND DATA MINING

SYLLABUS

Unit	Contents	Hours
I	**Precursor to data mining** Kinds of data, kinds of patterns, technologies, Kinds of applications, Major issues in data mining	12
II	**Data exploration and pre-processing** Data objects and attribute types, basic statistical descriptions of data, data visualization, measuring data similarity & dissimilarity, Data preprocessing: Overview, data cleaning, data integration, data reduction, data transformation & data discretization	12
III	**Data Warehousing & Online Analytical Processing** Data Warehouse: Basic Concepts, Data warehouse modelling: Data cube & OLAP, *Data warehouse design & usage, data warehouse implementation, data generalization by attribute-oriented induction*	12
IV	**Clustering: Basic concepts & Methods, Data Mining Trends & Research Frontiers** #Cluster Analysis, Partitioning methods, hierarchical methods, density-based methods, grid-based methods, evaluation of clustering- Mining complex data types, other methodologies of data mining, data mining applications, data mining & society, data mining trends#	12
V	**Mining Unstructured Data: Text mining** What is unstructured data? Importance of text mining, characteristics of text mining, steps in text mining: Representation of text documents, preprocessing techniques, feature selection, constructing a vector space model, predicting and validating the text classifier	12

*Self-study Portion #Lab-sessions

Text Book(s):

1.Pang-ning tan, Michael Steinbach, Anuj karpatne, Vipin Kumar, Introduction to data mining, Pearson publishers,2nd edition,2021

2. Jiawei Han, Data mining concepts and techniques, Elsevier, 4th edition ,2022

Reference Book(s):

1.Larose, D.T. & Larose, C.D. Data Mining and Predictive Analytics, Wiley,2nd 2016

2.Dean, J. Big Data, Data Mining and Machine Learning: Value Creation for Business Leaders and Practitioners, Wiley,1st edition 2014

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc20_cs12/preview
2. https://www.classcentral.com/course/swayam-data-mining-9821
3. https://www.cs.waikato.ac.nz/ml/weka/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the need for effective Data mining within an organization..	**K1 & K2**
CO2	Apply data mining tools in an effective manner.	**K3**
CO3	Analyse complex problems using advanced data mining tools	**K4**
CO4	Interpret data for better decision-making	**K5**
CO5	Create models within academic and professional contexts for technological	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	2	2	3	3	3	3	3	3	3	2.7
										Mean Overall Score	**10.5/5=2.1**
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEG4	Discipline Specific Elective	4	4	25	75	100
Course Title	**ADVANCED DATABASE MANAGEMENT SYSTEM**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Introduction & Types of Databases** Significance of Databases, Database System Applications, Advantages of DBMS, Disadvantages of DBMS - Data Models, Relational Database, Distributed Databases, Centralized Databases, Difference between Centralized and Distributed Databases	12
II	**Normalization & Its Forms** Purpose of Normalization, Functional Dependency, Anomalies in a Database, The Normalization Process -The Boyce-Codd normal form (BCNF), Multi-Valued Dependency (MVD), Fourth Normal form (4NF), Fifth normal form (5NF), Database Design, Denormalization	12
III	**Transaction Processing & Database Recovery Management** Basics of Transaction Processing, Serializability and recoverability, Deadlock Handling, Multilevel Transaction, Real- Time Transaction Systems, Long-Duration Transactions -Need for Recovery, Recovery & Transactions Provisions for Recovery, Failure Classification, Recovery Techniques, Remote Backup Systems	12
IV	**Concurrency Control & Locking Systems** Need for Concurrency Control, Concurrency Control by Timestamps, Concurrency Control by Validation, Multiversion Schemes, Snapshot Isolation - Locking Protocols, Implementation of Locking, Granularity of Data Items, *Concurrency control in index structures using locks, Other Concurrency Control Issues*	12
V	**Advanced Databases** Active database, Applications of active database, Temporal database, Spatial database -Concept of multimedia databases, Automatic Analysis of Images, Object Recognition in Images, Semantic Tagging of Images, Analysis of Audio Data Sources, Introduction to Mobile Databases	12

*Self-study Portion

Text Book(s):

1.Carlos Coronel, Steven Morris, and Peter Rob. Database Systems: Design, Implementation, & Management" Cengage Learning; 13th edition,2018

2.Abraham Silberschatz , Henry F. Korth, et al ,Database System Concepts ,McGraw hill publishers,7th Edition,2021

Reference Book(s):

1. Fundamentals of Database Systems, R. Elmasri, S.B. Navathe, Pearson Education/Addison Wesley, 7th Edition, 2015.
2. Connolly & Carolyn Begg , Database Systems: A Practical Approach to Design, Implementation, and Management, Thomas, Pearson, 6th Edition,2014

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc22_cs91/preview
2. https://online-degree.swayam2.ac.in/mri22_01_d01_s1_cc4/preview

Course Outcomes

Upon successful completion of this course, the student will be able to:

CO No.	CO Statement	Cognitive Level (K-Level)
CO1	Understand the types of databases, Database System Applications and	**K1 & K2**
CO2	apply database recovery processes	**K3**
CO3	Interpret Object-Oriented DBMS	**K4**
CO4	Utilize Object-Relational Databases	**K5**
CO5	Acknowledge Advanced Databases in the true sense	**K6**

Relationship Matrix:

COs	POs					PSOs					Mean Score of COs
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1	2	2	2	2	2	3	2	2	2	2	2.1
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	3	1	3	3	2	3	3	3	2	3	2.6
									Mean Overall Score		**10.8/5=2.16**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
III	23MBA3DEG5	Discipline Specific Elective	4	4	25	75	100

Course Title	DATA VISUALIZATION FOR MANAGERS

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Tableau** Getting Started with Tableau, Dimensions vs. Measures, Discrete vs. Continuous, *Application of Discrete and Continuous Fields*, Aggregation in Tableau.	12
II	**Data Operations in Tableau** #Working with Metadata, Filters in Tableau, Applying Analytics to the worksheet, Dashboard in Tableau, Modifications to Data Connections, Edit Data Source, Unions, Joins Data blending.	12
III	**Power-BI** Working with data – Importing from flat files, excel files, other Sources, Data Sources in Power BI Desktop, Loading Data in Power BI Desktop, Views in Power BI Desktop, Query Editor in Power BI.	12
IV	**Data Operations in Power-BI** Transform, Clean, Shape, and Model Data Manage Data Relationship, editing a Relationship, Cross Filter Direction, Saving Work file Measures.	12
V	**Data Expression and Visualisation** Data Analysis Expressions – Introduction to Power Query –Power View – Power View visualizations – Power View filtering options – Introduction to Power Map – Preparing geospatial data – Publish from Power BI desktop – Publish Dashboard to Web.#	12

*Self-study portion #Lab-sessions

Text Book(s):

1. Joshi, P. M., & Mahalle, P. N. Data Storytelling and Visualization with Tableau: A Hands-on Approach. CRC Press,1st edition 2022
2. Gupta, S., Pinto, S., Savale, S., Gillet, J., & Cherven, K. The Tableau Workshop: A practical guide to the art of data visualization with Tableau. Packt Publishing Pvt. Ltd,1st edition,2022
3. O'Connor, E. Microsoft Power BI Dashboards Step by Step. Microsoft Press,1st edition,2018

Reference Book(s):

1. Grey, J, Power BI: Give Life to Your Data with the Complete and Fastest Crash Course on Data Visualization,1st edition 2020
2. Knight, D., Knight, B., Pearson, M., & Quintana, M. Microsoft Power BI Quick Start Guide: Build dashboards and visualizations to make your data come to life. Packt Publishing Ltd, 1st edition,2018
3. Knight, D., Ostrowsky, E., Pearson, M., & Schacht, B. Microsoft Power BI Quick Start, standard edition,2022

Web Resource(s):
1. https://www.mygreatlearning.com/academy/learn-for-free/courses/data-visualization-using-tableau 2. https://www.microsoft.com/en-us/power-platform/products/power-bi 3. https://www.tableau.com/learn/articles/dashboards/what-is 4. https://www.tableau.com/learn/articles 5. https://www.tableau.com/about/newsroom

Course Outcomes

Upon successful completion of this course, the student will be able to:

CO No.	CO Statement	Cognitive Level (K-Level)
CO1	Understand data visualization features of Tableau and Power BI	**K1 & K2**
CO2	Apply the tools of Power BI	**K3**
CO3	Analyse the organize data, and design charts and dashboards	**K4**
CO4	evaluate metadata and its usage	**K5**
CO5	create charts, work with filters, parameters and sets	**K6**

Relationship Matrix:

COs	POs					PSOs					Mean Score of COs
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.1/5=2.02**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4CC18	CORE XVIII	4	3	25	75	100
Course Title	**STRATEGIC MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept and Benefits of Strategy - Framework for Strategic Management - Strategy Formation Process – Globalization and Sustainability -*Challenges to strategic Management* - Vision, Mission and Purpose- Business, Objectives and Goals.	12
II	Analysis of External and Internal Environment- Process of Internal and External Audit - Sources of External and Internal Information - Porter's Five Forces Model - Capabilities and Core Competencies - *Competitive Advantage*.	12
III	Type of Strategies – Grand Strategies - Stability Strategies - Growth Strategies - Retrenchment Strategies - Porters classification of Generic Strategy - combination Strategy – * SWOT/SWOC/TOWS Analysis# - Value Chain Analysis* - ETOP - BCG - GE Matrix - M/8 Model - Mc Kinsey's 7s Framework.	12
IV	The Process of Implementation, *Competitive Tactics*, Timing Tactics, Market Location Tactics, Defensive tactics, Flexible Organizational Structure and Managing corporate culture	12
V	Measuring Performance, Types of Control, Activity Based Costing, Enterprise Risk Management, *primary measures of corporate performance*- Guidelines for proper control.	12
VI	Current Trends(For CIA only) Blue Ocean Strategy: Principles of Blue Ocean strategy, Concepts of Red Ocean Strategy, Difference between Blue Ocean and Red ocean strategy.	

***……* Self Study Portions**

Text Book(s):

1. Sandeep bishla, Strategic management, Redshine Publication, 2023.
2. Thomas L.Wheelen, J. David Hunger, Alan N. Hoffman, Charles E. Bamford, Management and Business Policy - Globalization, Innovation, and Sustainability, 15th Edition, Pearson Education Limited – 2018.

Reference Book(s):

1. Fred R David, Forest R David, Strategic Management: A Competitive Advantage Approach, Concepts and Cases, 16th Edition, Pearson Publication, 2016.
2. Thomas L. Wheelen, Strategic management and business policy: globalization, innovation, and sustainability, 15th Edition, Person Publication, 2017.
3. Martin Kunc, Strategic Analytics: Integrating Management Science and Strategy, 2nd Edition, Wiley Publication, 2018.
4. H. Igor Ansoff, Daniel Kipley, A.O. Lewis, Roxanne Helm-Stevens, Rick Ansoff, Implanting Strategic Management, 3rd Edition, Springer International Publishing, Palgrave Macmillan, 2019.
5. John E Gamble, Margaret Peteraf, Arthur A Thompson Jr., Essentials of Strategic Management: The Quest for Competitive Advantage, 6th Edition, McGraw-Hill Publication, 2018.

Web Resource(s):
1. https://onlinecourses.swayam2.ac.in/imb23_mg24/preview 2. https://pracownik.kul.pl/files/12439/public/3_David.pdf 3. https://www.geektonight.com/strategic-management-notes-pdf/ 4. https://ocw.mit.edu/courses/15-902-strategic-management-i-fall-2006/pages/lecture-notes/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand and remember the strategic decisions that organizations make and have an ability to engage in Strategic planning.	**K1 & K2**
CO2	Apply the basic concepts, principles and practices associated with strategy formulation and implementation.	**K3**
CO3	Analyse and apply knowledge gained in basic courses to the formulation and implementation of strategy from holistic and multi-functional perspectives.	**K4**
CO4	Evaluate critically real-life company situations and develop creative solutions, using a strategic management perspective.	**K5**
CO5	Create the ability to conduct strategic analysis at corporate level	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	1	2	3	2	1	2	1	1.9
CO2	3	1	3	2	2	3	3	3	3	1	2.4
CO3	3	1	3	1	1	3	2	3	2	1	2
CO4	3	2	1	3	2	3	2	1	3	1	2.1
CO5	3	1	1	3	1	3	2	3	2	2	2.1
										Mean Overall Score	**2.01**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A. SELVARANI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4CC19	CORE XIX	4	4	25	75	100

Course Title	ENTREPRENEURSHIP AND STARTUP

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept of entrepreneurship - Definition Nature and characteristics of entrepreneurship - Function and type of entrepreneurship - *Phases of EDP* - Development of women entrepreneur & rural entrepreneur - including self-employment of women council scheme.	**12**
II	Factors influencing entrepreneurship - Internal factors External factors - Institutional Finance to entrepreneurs - *Functions of DICs* - NSIC - SIDO - SISIs - KVIC - IFCI.	**12**
III	E-Cell Meaning and concept of E-cells, advantages to join E-cell, significance of E-cell, various activities conducted by E-cell Communication Importance of communication, barriers and gateways to communication, listening to people, the power of talk, personal selling, risk taking & resilience, negotiation	**12**
IV	Start-up opportunities: The New Industrial Revolution – The Big Idea- Generate Ideas with Brainstorming- Business Start-up - Ideation- Venture Choices - The Rise of The startup Economy - The Six Forces of Change- The Start-up Equation – The Entrepreneurial Ecosystem – *Entrepreneurship in India. Government Initiatives*.	**12**
V	Start-up Capital Requirements: Identifying Startup capital Resource requirements - estimating Startup cash requirements - Develop financial assumptions Constructing a Process Map - Positioning the venture in the value chain - Launch strategy to reduce risks- Startup financing metrics Planning for Harvest and Exit: Dealing with Failure: Bankruptcy, Exit Strategies Selling the business - Cashing out but staying in-being acquired- Going Public (IPO) – Liquidation.	**12**

***---*: Self-study Portions**

Text Book(s):

1. Robert Hisrich, Michael Peters, and Dean Shepherd, Entrepreneurship, 11th Edition, McGraw Hill Education, 2019.
2. Poornima M. Charantimath, Entrepreneurship Development and Small Business Enterprises, 3rd Edition, Pearson Education, 2018.

Reference Book(s):

1. Kathleen R Allen, Launching New Ventures, An Entrepreneurial Approach, CengageLearning, 2016.
2. Vasant Desai, Small-Scale Enterprises and Entrepreneurship Ecosystem, 6th Edition, Himalaya Publishing House, 2016.
3. AnjanRaichaudhuri, Managing New Ventures Concepts and Cases, Prentice Hall International, 2010.
4. Steven Fisher, Ja-nae' Duane, The Startup Equation -A Visual Guidebook for Building Your Startup, Indian Edition, Mc Graw Hill Education India Pvt. Ltd, 2016.
5. Donald F Kuratko, Jeffrey S. Hornsby, New Venture Management: The Entrepreneur's Road

Map, 2e, Routledge, 2017.
Web Resource(s): 1. https://onlinecourses.swayam2.ac.in/cec19_mg39/preview 2. https://onlinecourses.swayam2.ac.in/imb20_mg22/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the Concept and function of entrepreneurship	**K1 & K2**
CO2	Apply the Factors influencing entrepreneurship	**K3**
CO3	Analysis Categories analyse various Start-up opportunities and revolution	**K4**
CO4	Estimate the role of Start-up Capital Requirements and Legal Environment	**K5**
CO5	Create Various factors Dealing with Failure	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	2.3
CO2	1	2	2	2	1	2	2	3	2	2	2.3
CO3	3	2	2	1	2	1	2	3	2	3	2.1
CO4	1	2	2	3	2	3	2	3	2	2	1.8
CO5	2	1	2	3	2	3	3	2	2	3	2.3
										Mean Overall Score	**10.8/5 = 2.16**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEA1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**RETAIL MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Retail Management – Characteristics – Traditional and Non-Traditional Retailing – Applications of Information Technology in Retail – Retail Business Models – E-retailing - Omni Channel Retailing.	**12**
II	Indian Retail Industry - Global Trends in Retailing – Drivers to the Growth of Retail - Retail Environment - Foreign Direct Investment in Retailing - Rural Retailing - Automation in Retail.	**12**
III	Retail Formats – Choice of Retail Store Location – Store Layouts and Designs – Positioning of Retail Shops – Retail Store Image – Merchandising – Creativity in Retailing - In-store Out-door Retail Communications - Visual Merchandising.	**12**
IV	Strategic Planning in Retailing - Service Retailing Vs. Product Retailing – Retail Branding - Pricing for Retail – Promotion - Retail Supply Chain and Logistics - Retail Marketing Strategies - Inventory Management - Shrinkage Management - Pilferage Management.	**12**
V	Shopping Process – Customer Experiences in Retail - Influences of shoppers' attitude, Perception, Personality and Life Style in Retail Shopping Behaviour – Handling Complaints – Delivering Value to Retail Shoppers - *Market Research in Retail*- Retail Service Quality Management.	**12**

***---* Self-study Portions**

Text Book(s):

1. Swapna Pradhan, Retailing Management, Tata McGraw- Hill Publishing Company Limited, New Delhi, 6th Edition, 2020
2. Dr. A. Mustafa, Retail Management, Himalaya Publishing House, 2nd Edition, 2016

Reference Book(s):

1. Malcolm Sullivan, Dennis Ad Cock, Retail marketing, Thomson, 2002.
2. Barry Berman, Joel R. Evans, Patrali Chatterjee, Retail Management – A Strategic Approach, Pearson, 2017
3. James R. Ogden, Denise J. Ogden, Integrated Retail Management, Biztantra, 2004.
4. S.C. Bhatia, Retail Management, Atlantic Publishers & Distributors Pvt. Ltd., New Delhi, 2008.
5. Gibson, Retail Management, 5th edition, Pearson, 2017

Web Resource(s):

1. Introduction to Retail Management, Indian Institute of Management, Bangalore (IIMB)

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basic concepts of retail management	**K1 & K2**
CO2	Apply the various retail formats choice of location strategies	**K3**
CO3	Analyze and explore the retailing in India and global context	**K4**
CO4	Evaluate the retail marketing mix and the inventory	**K5**
CO5	Create and deliver the value to the retail shopping by analyzing the attitude and behaviour.	**K6**

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	1	2	2	1	2	2	3	2	2	1.7
CO3	3	2	2	1	1	1	2	3	2	3	1.9
CO4	1	2	2	3	2	3	2	2	2	2	2.1
CO5	2	1	2	3	2	3	3	2	2	3	2.3
Mean Overall Score											**9.9/5=1.98**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEA2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**RURAL AND AGRICULTURAL MARKETING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Rural Marketing- Definition and Scope of Rural Marketing, Components of Rural Markets- Classification of Rural Markets- Rural vs. Urban Markets. Population- Occupation –Pattern-Income Generation-Location of Rural Population-Expenditure Pattern-Literacy Level-Land Distribution-Land Use Pattern- Irrigation-Rural Development Programs-Infrastructure Facilities-* Rural Credit Institutions-Rural Retail Outlets.*	**12**
II	Segmenting Rural Markets, Rural Marketing Mix Strategies: Positioning in Rural Markets- Rural Product Strategies and Brand Management – Rural Pricing Strategies – Rural Distribution Strategies – Innovative Distribution- Rural Promotional Strategies-Challenges in Rural Communication- Rural Media- Mass Media, Non- Conventional Media-Personalized Media- Rural Media Typology, Rural Media Innovation- *Influence of Consumer Behaviour on Communication.*	**12**
III	Marketing Strategies for Rural Markets- Market Research in Rural India Consumer Finance-Public-Private Partnership-E-Rural Marketing- Role of Government and NGOs in Rural Marketing- Qualitative Research Techniques for Rural Research.	**12**
IV	Agricultural Marketing: Nature and Scope-Objectives of Agriculture Marketing, Classification of Agricultural Products and Markets-Challenges in Agricultural Marketing-Channels of Distribution for Agricultural Products-Managing Rural Distribution Network - E-NAM * Role of Banking and NBFCs in Rural Markets*.	**12**
V	Role of co-operative agencies in marketing of agricultural and non-agricultural product - Promotion towards rural audience- The Future of Rural Marketing, Concept and Working of Contract Farming in India- Information and Communication Technology in Agriculture.	**12**

***---* Self-study Portions**

Text Book(s):

1. CSG Krishnamacharyulu and Lalitha Ramakrishnan, Rural Marketing - Text and Cases, Pearson Education,2016
2. T.P. Gopalswamy, Rural Marketing - Environmental Problems and Strategies, Wheeler Pub,2014

Reference Book(s):

1. Robert Chambers, Rural Development: Putting the last first, Pearson education,2014
2. Ganguly A.S. The Growing Rural Market Market in India. Grameen Foundation: New Delhi,2000.
3. Balaram Dogra & Karminder Ghuman, RURAL MARKETING: CONCEPT & CASES, Tata McGraw-Hill Publishing Company, New Delhi, 2008
4. Ruddar Dutt Sundaram, INDIAN ECONOMY, Tata McGraw Hill. Publishers, New Delhi

Web Reference(s):
1. https://onlinecourses.swayam2.ac.in/nou19_ag08/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand and remember the fundamentals of Rural Marketing.	**K1&k2**
CO2	Apply the importance of Rural Marketing Mix and Rural Distribution Strategies.	**K3**
CO3	Analyze the Market Research in Rural and Research Techniques	**K4**
CO4	Evaluate the Challenges in Agricultural Marketing.	**K5**
CO5	Create a role of co-operative agencies in agencies in marketing of agricultural and non-agricultural product	**K6**

Relationship Matrix:

Cos	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	2	3	2	3	2	1	1.9
CO2	2	1	2	2	1	2	2	3	2	3	2
CO3	3	2	2	2	2	2	2	3	2	3	2.3
CO4	1	2	2	3	2	3	2	2	2	2	2.1
CO5	2	1	1	3	3	3	3	3	2	1	2.2
									Mean Overall Score		**10.5/5=2.1**
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S.THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEA3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**CUSTOMER RELATIONSHIP MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Customer Relationship Management Fundamentals- Theoretical perspectives of relationship, CRM Definitions, Emergence of CRM practice: CRM cycle, Significance of CRM, Types of CRM-CRM Implementation. E- CRM in Business.	**12**
II	CRM in Marketing - One-to-one Relationship Marketing - Cross Selling & Up Selling - Customer Retention, Behaviour Prediction - Customer Profitability & Value Modeling, - Channel Optimization - Event-based marketing. - CRM and Customer Service - The Call Centre, Call Scripting - Customer Satisfaction Measurement.	**12**
III	Analytical CRM - Managing and sharing customer data - Customer information databases - Ethics and legalities of data use - Data Warehousing and Data Mining concepts - Data analysis - Market Basket Analysis (MBA), Click stream Analysis, Personalization and Collaborative Filtering.	**12**
IV	Economics of CRM -Lifetime value of customer, Activity based costing for customer profitability analysis -Applications of CRM in different industries - CRM implementation process, precautions related to CRM implementation- - Choosing CRM tools.	**12**
V	The role of CRM in business strategy - Understanding service quality: Technical quality: product knowledge - Functional quality - Determinants of service quality - Managing customer communications. - Planning and managing CRM projects -Target setting - Measuring performance of CRM- Future of CRM *Setting standards Customer satisfaction Portfolio profitability*.	**12**

***---* Self-study Portions**

Text Book(s):

1. Francis Buttle, Customer Relationship Management – Concepts and Technologies 2nd Edition, Butterworth Heinemann, Elsevier 2019
2. S. Shajahan, Relationship Management – Text and Cases, TataMcGrawHill Publishing co. second reprint2016.

Reference Book(s):

1. Dick, L., The Customer Relationship Marketing Planning Guide, Hym Press.2016
2. Peppers don &Martha , Rogers ,managing customer relationships, second edition Doubleday Pub.2016.
3. Francis Buttle ,Relationship marketing theory and practice ,sage publication 2012
   Jim Sterne &Anthony priore ., E-mail Marketing, Wiley.2010.

Web Resource(s):

1. http://www.crm.com/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basic concepts of CRM	**K1&K2**
CO2	Apply the basic concept of Customer based CRM into business strategy	**K3**
CO3	Analyze the various marketing aspects of CRM by using customer research and evaluation	**K4**
CO4	Evaluate the Customer relationships and its importance.	**K5**
CO5	Create the various strategies and develop CRM strategy	**K6**

Relationship Matrix:

Cos	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	1	2	1	1.6
CO2	2	1	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	2	3	1	2	3	2	3	2.3
CO4	2	2	2	3	2	3	2	1	2	2	2.1
CO5	2	1	2	3	2	3	1	3	2	3	2.2
										Mean Overall Score	**10.1/5=2.02**
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S.THILAGAVATHY

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEA4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	SERVICE MARKETING

SYLLABUS

Unit	Contents	Hours
I	Service Marketing – Nature, Need, Classification and Importance of Services, Barriers and Issues in Services, Difference between goods and services. Distinctive Characteristics of Services - Four I's of services - Intangibility, Inconsistency, Inseparability and Inventory. - The Growth in Services – Global & Indian Scenarios	12
II	Gap Model of Service Quality, Expectations and Perceptions, Measuring Service Quality -SERVQUAL Building Customer Relationships and Creating a Zero– Defection Culture, Service failure, Recovery, *Recovery Strategies*. Service Triangle, Service Encounter -Role of HR & Internal Marketing	12
III	Positioning, Service Development and Designing Services, Service Blue Printing, Quality Function Deployment, Adding Value, Physical evidence and Service Cape.	12
IV	Price as an Indicator of service quality, Pricing Strategies for Services – Approaches to Pricing services, Creating and Managing Service Delivery, Balancing Demand and Capacity, *Integrated Services Marketing Communication*, Services Advertising strategies	12
V	Marketing of Services with special reference to Financial Services - Health Services- Hospitality Services including Travel, Hotels and Tourism - Professional Services - *Public Utility Services Communication Services *- Educational Services. Challenges in Distribution of Services	12

***---* Self Study Portions**

Text Book(s):

1. Zeithaml, V.A., Bitner, M.J., Gremler, D.D, "Services Marketing: Integrating Customer Focus Across theFirm", McGraw-Hill Education, 7thEdition, 2018.
2. Christopher Lovelock, JochenWirtz, Jayanta Chatterjee, "Services Marketing – People,Technology,Strategy", Pearson Publications,7th Edition, 2016.

Reference Book(s):

1. Helen Woodrfuff, "Services Marketing", Himalayan Publishing House,2017.
2. Roland Rust, "Services Marketing", Macmillan Limited, 2016.
3. Jeff Toister, "The Service Culture Handbook: A Step-by-Step Guide to Getting Your Employees Obsessedwith Customer Service", AMACOM, 2016.
4. Jochen Wirtz, Essentials of Services Marketing, Pearson, 2022
5. Edwin N. Torres, Customer Service Marketing
   Managing the Customer Experience, Tingting ZhangTaylor & Francis,2020

Web Resource(s):

1. https://www.mooc-list.com/course/services-marketing-next-level-openlearning
2. https://swayam.gov.in/nd1_noc20_mg12/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basic concept of service industry.	**K1 &K2**
CO2	Apply the Gap in services sector using tools and techniques.	**K3**
CO3	Analyze the emerging issues in services sector.	**K4**
CO5	Evaluate the role of marketing strategic business in service sector.	**K5**
CO5	Creating knowledge on operations and financial aspects in Market and retail planning.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	2	2	1	2	2	1	1	1.4
CO2	2	2	2	2	2	2	2	1	2	2	1.9
CO3	2	3	1	3	2	2	2	2	2	2	2.1
CO4	3	3	1	3	3	2	1	2	2	2	2.2
CO5	3	3	2	3	2	3	3	2	2	2	2.5
										Mean Overall Score	10.1/5=2.02
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.S.THOUFIQ NISHATH

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEA5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	MARKETING ANALYTICS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Transformational Role of analytics – Data – Need for Marketing Analytics - Marketing Process - Strategic Challenge - Marketing Strategy with Data-Using Text Analytics - Utilizing Data to Improve Marketing Strategy- Improving the Marketing Process with Analytics.	**12**
II	Introduction to Metrics for Measuring Brand Assets -Snapple and Brand Value-Developing Brand Architecture - Brand Architecture - Measuring Brand Value: Key Points - Revenue Premium as a Measure of Brand Equity - Calculating Brand Value - *Brand Personality*.	**12**
III	Customer Lifetime Value (CLV) - Calculating CLV- Applications of CLV -Using CLV to Make Decisions - CLV: A Forward - Looking Measure - Determining Cause and Effect through Experiments.	**12**
IV	Designing Basic Experiments - Designing Before - After Experiments - Designing Full Factorial Web Experiments - Designing an Experiment-Analyzing an Experiment-Analyzing an Experiment - Calculating Projected Lift - *Pitfalls of Marketing Experiments* - Maximizing Effectiveness: Nanoblocks.	**12**
V	Using Regression Analysis – Applications of Regression - Interpreting Regression Outputs - Multivariable Regressions - Omitted Variable Bias-Using Price Elasticity to Evaluate Marketing - Marketing Mix Models.	**12**

***---* Self-study Portions**

Text Book(s):

1. Marketing Data Science: Modeling Techniques in Predictive Analytics with R and Python (FT Press Analytics) 1st Edition,ThomasW.Miller, 2015
2. Marketing and Sales Analytics: Proven Techniques and Powerful Applications from Industry Leaders (FT Press Analytics) 1st Edition, Kindle Edition,by Cesar Brea, 2018

Reference Book(s):

1. Marketing Analytics: Optimize Your Business with Data Science in R, Python, and SQL Kindle Edition,by Dave Jacobs, 2016
2. Marketing Analytics Kindle Edition,by Stephan Sorger, 2013
3. Seema Gupta, Avadhoot Jathar, Marketing Analytics, Kindle Edition
4. Moutusy Maity, Pavankumar Gurazada, Marketing Analytics, 2021
5. Chuck Hemann;Ken Burbary, Digital Marketing Analytics, 2nd edition, 2019

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc20_mg30/preview

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the fundamentals of marketing analytics	**K1 & K2**
CO2	Compute and apply the customer lifetime value in the business	**K3**
CO3	Analyze the different marketing metrics	**K4**
CO4	Evaluate marketing experiments	**K5**
CO5	Create models using analysis for the business	**K6**

Cos	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	2	2	2	2	1	1.6
CO2	1	2	2	2	1	2	2	2	2	2	1.8
CO3	3	2	2	1	1	1	2	2	2	3	1.9
CO4	1	2	2	3	2	3	2	2	2	2	2.1
CO5	2	1	2	3	2	3	3	2	2	2	2.2
Mean Overall Score											**9.6/5=1.92**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEB1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	INTERNATIONAL TRADE AND FINANCE

SYLLABUS

Unit	Contents	Hours
I	International Trade –Benefits – Basis of International Trade – Foreign Trade and Economic Growth – Balance of Trade – Balance of Payment – Current Trends in India – Barriers to International Trade – Indian EXIM Policy.	12
II	Export and Import Finance: Special need for Finance in International Trade – INCO Terms (FOB, CIF, etc.,) – Payment Terms – Letters of Credit – Pre Shipment and Post Shipment Finance – Forfeiting – Deferred Payment Terms – EXIM Bank – ECGC and its schemes – Import Licensing – Financing methods for import of Capital goods	12
III	Foreign Exchange Markets – Spot Prices and Forward Prices – The effects of Exchange rates in Foreign Trade – Tools for hedging against Exchange rate variations – Forward, Futures and Currency options – FEMA – Law of one price – PPP theory – Interest Rate Parity	12
IV	Exchange Rate Determination: Determination Under Gold Standard and Paper Standard, Factors Affecting Exchange Rates, Purchasing Power Parity Theory, Demand and Supply Theory, Equilibrium Rate Of Exchange, Fluctuating Vs Fixed Exchange Rates, Exchange Control, Objectives Of Exchange Control	12
V	*Export Promotion Schemes – Government Organizations Promoting Exports – Export Incentives: Duty Exemption – IT Concession – Marketing Assistance* – EPCG, DEPB – Advance License – Other efforts I Export Promotion – EPZ – EQU – SEZ and Export House.	12

***---* Self-study Portions**

Text Book(s):

1. P.G. Apte , Sanjeevan Kapshe. "*International Financial Management"* McGraw Hill Education (India) Private Limited, 8th Edition,2020
2. Leeman, J. "Export Planning: A 10-Step Approach", Books on Demand,2nd edition, 2018

Reference Book(s):

1. Feenstra, R. C. *Advanced international trade: theory and evidence*. Princeton university press,2nd edition,2015
2. Alan C. Shapiro, Multinational Financial Managent, Wiley publishers,9th edition,2012
3. Seyoum, B. "Export-Import Theory, Practices, and Procedures",Routledge publications,3rd edition 2013
4. Nelson, C. Import-Export: How to Take Your Business Across Borders, McGraw hill publication ,4th edition, 2009
5. Ferguson, N. The Ascent of Money. A Financial History of the World, Penguin Books, 2nd edition, 2019.

Web Resource(s):
1. https://www.trade.gov/report/trade-finance-guide 2. https://www.gtreview.com/ 3. https://www.tutorialspoint.com/international_finance/international_trade_finance.htm

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the rationale behind the multinational enterprises' role in the global economy	**K1 & K2**
CO2	Apply the fundamentals of export and import procedures	**K3**
CO3	Analyse the export and import strategies	**K4**
CO4	Evaluate challenges and opportunities in export and import operations	**K5**
CO5	Plan and execute the export and import operations	**K6**

Relationship Matrix:

Cos	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	2	3	2	2	2	1	1.8
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.2/5=2.04**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEB2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	FINANCIAL MODELLING USING SPREADSHEET

SYLLABUS		
Unit	**Contents**	**Hours**
I	Meaning- Objectives- Introduction to Design- Features of Model Number format – line and border, color and pattern- Data Validation- Controls- Conditional formatting – Functions – Graphics –Scenario – Goal Seek.	**12**
II	Analyzing Performance: *Financial Statement Analysis*, Profit and Loss, Balance Sheet, - Preparing common size statements directly from trial balance, forecasting financial statements using excel, analyzing financial statements by using spreadsheet model, excel in project appraisal, determining project viability- *Depreciation*: Straight Line, Sum of Digits, Declining Balance, Inventory Valuation- Amortization and Comparison.	**12**
III	Ratios - Variance Analysis: Cash Flow Budgets, Monthly Cash Model, Flash Report and Graphics - Breakeven Analysis - Operating Leverage, Financial Leverage, Combined Leverage -Cost of Capital: Capital Asset Pricing Model, Dividend Growth Model, Cost of Debt, Cost of Preference Shares, Weighted Average Cost of Capital, Marginal Weighted Average Cost of Capital - Capital Budgeting – Time Value of Money – Capital Structure- Working Capital Management.	**12**
IV	Company Valuation: Assets, Adjusted Assets, Gordon's Growth Model, Market-based – Bond: Pricing, Yield Measures, Duration and Modified Duration, Convexity and Sensitivity – Risk Analysis: Risk adjusted rate, Maximum, Minimum, Range, Variation, Standard Deviation, Coefficient of Variation- Visual Basic for Applications (VAB).	**12**
V	Linear Regression – Forecasting Models: Historic Forecasts, Trend lines, Data smoothing, Cyclicality and Seasonality – Linear Programming – Profit Maximization – Probability concepts – Decision Tree Model - Assignment Problem, Transportation Problem, Network Analysis.	**12**

***---* Self-study Portions**

Text Book(s):

1. Oluwa, Shmuel, Hands-On Financial Modeling with Microsoft Excel, Kindle Edition, (2019)
2. Danielle Stein Fairhurst, Financial Modeling in Excel for Dummies, John Wiley &Sons, Canada,(2017)

Reference Book(s):

1. Lokesh Lalwani Excel 2019: In Easy Steps, 1 ed, BPB Publications, (2019)
2. Sanjay Saxena, MS Office 2007 in a Nutshell, Vikas Publishing House, 2011.
3. Parameswaran, R. Computer Applications in Business, Sixth Edition, Sultan Chand & Company Ltd, 2012.
4. Alexis Leon, Mathews Leon, Computer Applications in Business, Vijay Nicole Imprints Private Limited, 2013
5. RuzbethJ.Bodhanwala, Learning Financial Management Using Financial Modelling, Taxmann Allied Services Pvt. Ltd (2009).

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc20_mg52 2. https://www.geektonight.com/financial-modeling-notes-pdf/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the concept of Design Model for analyzing performance, variance and break even analysis.	**K1 & K2**
CO2	Apply the various financial models for calculating cost of capital, time value of money and for planning capital budgeting and capital structure.	**K3**
CO3	Analyse the concepts of developing model for valuing share and bond, analyzing portfolio and risk.	**K4**
CO4	Evaluate the concepts developing the model for the applications of investment Management.	**K5**
CO5	Create the model for the applications of linear regression, trend line, data smoothing and decision tree model.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	1	1	3	2	2	2	1	1.5
CO2	2	2	2	1	2	2	1	3	2	2	1.3
CO3	3	2	2	2	1	1	2	3	2	3	2
CO4	1	2	2	3	2	3	2	1	2	2	1.9
CO5	2	3	1	3	2	3	2	3	2	2	1.8
Mean Overall Score											**10.1/5=2.02**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEB3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**ENTERPRISE RISK MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Risk Overview- Risk and Uncertainty-Types of Risk-Burden of Risk-Sources of Risk-Methods of handling Risk-Degree of Risk-Management of Risk -*Nature of risk-legal–financial and social benefits of managing risk*-Corporate Risk-Objectives-Attitudes-Personal Vs Corporate Risk Management- Role of Risk Manager-Risk opportunity - Risk Drivers.	**12**
II	Enterprise Risk Management- Concept – Scope – Challenges- Risk Identification and Evaluation of Internal and External Exposures –risk response and strategy-Enterprise –wide Approach-Barriers in Risk analysis.	**12**
III	Loss Prevention, Loss Minimization, Diversification, Optimal Loss Control, Contingency Planning, Statutory Provision on Risk control- Human factor in Risk Control, Training- Surveyor's role in Loss Prevention-Economics of Risk Financing- Techniques- External factors affecting Risk Financing-Mismanagement of Funds.	**12**
IV	Risk Insurability and Liability-Transfer of activity and risk transfer- Financial risk - Risk management and Insurance - Insurance as a Risk Transfer Tool-Alternative Risk Transfer (ART)-*Characteristics –Tools - CAT Bonds*.	**12**
V	Concept - Identification-Drivers - Approaches-*Managing operational risk* - Insurance-Principles- Polices-Contractual Provisions that limit Insurance Coverage-Hedging using derivatives - *Application of VAR*- RBI guidelines for credit & market risk management, VAR based margining -Risk Adjusted Performance Measurement - Earnings Based – SVA - Integrated Risk Management - Controlling Firm Wide Risk -Model Risk.	**12**

***---* Self-study Portions**

Text Book(s):

1. Enterprise Risk Management (2nd Edition) by David L Olson and Desheng Dash Wu, World Scientific (2020)..
2. Fundamentals of Enterprise Risk Management: How Top Companies Assess Risk, Manage Exposure, and Seize Opportunity, John Hampton , Kindle Edition, 2018

Reference Book(s):

1. Michel Crouhy, Dan Galai , Robert Mark -The Essentials of Risk Management, 2nd Edition – MCGraw Hill Publication (2019).
2. James Lam, Enterprise Risk Management: From Incentives to Controls 2nd Edition Kindle EditionPublication, (2013)
3. Paul Hopkin, Fundamentals of Risk Management,5th edition, Kogan Page Limited, United Kingdom, (2018)
4. GARP – FRM Handbook, 5th Edition, Wiley Finance Publication(2009)
5. Philippe Jorion – Value at Risk, 3rd Edition.MCGraw Hill Publication (2001)

Web Resource(s):
1. https://www.udemy.com/course/the-risk-management 2. https://onlinecourses.swayam2.ac.in/imb21_mg19/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the concept of Risk, Types, management of risk for the business.	**K1 & K2**
CO2	Apply Classification and barriers of risk involved in the modern business.	**K3**
CO3	Analyse the concepts of Enterprise Risk Management, scope and challenges for various enterprise.	**K4**
CO4	Evaluate the concepts of Risk Transfer, Financial risk faced in the context of Business Management.	**K5**
CO5	Create the Operational Risk Management, VAR with reference to takeover tactics.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	2	1	3	2	2	2	2	1.9
CO2	2	1	2	1	2	2	1	3	2	2	1.8
CO3	3	2	2	2	2	1	2	3	2	3	2.1
CO4	1	2	2	3	2	3	2	1	2	2	2.0
CO5	2	2	2	3	2	3	1	3	2	2	2.2
Mean Overall Score											**10.1/5= 2.02**
Correlation											Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.A.SHAKILA BANU

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEB4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	BANKING AND FINANCIAL SERVICES	
SYLLABUS		
UNIT	**Details**	**No. of Hours**
I	Banking – Meaning and Evolution- Types of Banks- Types of Customers - Types of Accounts - Deposit Products – Services Rendered by Banks - Bankers' Duties and Responsibilities - Customer Relationships- Role & Functions of Banks – Regulatory authorities –RBI- Role - NBFCs - *Micro Finance Institutions, Small finance banks and payment banks* - Self Help Groups	**12**
II	Know Your Customer, Anti Money Laundering -Guidelines - Negotiable instruments – Principles of Lending -Credit Management & Credit Monitoring - Priority Sector Lending in Banks- Lending to Agriculture, Micro, Small & Medium Enterprises - Recovery & Modes of Recovery - Non-Performing Assets – Causes- Remedial measures - *Risk Management in Banks*.	**12**
III	Current Trends - Core Banking Solutions vis-a-vis Traditional Banking -Banking Technology – Alternate Delivery Channels – ATMs, Credit/Debit Cards/Mobile Banking / Internet Banking - Cheque Truncation System of cheque clearance, E-Lounges, UPI, BHIM (Bharath Interface for money), Products and Impact - Electronic Funds Transfers – Real Time Gross Settlements (RTGS) & National Electronic Funds Transfer (NEFT) - *****Global Trends in Banking Technology*.	**12**
IV	Introduction to Financial Services - Structure of Financial Services - Merchant Banking - Functions - Mutual Funds – Types -Advantages - Credit rating- Process of credit rating of financial instruments- Rating agencies – Rating symbols - Depositary services - Role— *Advantages of depository system*.	**12**
V	Meaning of Venture Capital - Hire Purchase - Leasing - Factoring -Insurance - Classification - Functions - Re-insurance - Issue of Duplicate Policy -Revival Policy - Surrender Value - Nominations and Assignment - IRDAI – *Functions*.	**12**

***---* Self Study Portions**

Text Book(s):

1. SundharamKPM and Varshney P. N., "Banking Theory, Law and Practice", Sultan Chand & Sons, 20th Edition, 2020.
2. Gordon and Natarajan "Banking Theory, Law and Practice", Himalaya Publishing House Pvt Ltd, 9th Edition, 2022

Reference Book(s):

1. M. Y. Khan, Financial Services McGraw Hill Education Private Ltd., 10th Edition, 2019
2. Gupta P. K. , Insurance and Risk Management, Himalaya Publishing House Pvt Ltd, 6th Edition, 2021
3. Indian Institute of Banking and Finance, "Principles & Practices of Banking", Macmillan Education India Pvt. Ltd, 5th Edition, 2021
4. Sandeep Goel, Financial Markets, Institutions and Services, PHI Learning Private Limited, Delhi, 2018.
5. Avadhani.V.A., Marketing of Financial Services, Himalayas Publishers, 3rd Revised edition, 2015.

Web Resource(s):
1. https://onlinecourses.swayam2.ac.in/imb20_mg17/preview

Course Outcome		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cogn. Level (K-Level)**
CO1	Remember and Understand the basics of banking services	**K1 & K2**
CO2	Apply the various loan products and NPA	**K3**
CO3	Analyze the Comprehensive knowledge about modern banking services	**K4**
CO4	Evaluate the functions of Financial Services	**K5**
CO5	Create advance knowledge about Insurance and other services	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO 5**	
CO1	2	1	3	2	3	3	1	2	3	3	2.3
CO2	2	3	1	2	3	2	2	2	2	3	2.2
CO3	2	3	3	2	3	3	3	2	2	3	2.6
CO4	3	2	1	3	3	2	2	3	2	2	2.3
CO5	3	2	3	3	3	3	3	3	2	3	2.8
										Mean Overall score	**2.4**
correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEB5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	STRATEGIC COST MANAGEMENT

SYLLABUS

UNIT	Details	No. of Hours
I	Strategic Cost Management – meaning and importance -objectives of strategic cost management - difference between cost reduction and cost control –*Strategic positioning and SCM.*	**12**
II	Cost Behavior – Basics - Resources - Methods for separating mixed costs into Fixed and Variable components- Reliability of Cost Formula - Cost Estimation using Multiple Regression- *The Learning Curve and Non-linear cost behavior.*	**12**
III	Activity Based Costing- Functional based product costing- ABC costing system- *Product and service costing* - role of activity based costing and activity based management in decision making	**12**
IV	Single and multiple overhead rates - Allocating one department's costs to another department- Learning Curve Theory: Concept, phases and application Lean Management: Lean cost management – *Utility and application.*	**12**
V	Value-Based Organization: Value-based management - Value Chain costing – meaning and application – throughput costing and theory of constraints – *Balanced Scorecard and its application in cost management*	**12**

***…* self-study portions**

Text Book(s):

1. Ravi M Kishore (2018), "Strategic Cost Management", 5th Edition, TaxmannPublications Pvt. Ltd, New Delhi.
2. Sexena V. K., (2020), "Strategic Cost Management and PerformanceEvaluation", 1st Edition, Sultan Chand & Sons, New Delhi.

Reference Book(s):

1. John K Shank and Vijay Govindarajan (2008), Strategic Cost Management, Simon & Schuster; Latest edition, UK
2. Jawahar Lal, (2015), "Strategic Cost Management", 1st Edition, Himalaya Publishing House Pvt Ltd, Mumbai.
3. Bandgar P. K., (2017), "Strategic Cost Management", 1st Edition, HimalayaPublishing House Pvt Ltd, Mumbai.
4. Arora M. N., (2021), "A Text Book of Cost and Management Accounting", 11th Edition, Vikas Publishing House Pvt. Ltd., New Delhi

Web Resource(s):

1. https://www.careers360.com/university/indian-institute-of-management-ahmedabad/strategic-cost-management-certification-course
2. https://www.accountingtools.com/articles/strategic-cost-management.html

Course Outcome		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the basic cost concepts and strategies	**K1,K2**
CO2	Apply the Cost behavior and the learning curve	**K3**
CO3	Analyze the Application of Activity-based costing	**K4**
CO4	Evaluate the learning curve aspects	**K5**
CO5	Create knowledge about Value-based organization	**K6**

Relationship Matrix:

Course Outcomes (COs)	Programme Outcomes (POs)					Programme Specific Outcomes (PSOs)					Mean Score of COs
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**	
CO1	2	1	3	2	3	3	1	2	3	3	2.3
CO2	2	3	1	2	3	2	2	2	2	3	2.2
CO3	2	3	3	2	3	3	3	2	2	3	2.6
CO4	3	2	1	3	3	2	2	3	2	2	2.3
CO5	3	2	3	3	3	3	3	3	2	3	2.8
										Mean Overall score	**2.4**
										correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.PL.SENTHIL

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEC1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**PERFORMANCE MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Performance Management – Definition, Features, Need, Benefits –Historical context of Performance Management – Activities of Performance Management – Goals of Performance Management – People involved with Performance Management – Approaches to Performance Management – *Improving effectiveness of Performance Management*.	**12**
II	Planning Performance –Plan, Monitor, Improve, Review – *Developing Role Profiles*– Updating Role Profile **-Data-driven PMS Discussions -** Prerequisites, Elements and Model for Effective Performance Management – Models of Performance Management – 360^0 Feedback, Key Performance Indicators(KPI), Behaviorally Anchored Rating Scale (BARS), Cascading Goals Model, Goal Setting Theory.	**12**
III	Monitoring Performance – Determining data to collect - Collecting data – Reports, Surveys, Direct Observation – Analysis and responding to Performance gaps – *Dealing with underperformance*– Managing underperformers, Initial steps, Meeting with an underperformer, Support and follow-up - **Role of AI in PMS**	**12**
IV	Reviewing Performance – Rating Performance – Performance Standards – Using Rating Scales– Appraising Performance – importance – Preparing for the appraisal meeting – Stages of Performance Appraisal meeting - Conducting the appraisal.	**12**
V	Rewarding Performance – Concept, importance, objectives – Efficient Reward Practices –Benefits of an efficient reward system– Linking Pay rewards to Performance.Managing Team Performance - Purpose and Challenge of Team Performance Management – Rewarding Team Performance.	**12**
VI	**Current Trends(For CIA only)** Upskilling and Reskilling Employees - People Analytics - Gamification and recognition.	

…… Self Study Portions

Text Book(s):

1. Arup Varma, Pawan Budhwar, Performance Management Systems: An Experiential Approach, SAGE Publications Ltd, 2019.
2. Linda Ashdown, "Performance Management – A Practical Introduction", Kogan Page Limited, United States, 2018.

Reference Book(s):

1. Acca,Performance Management **,** Emile Woolf International,2023.
2. Sorin Dumitrascu, "Performance Management: A Practical Guide Paperback" Independently Published 2017.
3. Christopher Mills, "Performance Management: A Practical Guide", AuthorHouse, UK 2017.

4. T V Rao, “Performance Management: Toward Organizational Excellence”, Sage Publications Pvt. Ltd, 2016.
5. Herman Aguinis, “Performance Management” Pearson India, 2013.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc23_hs12/preview
2. https://www.workhuman.com/blog/performance-management/
3. https://www.geektonight.com/performance-management-system-pdf/
4. https://matterapp.com/blog/performance-management

Course Outcomes

After taking this course the students will be able to

CO No.	CO Statement	Cognitive Level (K-Level)
CO1	Remember and understand strategic performance aims, objectives, priorities and targets.	**K1, K2**
CO2	Apply effective performance management policies and practices to improve organizational and employee performance.	**K3**
CO3	Analyze and sustain arguments for using appropriate performance management techniques, rewards and sanctions to improve performance.	**K4**
CO4	Evaluate the appraisal skills required when managing achievement and underachievement.	**K5**
CO5	Create and evaluate the effectiveness of performance management.	**K6**

Relationship Matrix:

COs	Programme Outcomes (POs)					Programme Specific Outcomes (PSOs)					Mean Score of COs
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1	2	1	3	2	1	3	1	1	1	1	1.6
CO2	2	3	2	3	3	3	3	2	3	1	2.5
CO3	2	1	3	1	1	3	1	2	2	1	1.7
CO4	2	3	2	3	3	2	1	1	3	1	2.1
CO5	2	1	3	1	1	3	3	1	3	3	2.1
Mean Overall Score											**2.00**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A. SELVARANI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEC2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**MANAGERIAL BEHAVIOR AND EFFECTIVENESS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Managerial jobs - Dimensions of managerial jobs - Models - Time dimensions in managerial jobs -Effective and ineffective job behavior - Functional and cadre difference in managerial job behavior – Managing the Boss - Managing Political Issues.	**12**
II	Designing The Managerial Job - Identifying managerial talent - Selection and recruitment for managerial jobs - pay and rewards - Performance appraisal measures - Competency Mapping - *Career Planning - Career development Stages * - Intellectual capital (IC) – Components and measurement.	**12**
III	Managerial Effectiveness - The person, process, product approaches - Bridging the Gap - Measuring Managerial Effectiveness - Current Industrial and Government practices in the Management of managerial effectiveness - the effective manager as an optimizer – *Quality Circle*.	**12**
IV	Environmental Issues - Organizational processes - Organizational climate-Leader-Group influences -Job challenge - Competition - Managerial styles –*Employee Empowerment*.	**12**
V	Organisational Effectiveness - Organizational Life Cycle – Organization Mirroring – Organizational Learning – Six Sigma – Organizational Effectiveness – Perspective – Approaches – Factor Influencing Organizational Effectiveness – Organizational Mirroring – Fostering Creativity.	**12**

***……* Self Study Portions**

Text Book(s):

1. Henning Bang, Thomas Nesset Midelfart, Effective Management Teams and Organizational Behavior,Routledge Publishing Ltd, 2022.
2. Peter F.Drucker, Management Essentials -Drucker's Library, Harvard Business Press, 2020.

Reference Book(s):

1. Mark Horstman, Sarah Sentes, The Effective Manager 2nd edition, wiley publishing, 2023.
2. Gary Dessler,Biju varkkey, Human Resource Management,15th edition,pearson publishers, 2017.
3. Milkovich , Newman ,'compenstion',9th edition, McGraw-Hill international, 2017.
4. Richard L Daft, Organizational Theory and Design,12th edition, Cengage learning, 2015.
5. Afsaneh Nahavandi,The Art and Science of Leadership,7th edition,Pearson,2014.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc23_hs141/preview
2. https://www.academia.edu/37018852/A_Course_Material_on_MANAGERIAL_BEHAVIOR_AND_EFFECTIVENESS
3. https://issuu.com/brainkart.com/docs/managerial_behavior_and_effectivene

Course Outcomes		
After taking this course the students will be able to		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the key dimensions and models of managerial jobs and their relevance in organizational settings.	**K1&K2**
CO2	Apply effective selection and recruitment strategies tailored to managerial positions	**K3**
CO3	Analyze various managerial skills required for effective performance and career advancement	**K4**
CO4	Evaluate the impact of environmental factors, such as organizational climate and competition, on managerial effectiveness.	**K5**
CO5	Create strategies for fostering creativity and organizational learning to enhance overall organizational effectiveness.	**K6**

RelationshipMatrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	1	2	3	2	2	2	2	2	2	2.0
CO2	1	3	2	2	2	2	2	2	3	2	2.1
CO3	1	2	2	3	2	2	3	3	2	1	2.1
CO4	2	3	2	1	2	2	2	2	3	2	2.1
CO5	1	3	2	2	3	2	2	2	2	1	2.0
									Mean Overall Score		**2.06**
									Correlation		

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A. SELVARANI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEC3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**BEHAVIOR AND IMPRESSION MANAGEMENT IN ORGANIZATION**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Behavior and Impression Management: Definition, Purpose, Uses, Theory and Techniques – Tactics of impression management - The role of impression management in workplace	**12**
II	Relationship Management: Understanding Relationships- Importance of relationships - Role and relationships - Maintaining healthy relationships: -- Upward Relations – Downward Relations – Lateral Relations -	**12**
III	Power & Politics in Oorganization - Effective use of organisational politics – Ethics – Initiatives for Acquiring Power: Power Dynamics in Negotiations, Development and Transfer of Power across Organizational Levels - *The Impact of Political Skill on Impression Management Effectiveness.*	**12**
IV	Self-presentation: Meaning – objective -Techniques – Self Promotion - Bridging Individual Differences - Understanding individual differences - Bridging differences in Interpersonal Relationship	**12**
V	Self-Development and Interpersonal Skills: Understanding Self: Formation of self-concept - Dimension of Self - Components of self - Self Competency - Managing Emotions and Building Interpersonal Competence: Need and importance of Emotions - Healthy and Unhealthy expression of emotions - Developing emotional and interpersonal competence - *Self-assessment, analysis and action plan*	**12**

***---*Self-study portions**

Text Book(s):

1. Andrew J. DuBrin , Impression Management in the Workplace: Research, Theory and Practice, Routledge, 1st edition, 2010
2. Paul Rosenfeld, Robert A. Giacalone, Catherine A. Riordan, Impression Management: Building and Enhancing Reputations at Work, Thomson Learning, 2002

Reference Book(s):

1. Elliot Aronson (Author), Timothy D. Wilson (Author), Robin M. Akert, Social Psychology Pearson; 7th edition, 2009
2. Barry R. Schlenker, Impression Management: The Self-Concept, Social Identity, and Interpersonal Relations
3. Robert A. Giacalone, Paul Rosenfeld, Impression Management in the Organization 1989
4. Mark R. Leary, Self-presentation: Impression Management And Interpersonal Behavior, 1996

Web Resource(s):

1. https://www.amity.edu/raipur/sdg/pdf/sdg%2017/17.6/17.6.2.pdf
2. https://www.linkedin.com/pulse/impression-management-workplace-12-techniques-success-fola-vincent
3. https://www.griet.ac.in/cls/IMpression%20management%20book-3.pdf

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the concepts of impression management in Workplace	**K1&K2**
CO2	Apply the concepts of Behavior Management to build Healthy Relationship Management	**K3**
CO3	Analyze the level of political skill for effective Impression Management	**K4**
CO4	Evaluate the individual differences to bridge interpersonal relationship.	**K5**
CO5	Creating a positive work environment through improved awareness of personality styles.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
Mean Overall Score											**10.1/5=2.02**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.F.WAHIDHA BEGUM

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEC4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**HR ANALYTICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Need for HR Measurement, Significance and concept of HR Analytics, HR Analytics and business linkages, Prerequisites of HR Analytics; Models and frameworks of HR Analytics; Measuring intellectual capital, need and rationale for HR Accounting & Audit, Approaches and methods of HR Accounting & Audit.	**12**
II	Social Media for Recruitment and Employer Branding, Diversity Index, Offer Reject and Renege (Logistic Regression), Attrition (Random Forest Algorithm), *Channel Efficiency, Recruitment Metrics*	**12**
III	Descriptive Analysis to Predictive Analysis – Statistical Significance - Data Integrity - Statistical tests for categorical data - Statistical tests for continuous/interval-level data - Factor analysis and #reliability analysis#	**12**
IV	HR Metrics, Types of HR Metrics, Staffing Metrics, Training and Development Metrics, Application-oriented Exercises	**12**
V	HR Audit Process, Recruitment and Selection Process Audit, Statutory Compliance Audit, Benchmarking, Design Thinking Principles for Dashboards, KPI Dashboard, KPI Scorecard, HR Balanced Scorecard	**12**

***---* Self Study Portions**

Text Book(s):

1. Edwards, M., & Edwards, K, "Predictive HR Analytics: Mastering the HR Metric", 2nd Edition, Kogan Page, 2019.
2. Martin R Edwards and Kirsten Edwards, Predictive HR Analytics Mastering the HR metric, London; Philadelphia: Kogan Page, 2016.

Reference Book(s):

1. Steve Van Wieren, Quantifiably Better: Delivering Human Resource (HR) Analytics from Start to Finish, 1st Edition, Techniques Publications LLC, 2017.
2. Bernard Marr, Data-Driven HR: How to Use Analytics and Metrics to Drive Performance, 1st Edition, Kogan Publication, 2018.
3. Martin R. Edwards, Kirsten Edwards, Predictive HR Analytics: Mastering the HR Metric, 1st Edition, Kogan Publication, 2016.
4. C. Sesil James, Applying Advanced Analytics to HR Management Decisions: Methods for Selection, Developing Incentives and Improving Collaboration, Pearson Education, 2017.
5. Jatin Pandey, Manish Gupta Pratyush Banerjee, Practical Applications of HR Analytics, Sage Texts, 2019.
6. Dipak Kumar Bhattacharyya, HR Analytics: Understanding Theories and Applications, Sage Texts, 2017.
7. Ramesh Soundararajan, Kuldeep Singh, Winning on HR Analytics: Leveraging Data for Competitive Advantage, Sage Texts, 2016.
8. Jac Fitz-enz, The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, AMACOM, 2010.

Web Resource(s):
https://www.simplilearn.com/hr-analytics-certification-online-course?tag=HR%20analytics

Course Outcomes		
After taking this course the students will be able to		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the role and importance of HR analytics, and the ability to track, store, retrieve, analyse and interpret HR data to support decision making.	**K1&K2**
CO2	Apply and derive insights from Recruitment and Diversity metrics	**K3**
CO3	Analyze appropriate software to record, maintain, retrieve and analyse human resources information (e.g., staffing, skills, performance ratings and compensation information).	**K4**
CO4	Evaluate quantitative and qualitative analysis to understand trends and indicators in human resource data; understand and apply various statistical analysis methods.	**K5**
CO5	Create HR results to connect with business results.	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	2	2	1	2	2	1	1.8
CO2	2	3	1	2	2	3	2	2	1	1	1.9
CO3	1	2	3	2	3	2	2	2	2	2	2.1
CO4	2	3	2	3	2	3	2	2	2	2	2.3
CO5	2	2	3	2	2	2	2	2	3	1	2.1
										Mean Overall Score	**10.2/5=2.04**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G. SIVANESAN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEC5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**INTERNATIONAL HUMAN RESOURCE MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Globalization - IHRM: Definitions – Difference between Domestic and International HRM – Models of IHRM - Matching model, Harvard Model, Contextual Model, 5P Model European Model. - Managing Culture Diversity – Cross Cultural differences in the workplace – Cultural Sensitivity –Cross cultural communication process and Negotiation - Barriers in effective global HRM	**12**
II	Sourcing Human Resources for Global Markets – Approaches to staffing – Transferring staff for international Business Activities – The roles of an Expatriate and Non Expatriates - Roles of Inpatriates – Recruitment and Selection of International managers – Selection strategies for overseas assignments; *Hiring HCN‟s and TCN‟s*	**12**
III	International Training and Development – Component and effectiveness of Pre-Departure training programs – Developing staff through international assignments – Training and Development in Global environment – Development of global leaders – *Expatriate Development*.	**12**
IV	Global Performance Management: Introduction – Key components of PMS – Factors affecting PMS – Steps in Global PMS – Setting Individual performance goals – Performance appraisal – Providing feedback - Issues in Managing Performance in the Global context - International Compensation Management: Objectives, Theories - Components of Compensation – Compensation Packages.	**12**
V	International Industrial Relations and Corporate Social Responsibility: International industrial Relations: Objectives – Key Issues in International IR – Trade Unions and International Industrial Relations – Regional Integration - Ethics and Social Responsibility: Role of Ethics in Business – International Labour Standard –* Social Responsibility and IHR Manager*	**12**

***---* Self Study Portions**

Text Book(s):

1. K. Aswathappa, Sadhna Dash, International Human Resource Management Text and Cases, McGraw Hill Education (India) Private Limited, Third Edition, 2020
2. Marion Festing (author), Peter Dowling (author) International Human Resource Management, Cengage Learning, Seventh Edition, 2017

Reference Book(s):

1. P Subba Rao, International Human Resource Management, Himalaya Publishing House, Revised Edition, 2020
2. V. S. P. Rao, Human Resource Management, 3rd Edition 2023
3. Christopher Brewster, Guy Vernon, Paul Sparrow, Elizabeth Houldsworth – International Human Resource Management, Kogan Page Publishers, 4th edition, 2016
4. Anne- WilHarZing, Ashly Pinnington, International human Resource Management, 3rd edition, Sage Publication
5. P L Rao, International Human resource Management- Text and Cases, Excel Books

Web Resource(s):
1. https://ddceutkal.ac.in/Syllabus/IHRM_BOOK.pdf 2. https://mlritm.ac.in/assets/img/INTERNATIONAL%20HUMAN%20RESOURCE%20MANAGEMENT.pdf 3. https://books.google.co.in/books?id=jzcDgAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the key term, theories and practices thin the field of IHRM	**K1&K2**
CO2	Apply concepts and knowledge about the range of Human Resource functions to the deployment of expatriate failures on international assignments	**K3**
CO3	Diagnose and Analyse complex behaviour in a different cultural setting.	**K4**
CO4	Be able to identify and to evaluate social, cultural, ethical and environmental responsibilities and issues in global contexts.	**K5**
CO5	Develop and ability to undertake qualitative and quantitative research and apply this knowledge in the context of an independently constructed work	**K6**

Relationship Matrix:

Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO 1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**	
CO1	2	2	2	2	2	3	2	2	1	3	2.1
CO2	2	2	2	2	2	2	2	3	2	2	2.0
CO3	1	2	2	2	1	2	2	3	2	3	2.0
CO4	2	3	1	2	2	2	2	2	3	2	2.1
CO5	2	1	3	2	2	2	3	2	2	3	2.2
										Mean Overall Score	**10.4/5=2.08**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. F. WAHIDHA BEGUM

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DED1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**ENTERPRISE RESOURCE PLANNING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept of System Island and Integration – An overview of Enterprise Resource Planning (ERP) - ERP Need Analysis - ERP Evolution - ERP Characteristics - ERP Benefits and Limitations – Expectations of ERP- *Reasons for ERP Failure* -Case Discussion	**12**
II	Concept of Business process -Basics and Definitions of BPR- Identification of reengineering need- Components of reengineering –Stages and Tasks of BPR – Benefits of BPR- BPR vs. TQM- BPR vs. Continuous Improvement – BPR vs. Restructuring – *Role of IT in BPR*-Case Discussion	**12**
III	Business Modules of ERP – ERP vendors - Implementation life cycle- Hidden costs – Team Formation – Roles of Vendors, Consultants and Users; -Case Discussion	**12**
IV	Post Implementation Review - Maintenance of ERP- Organizational and Industrial impact -Success and Failure Factors-Case Discussion	**12**
V	Extended ERP Systems and ERP add-ons - Future Trends in ERP System - Web enabled, Wireless Technologies, Cloud computing, *Augmented reality*-Case Discussion	**12**

--- **Self-study Portions**

Text Book(s):

1. Zubair H. Shaikh, ERP: The Future of Business Automation, Atlantic; Edition, 2022

2. Alexis Leon, Enterprise Resource Planning, Fourth Edition, McGraw Hill Education, New Delhi, 2019.

Reference Book(s):

1. Vinod Waike, ERP implementation Issues and Challenges, Notion Press,2021.
2. Dimpi Srivastava, ERP Systems, Dreamtech Press , 2020.
3. Rajesh Ray, Enterprise Resource Planning, McGraw Hill Education, New Delhi 2017
4. Stephen Harwood, ERP: The Implementation Cycle, Routledge , USA, 2016.
5. Garg, Enterprise Resource Planning: Concepts and Practice, Prentice Hall India Learning Private Limited; 2nd edition , 2003.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc22_mg100

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the technical aspects of ERP systems.	**K1 & K2**
CO2	Apply the Principles of BPR in ERP system implementations.	**K3**
CO3	Analyse typical functionality in an ERP system.	**K4**
CO4	Evaluate the impact of ERP implementation.	**K5**
CO5	Create new possibilities for the applications of Extended ERP.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	1	1	3	1	3	2	1	2.0
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
									Mean Overall Score		10.9/5=2.2
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DED2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**E-BUSINESS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	E-Business- Forces fuelling E-business - Industry framework - Advantages and Disadvantages - Managerial perspectives, Rules and Regulations of E-business – *Applications of E- business concept* - Components of E-business – Case Discussion.	**12**
II	Model Based on Transaction Type - Model Based on Transaction Party - B2B - B2C- B2G- C2C- C2B- C2G - Legal regulations of e-business- Ecommerce Business Revenue Models- Case Discussion	**12**
III	E Business capacity planning -E- Procurement – E-Marketing - E-Supply Chain Management- Case Discussion.	**12**
IV	E- Payment System - EDI - Automatic Data Capture using RFID - GPS and GIS in supply chain- Dynamic Pricing - *Introduction to Online auction*- Case Discussion	**12**
V	Security Risk of E-business– Types and Sources of Threats - Fire walls and Network Security - Types of Fire walls - Firewall security policies; Digital Identity and Electronic Signature - Cryptography: Secret key encryption - Public key encryption - *Implementation and Management Issues* - Remedial measures for e-business issues- Case Discussion	**12**

***---* Self-study Portions**

Text Book(s):

1. David Whitley, E-Commerce-Strategy, Technologies & Applications, 26th ed., Tata Mac Hill,2020
2. Carol Guercio Traver Kenneth C. Laudon, E-Commerce 2021: Business Technology And Society,17th Edition, Pearson Education; 2022.

Reference Book(s):

1. Mathew Reynolds, Beginning E-Commerce with VB, ASP, SQL Server 7.0 & MTS, 1st ed., Wrox Publishers.2015
2. J. Christopher Westl and Theodore H. K Clark, Global Electronic Commerce- Theory and Case Studies, 1st University Press,2016
3. Laudon and Laudon , Management Information Systems: Managing the Digital Firm,Pearson, 2019
4. Kamlesh K. Bajaj, E-Commerce- The cutting edge of business,10th ed., TMH,2015
5. Menasce and Almeida, Scaling for E-Business, PHI, 2000

Web Resource(s):
• https://onlinecourses.nptel.ac.in/noc19_mg54 • springerlink.com

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand the basic concepts of E-Business	**K1 & K2**
CO2	Apply the knowledge in identifying the appropriate e-business models	**K3**
CO3	Analyse the Importance and Impact of Technology in core functions of business.	**K4**
CO4	Evaluate the Contribution of technology in Payment Systems.	**K5**
CO5	Create Measures and Mechanism for Ensuring Security System in E-business.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	1	1	3	1	3	2	1	2.0
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
Mean Overall Score											**10.9/5=2.2**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DED3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**KNOWLEDGE MANAGEMENT SYSTEM**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Knowledge: Concept and Types of Knowledge – Knowledge Management (KM): Concept of KM, Need for KM, Driving Forces of KM, Benefits of KM – KM System Development Cycle – Alignment of KM Strategies with Business Strategies – *Knowledge Economy* - Knowledge workers – Case Discussion.	**12**
II	KM Cycle Models: Meyer and Zack KM Cycle, Bukowitz and Williams Model, Wiig KM Cycle – Nonaka's Model of Knowledge Creation Process –Knowledge Capture Techniques- Knowledge Codification: Need for Codification, Problems with Codification, Knowledge Codification Tools and Procedures- Case Discussion.	**12**
III	Knowledge Transfer (KT): Factors, Pre-requisites, Methods, Inhibitors of KT, *Role of Internet in KT* - Knowledge Audit: Need, Measuring the Knowledge growth, Conducting Knowledge Audit - Knowledge Management team: Composition of KM team, Selection Criteria- Case Discussion	**12**
IV	*KM Tools and Techniques* - Evaluation of KMS effectiveness: Tools and Metrics – Ethical, Legal and Managerial Issues- Case Discussion.	**12**
V	KM Experiences from Indian Companies – KM Practices of select Industries – Linking KM with Innovations and Learning Innovation – Future of KM- Case Discussion	**12**

***---* Self-study Portions**

Text Book(s):

1. Santhosh Shekar, Design Knowledge Management System, Penman Books ,2021.
2. Kimiz Dalkir, Knowledge Management in Theory and Practice, fourth edition, The MIT Press, 2023

Reference Book(s):

1. Anthony J. Rhem, Knowledge Management in Practice, First Edition, CRC Press, 2017.
2. Fernandez I. B. and Sabherwal, R., Knowledge Management: System and Resources. PHI Delhi, 2010.
3. Amrit Tiwana, Knowledge Management Tool kit: Orchestrating IT, strategy and knowledge platforms, Second Edition, Prentice Hall, Boston, 2015.
4. Elias M. Awad and Hassan M. Ghaziri, Knowledge Management, Second Edition, Pearson Education, New Delhi, 2013.
5. Hislop, Knowledge Management In Organizations, Oxford University Press ,2013.

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc19_mg33/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand the nature and topology of knowledge and knowledge management within Business context.	**K1 & K2**
CO2	Apply tools and technologies for capturing, organizing, distributing, and sharing knowledge.	**K3**
CO3	Analyse knowledge management strategies for Competitive Advantage.	**K4**
CO4	Evaluate the factors that encourage and discourage Knowledge Transfer and Knowledge sharing.	**K5**
CO5	Create mechanism to solve the Ethical, Legal and Managerial Issues with regard to KMS Design and Implementation.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	1	1	3	1	3	2	1	2.0
CO2	2	2	2	3	2	2	1	2	2	2	2.0
CO3	1	2	1	3	2	3	3	3	2	2	2.2
CO4	2	2	3	3	2	2	3	2	2	3	2.4
CO5	1	2	2	2	3	3	3	2	2	3	2.3
Mean Overall Score											10.9/5=2.2
Correlation											Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. U. SYED AKTHARSHA

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DED4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**PLANT LAYOUT AND MATERIALS MANAGEMENT**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Plant layout-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production	**12**
II	Material requirement-bill of material requirement planning -manufacturing resource planning-capacity management-scheduling orders-*production activity control-codification*.	**12**
III	Policy Decisions–objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBQ models for uniform and variable demand With and without shortages -Quantity discount models. Probabilistic inventory models	**12**
IV	Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting	**12**
V	*Warehousing functions* – types - Stores management-stores systems and procedures- incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management	**12**

***---* Self-study Portions**

Text Book(s):

1. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson,2022
2. P. Gopalakrishnan, Purchasing and Materials Management, Tata McGraw Hill, 2022

Reference Book(s):

1. 1.A.K.Chitale and R.C.Gupta, Materials Management, Text and Cases, PHI Learning, 2nd Edition, 2020
2. 2.A.K.Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2022
3. 3 Panneerselvam, R., Production and Operations Management, PHI
4. Learning Pvt. Ltd., Third Edition ,2017.
5. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
6. Adam and Elbert, 'Production and Operations Management', Prentice Hall., 2017.

Web Resource(s):

1. https://www.managementstudyguide.com/plant layout.htm
2. https://www.mbaknol.com/operations-management/managing material management quality tools-technology

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand basics of plant layout materials management	**K1 &K2**
CO2	Apply the requirement analysis for material planning	**K3**
CO3	Analyze inventory management models	**K4**
CO4	Evaluate purchasing practices	**K5**
CO5	Create storage in warehouse	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	1	1	1	3	2	2	2	2	1.8
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
Mean Overall Score											**12.4/5= 2.5**
Correlation											**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DED5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**LEAN SIX SIGMA**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Lean Thinking - Basics, principles; Six Sigma Methodology -Identification, Prioritization and Selection of Improvement opportunities; Six Sigma implementation - Overview, Roles & Responsibilities	**12**
II	Cost of Poor Quality (COPQ), Cost of Doing Nothing, CTQ Tree, Translating the needs of the customer into the specific requirements -Development of Project Team and Charter *Define and Map Processes to be improved (SIPOC / COPIS);* Voice of Customer	**12**
III	Data Collection planning, Understanding of Prioritization Matrix, FMEA, Type of Data,Measurement System Evaluation (Gauge R&R) for variables as well as attribute data, Understanding variation - Evaluation of Process Capability and Sigma level	**12**
IV	Activity flow chart, identification of Value-added and Non-value-added activities (Lean Sigma), Organizing for potential causes - Cause and effect diagram, Verification/validation ofcauses using workplace investigation	**12**
V	Deploying Lean Six Sigma, Selection and prioritization of solutions - Concept of risk analysis, pilot and full-scale implementation. *process control plans, Evaluation, monitoring mechanism(SPC)*, process audits, the economics of six sigma quality	**12**

***---* Self-study Portions**

Text Book(s):

1. John Morgan, Martin Brenig-Jones, Lean Six Sigma for Dummies, John Wiley & SonsLtd., 2019
2. Michael L.George, David Rownalds, Marle Price, John Maxey, The Lean Six Sigma Pocket Toolbook, McGraw Hill, 2019

Reference Book(s):

1. Michael L.George, David Rownalds, Bill Kastle, What is Lean Six Sigma, McGraw – Hill 2020
2. Thomas Pyzdek, The Six Sigma Handbook, McGraw-Hill,5 th edition, 2020
3. Panneerselvam, R., Production and Operations Management, PHI
4. Learning Pvt. Ltd., Third Edition ,2017.
5. Alan Muhlemann et al, 'Production and Operations Management', Macmillan, 2018.
6. Adam and Elbert, 'Production and Operations Management', Prentice Hall. 2017.

Web Resource(s):

1. https://www.managementstudyguide.com/six sigma.htm
2. https://www.mbaknol.com/operations-management/managing six sigma quality tools-technology

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and Understand basics of lean six sigma	**K1 &K2**
CO2	Apply develop business cases	**K3**
CO3	Analyze the tools and techniques of lean six sigma to increase productivity	**K4**
CO4	Evaluate the map processes	**K5**
CO5	Create processes and apply continuous improvement	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	1	1	1	3	2	2	2	2	1.8
CO2	2	2	2	3	2	2	3	2	3	2	2.3
CO3	3	3	2	3	2	2	3	3	3	3	2.7
CO4	3	3	2	3	2	3	3	3	2	3	2.7
CO5	3	3	3	3	2	3	3	3	3	3	2.9
Mean Overall Score											**12.4/5= 2.5**
Correlation											**High**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. S. DAWOOD ALI

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEE1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	EXIM AND DOCUMENTATION

SYLLABUS

Unit	Contents	Hours
I	Introduction to Export and Import- Basics of Exports - Classification of goods - Preparation for Exports - Methods of Exporting - Export Marketing Organizations - Functions - Registration formalities - IEC Number - Procedure of obtaining IEC Number - RCMC (Registration Cum Membership Certificate) –*Export Credit Guarantee Council (ECGC)* - Application for import and export of restricted items.	12
II	Documentation Framework and Contracts - Aligned Documentation System: Commercial Documents - Auxiliary Commercial Documents - Regulatory Documents - Documents related to goods - Documents related to Shipment - Documents related to Payments - Documents related to Inspection - *Documents related to Excisable Goods*- Types of Contracts - Export Contracts.	12
III	Payments and Finance - Factors - Methods of receiving Payment - Instruments of Payments-Letter of Credit- Pre-shipment Finance - Post-shipment Finance - Post-shipment Credit in Foreign Currency - Negotiation of documents with bank - CENVAT - Duty Draw back	12
IV	Quality Control and Clearance of Cargo - Objective of Quality Control - Methods - Procedure for Pre-shipment Inspection - Role of Clearing and Forwarding Agents – Role of Inspection Agents-Clearance of Cargo- Central Excise Clearance Procedure - Central Excise Clearance Option - Shipment of Export Cargo.	12
V	Customs Clearance, Risk and Insurance Policy Customs Clearance of Export Cargo - Customs Clearance of Import Cargo - Risk: Types - Types of cover issued by ECGC - Cargo Insurance. Processing of an export order - Major laws governing export contract.	12

***---*Self-study Portions**

Text Book(s):

1. How to EXPORT (with a new chapter on "Exports under GST"), Nabhi Publication, 2nd edition,2019
2. Government of India, Export-Import Policy, Procedures, etc. (Volumes I, II and II) New Delhi

Reference Book(s):

1. Government of India, HandBook of Procedures, Import and Export Promotion, New Delhi.
2. Rathod, Rathor and Jani, International Marketing, Himalaya Publishing House, 4th edition 2017
3. Jacob Cherian and BalKrishna Parab, Export Marketing, Himalaya Publishing House, 1st edition,1997
4. Khurana P K, Export Management, Galgotia Publications,8th edition,2017
5. N. Kumar,Export management,Penguins Books LTD,1st edition,2002

Web Resource(s):
1. https://grow.exim.gov/blog/ten-common-export-documents-you-should-know-about 2. https://www.eximtutor.com/ 3. http://niryatbandhu.iift.ac.in/exim/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand behind the multinational enterprises' role in the global economy	**K1 & K2**
CO2	Apply the fundamentals of export and import.	**K3**
CO3	Analyse the export and import procedures and strategies	**K4**
CO4	Evaluate the challenges and opportunities in EXIM operations	**K5**
CO5	Plan and execute the export and import operations	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	1	1	1	1	1	3	2	2	2	1	1.5
CO2	1	2	2	2	2	2	2	3	2	2	2.0
CO3	3	2	2	1	2	1	2	3	2	3	2.1
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	2	2	3	2	3	3	2	3	3	4.3
										Mean Overall Score	**12.1/5=2.42**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEE2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**TRANSPORT AND DISTRIBUTION**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Transportation-Definition-Objectives-Principles-role of transportation in logistics transport functionality & Principles-participants in Transportation Decisions.	**12**
II	Mode of Transport-Rail, Road, Water, Air, Pipeline-their characteristics and their cost structure-The carrier selection decision-determinants of carrier selection-legal classification of carriers-Role of couriers as carriers.	**12**
III	Intermodal transport- Definition- rationale- types- limitations- containerisation piggyback ownership of transport-own account transport and third party transport-choice of ownership factors to be considered. Transportation costs - fixed, variable, joint and common costs-product related & Market related factors influencing transport cost.	**12**
IV	role of distribution in supply chain – transportation management – warehousing concepts – designing distribution channels – understanding distribution costs Advantages of distribution models – disadvantages of distribution models – *pre- requisites Of distribution – comparing distribution networks*.	**12**
V	Distribution network planning – various factors in distribution - delivery lead time and local facilities – optimization approach and techniques – material management process – role of transportation – transportation principles and participants – *contribution of various agencies in transportation*.	**12**

***---* Self-study Portions**

Text Book(s):

1. S. Chopra and D. V. Kalra, Supply Chain Management: Strategy, Planning, and Operation by Pearson, 7th Edition 2018.
2. Cheong KweeThiam (Author), Introduction to Shipping, Lexis Nexis Emerging Issues Analysis CLE, 2nd Edition, 2016

Reference Book(s):

1. Transportation Management – Imperatives and Best Practices, S. Jaya Krishna, ICFAI University Press, 2007.
2. Management of Transportation, Bardi Edward J., Cengage Learning (Thompson), 6th Edition 2006 [International Edition],
3. Marine Transportation Management, Henry S. Marcus, Auburn House Pub. Co., 1986.
4. International Trade Logistics-Ram Singh- Oxford Publication.
5. ALAN E BRANCH & MICHAEL ROBARTS Branch's Elements of Shipping. 9th Edition, Routledge Publication (2014)

Web Resource(s):
1. www.consulting.xerox.com/case- studies/...shipping- co/ enus.html(International Shipping Company Case Study) 2. www.sugarcrm.com/industry/shipping- and- transport/case- study (CRM Shipping and Transport Case Studies) 3. http://businesscasestudies.co.uk (Shipping Sector- Case Studies) 4. https://archive.nptel.ac.in/courses/110/106/110106045/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the Transportations roles, objectives and Principles	**K1 & K2**
CO2	Applying Various modes of transport and role of couriers	**K3**
CO3	Categories analyse various intermodal transport	**K4**
CO4	Evaluate role of distribution in supply chain	**K5**
CO5	Create Various Distribution network planning	**K6**

Relationship Matrix:

COs	**Pos**					**PSOs**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	2	1	2	3	2	3	2.1
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
										Mean Overall Score	10.2/5=2.04
										Correlation	Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEE3	DSCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**RETAIL LOGISTICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Retail Logistics And Supply Chain Transformation - Buyer / Seller Relationships - Role Of Logistics Service Providers - Retail Formats And Associated Logistics Functions - Macro And Micro Aspects - Peculiarities And Diversity Of Needs Of Logistics For Retailing.	**12**
II	Packaging Logistics And Fresh Food Retailing -Logistics Service For Food Retail Locations – Packaging Aspects Of Retail Logistics - Returnable Packaging - Embedded Integration Technology - *Collaborative Tools*	**12**
III	Automotive Logistics Solutions - Fleet Management - Milk Run Concept - Optimal Efficiencies In Automotive Logistics - Pricing Aspects By Logistics Service Providers -Collaborating Strategies In Automotive Supply Chain	**12**
IV	The Internationalization Of The Retail Supply Chain - International Sourcing - Distribution Strategies And Associated Infrastructure - Role Of Culture In International Retail Markets - Internationalization Of Logistics Practices	**12**
V	Emerging Aspects In Retail Logistics - Development Of E-Tail Logistics - Growth Of E-Commerce - Home Delivery Channel -*Rapid Home Delivery - Impact Of RFID Technology* - Environmental Aspects Of Retail Logistics – Logistics For Managing Waste Within The Retail Sector.	**12**

***---* Self-study Portions**

Text Book(s):

1. John Fernie, Leigh Sparks, Logistics and Retail Management, Kogan Page, 5th Edition, 2018
2. James B. Ayers, Mary Ann Odegaard, Retail Supply Chain Management, CRC Press, 2nd Edition, (2017)

Reference Book(s):

1. Alan Rushton, International Logistics and Supply Chain Outsourcing: From Local to Global, 1st edition, Kogan Page Publishers.UK, 2007.
2. Herbert Kotzab, Mogens Bjerre, Retailing in a SCM-perspective, 1st edition, Copenhagen Business School Press, 2005.
3. Kerstin Gustafsson, Gunilla Jönson, Retailing Logistics and Fresh Food Packaging: Managing Change in the Supply Chain,1st edition, Kogan Page Publishers, 2006.
4. Logistics and Retail Management: Emerging Issues and New Challenges in the Retail Supply Chain, 2018.
5. Ganapathi, Logistics Management, Oxford University Press, 2015.

Web Resource(s):

1. https://www.shipbob.com/blog/retail-logistics/
2. https://www.onlinemanipal.com/blogs/role-of-logistics-in-retail-industry

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the Role of Logistics Service Providers	**K1 & K2**
CO2	Apply The Right Retail Packaging Methods	**K3**
CO3	Analyze the Pricing aspects and collaborative strategies in automotive logistics	**K4**
CO4	Evaluate The Role of Culture In International Retail Markets	**K5**
CO5	Create The Channel Of E-Commerce In Retail	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	4	2	3	3	2	2	2	1	2.3
CO2	1	2	1	2	1	2	1	2	2	3	1.7
CO3	3	1	2	3	1	3	2	1	3	3	2.2
CO4	1	2	2	3	2	3	2	1	2	3	2.1
CO5	3	1	2	2	1	2	3	2	2	1	1.9
Mean Overall Score											**10.2/5=2.04**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEE4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	DIGITAL SUPPLY CHAIN

SYLLABUS

Unit	Contents	Hours
I	Meaning, Importance, Overview, Objective, Process Overview, Process tools, Supply chain dynamics, A model of SCM, Focus areas in SCM, Change Drivers, Evolution of SCM, Types of Cargoes. Cross docking warehousing, *Agile SCM*, Green SCM, Maritime SCMs.	12
II	Information technology, History information technology components, e-commerce, e-business legal and other it issues *Internet Characteristics Technologies* – EDI, ERP, DSS- EDI standards and formats specific to supply chain (e.g., EDIFACT) - EDI transactions in supply chain operations (e.g., purchase orders, invoices) - Role of EDI in supply chain integration - Benefits and challenges of EDI implementation in supply chain	12
III	ERP in Supply Chain Management - ERP modules and features relevant to supply chain (e.g., inventory management, demand forecasting) - Integration of ERP with supply chain processes - Inventory optimization and demand planning using ERP -Supplier relationship management (SRM) in ERP systems -Warehouse and logistics management in ERP - ERP-based supply chain analytics and reporting	12
IV	DSS in Supply Chain Decision-Making -Types of DSS used in supply chain (e.g., supply chain analytics, demand forecasting) - Data collection and processing for DSS in supply chain - Modeling and simulation for supply chain decision support - DSS for supply chain optimization and risk management - Real-time decision support in supply chain operations	12
V	Block chain - basic concepts - distributed ledger - smart contracts- Block chain applications in different contexts -Project development in Block chain - *Virtual factory and factory scanning* including Augmented Reality / Virtual reality - Digital twins -New Developments in IT other technologies – RFID, SOA, CPFR, Role of IT in Supply Chain Management	12

***---* Self-study Portions**

Text Book(s):

1. K. Shridhara Bhat, Supply Chain Management, Himalaya Publishing House, Latest Edition
2. Sunil Chopra, Peter Meindl, Dharam Vir Kalra Supply Chain Management – Strategy, Planning and Operation, Pearson Latest Edition

Reference Book(s):

1. "Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra and Peter Meindl, 2nd Edition, Prentice Hall.
2. “Designing and Managing the Supply Chain” by David Simchi-Levi, Philip Kaminsky, and Edith Simchi-Levi, 3rd Edition, McGraw Hill.
3. “Internet Business Models and Strategies”, by Afuah, A., and Tucci, C.L., 2nd Edition, McGraw Hill.

4. "Creating and Capturing Value: Perspectives and Cases on Electronic Commerce" by Garth Saloner and A. Michael Spence. John Wiley & Sons, Inc.
5. Mark Gates, "Block chain: Ultimate guide to understanding block chain, bit coin, crypto currencies, smart contracts and the future of money", Wise Fox Publishing and Mark Gates 2017.

Web Resource(s):

1. SCM Review: http://www.manufacturing.net/scm/index.asp?layout=siteInfoWebzine
2. ASCET Project: http://www.ascet.com/
3. Supplychainbrain.com: http://www.supplychainbrain.com/
4. Managing the Digital Enterprise: http://digitalenterprise.org/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the Meaning, Importance, and Overview of Supply Chain Management (SCM).	**K1 & K2**
CO2	Apply various Supply Chain Processes and Tools	**K3**
CO3	Analyze Supply Chain Components and Challenges	**K4**
CO4	Evaluate the Information Technology in Supply Chain Management	**K5**
CO5	Create and optimize Supply Chain Planning and Management	**K6**

Relationship Matrix:

COs	**Pos**					**PSOs**					**Mean Score of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	2	1	2	3	2	3	3	1	2.1
CO2	2	1	2	2	3	1	2	3	3	1	2.0
CO3	2	2	1	1	2	2	1	2	3	1	1.7
CO4	2	2	1	2	2	2	2	3	3	2	2.1
CO5	2	1	3	3	3	2	2	2	3	1	2.2
									Mean Overall Score		**10.1 = 2.02**
									Correlation		**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of Cos	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S. DAVID SAM JAYAKUMAR

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEE5	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**SUPPLY CHAIN PLANNING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Concept And Definition Of Forecasting & Demand - Integrating Supply Chain & Demand Management– Quantitative Forecasting Methods - Market Research Methods - Time Series Methods. Selection Of Appropriate Forecasting Technique For SC.	**12**
II	Managing Supply, Implementing Sales and Operations Planning in practice - Order fulfillment & Order Management. – Procurement – Strategies - *Optimization of Customer Service Levels*, Quick Response and Accurate Response System in SCM	**12**
III	Introduction, Requirement of Aggregate Plan, Steps in Developing an Aggregate Plan, Advantages of Aggregate Plan, Aggregate Planning Strategies, Planning Options. Selecting the Method in Aggregate Planning, Aggregate Planning in Services	**12**
IV	Crafting the Supply Chain Strategy, Stages of Supply Chain Strategy, Supply Chain Strategy Performance Attributes, Process Drivers of Supply Chain Performance, Supply Chain Strategy Matrix, Concept of Supply Chain Strategic Fit, Supply Chain Strategy Performance Metrics, Supply Chain Strategy and Risk Management. SCRM Maturity Model	**12**
V	Design of a resilient chain - Principles of designing a resilient supply chain- Physical features of a resilient supply chain - Relationship within resilient supply chain- Risk compensation and business continuity - Features of a resilient supply chain, Emergencies and crises -Use if BCM, Steps in business continuity management, Deliverables.	**12**
VI	**(Only for CIA)** Digital Supply Chain Twins – Supply Chain as a Service(SCaaS) – Capacity Crunch	

***---* Self-study Portions**

Text Book(s):

1. F.Robert Jacobs and Richard Chase, Operations and Supply Chain Management,16th Edition,2020
2. Michael H. Hugos, Essentials Of Supply Chain Management, 4th Edition, Wiley, 2018

Reference Book(s):

1. LM Cecere, Supply Chain Metrics that Matter , 1st Edition, Wiley Corporate F&A- 2015
2. Martin Christopher, Logistics and Supply Chain Management, FT Publishing International, 5th Edition, 2016
3. David B. Grant & Chee Yew Wong Sustainable Logistics and Supply Chain Management: Principles and Practices for Sustainable Operations and Management Kogan Page; 2 edition April 3, 2017

4. David Frederick Ross, Distribution Planning and Control: Managing in the Era of Supply Chain last edition, Springer, 2015.
5. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson 6th Edition, 2016.

Web Resource(s):

1. https://www.gep.com/blog/technology/supply-chain-planning-what-why-and-how
2. https://www.gep.com/blog/strategy/supply-chain-network-design-explained
3. https://www.gartner.com/en/supply-chain/topics/supply-chain-planning

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember the demand forecasting process and Understand forecasting methods	**K1 & K2**
CO2	Apply the procurement planning and strategies	**K3**
CO3	Analyze the impact of aggregate planning	**K4**
CO4	Evaluate the importance of Supply Chain Strategy.	**K5**
CO5	Creating Resilient Supply Chain Network.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	3	1	3	2	2	3	1	2
CO2	1	2	1	2	2	2	2	3	2	2	1.9
CO3	3	2	3	1	2	1	3	2	1	3	2.1
CO4	1	2	2	3	1	3	1	3	2	2	2
CO5	2	0	2	3	2	3	2	2	2	3	2.1
Mean Overall Score											**10.1/5=2.02**
Correlation											Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Mr. ARMAAN SALIK JAIN ALAUDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEF1	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100

Course Title	INTELLECTUAL PROPERTY RIGHTS

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to IPRs - Basic concepts - Need for Intellectual Property - Patents - Copyrights - Geographical Indications - IPR in India - IPR abroad - Nature of Intellectual Property - Industrial Property - Technological Research - Inventions - Innovations - Examples of IPR.	**12**
II	IPR tool kit - Patents - patenting process - Patent cooperation treaties - International Treaties - conventions - IPRs - Trade Related Aspects of Intellectual Property Rights Agreement - Patent Cooperation Treaty - Patent Act of India - Patent Amendment Act - Design Act - Trademark	**12**
III	IPR - Living Species - Protecting Inventions - Biotechnology - Traditional Knowledge - Bio piracy - Documenting Traditional Knowledge - Digital Innovations - Knowledge Assets - *IP Laws - Cyber Law - Digital Content Protection* - Case Studies - Basmati Rice Issue - Turmeric Patent Revocation - Neem Patent Revocation	**12**
IV	Rights of an IPR owner, licensing agreements, criteria for patent infringement. Case studies of patent infringement, IPR – contract, unfair competitions and control, provisions in TRIPS, Celebrity Rights	**12**
V	Recent changes - IPR laws - Patents - *Copyrights* - Intellectual cooperation - Science and allied industry - Patentable research - Non-patentable research- WIPO	**12**

***---* Self-study Portions**

Text Book(s):

1. Nithyananda, K V. Intellectual Property Rights: Protection and Management. India, IN: Cengage Learning India Private Limited.2019
2. Neeraj, P., &Khusdeep, D. Intellectual Property Rights. India, IN: PHI learning Private Limited,2021.

Reference Book(s):

1. Sreenivasulu N. S, Law Relating To Intellectual Property, Universal Law Publishing - an imprint of LexisNexis, Second edition (1 February 2018)
2. Ahuja, V K. Law relating to Intellectual Property Rights. India, IN: Lexis Nexis, 2017.
3. PrabuddhaGanguli,"Intellectual Property Rights: Unleashing the Knowledge Economy", McGraw Hill Education, 2011.
4. V. ScopleVinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012
5. Edited by Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, Edward Elgar Publishing Ltd., 2013..

Web Resource(s):

1. https://nptel.ac.in/courses/109106137
2. https://www.coursera.org/learn/introduction-intellectual-property
3. https://www.coursera.org/specializations/introduction-intellectual-property

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the intricate landscape of Intellectual Property and its safeguarding under diverse legal frameworks.	**K1 & K2**
CO2	Apply acquired knowledge of Intellectual Property Rights (IPR) to advance one's professional growth.	**K3**
CO3	Analyze and develop a comprehensive platform for ensuring protection and compliance with IPR and knowledge management.	**K4**
CO4	Evaluate and create strategies for spreading awareness about IPR and Copyright compliance within academia and industry.	**K5**
CO5	Create an understanding of the fundamental purpose and significance of IPR and the patenting process to foster innovation and protection.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	2	3	3	2	2	2	1	2
CO2	2	2	1	2	3	2	1	2	2	3	2
CO3	3	1	3	3	1	3	2	3	3	3	2.5
CO4	1	2	1	3	2	3	2	2	2	3	2.1
CO5	3	1	2	2	2	2	3	2	2	1	2
Mean Overall Score											**10.6 / 5 = 2.12**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.JAINULLABDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEF2	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**COMPANY LAW**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Company - Definition - Characteristics - Lifting the Corporate Veil - Company vs. Partnership - Kinds of Companies - Incorporation of Company - Promoter - Legal Position, Company Law 2013.	**12**
II	Memorandum of Association - Contents - Alteration - Doctrine of Ultra Vires - Articles of Association - Contents - Alteration - Doctrine of Indoor Management - Constructive Notice of Memorandum and Articles - Relation and Distinction Between Articles and Memorandum - *Legal Effect of Memorandum and Articles*	**12**
III	Prospectus - Shelf Prospectus - Information Memorandum - Red Herring Prospectus - Abridged Prospectus - Misstatements in Prospectus - Consequences - Statement in Lieu of Prospectus - Underwriting Commission - Brokerage - Membership in a Company - Members - Shareholders - Rights - Liabilities of Members.	**12**
IV	Corporate Governance - Directors - Qualification - Appointment - Remuneration - Disclosure - Service Contracts - Removal - Retirement - Disqualification - Powers - Fiduciary Duties - Role - *Good Corporate Governance* - Shares - Share Capital - Kinds - Alteration - Reduction of Capital - Reorganization of Capital - Voting Rights.	**12**
V	Company meetings - proceedings - general meetings - shareholders - requisites - valid meeting - proxies - voting - poll - resolutions - borrowing power - debentures - charges - ultra vires borrowings - prevention of oppression - prevention of mismanagement - majority rule - remedial actions, Corporate Restructuring, Merger& Acquisitions, Insolvency, Liquidation & Winding-up.	**12**

***---* Self-study Portions**

Text Book(s):

1. N.D. Kapoor, Dr RajniAbbi, Bharat Bhushan, Rajiv Kapoor, 'Business Law', Sultan Chand & Sons (P) Ltd. 5th Edition, 2019
2. A Ramaiya, Company Law, Taxmann, 48th Edition 2023

Reference Book(s):

1. Avtar Singh, 'Company Law'- 13th Edition, Eastern Book Company, 2022
2. P.P.S.Gogna. "A Textbook of Company Law", S Chand & Co Ltd, 5th Edition, New Delhi, 2021.
3. Dr. G.K. Kapoor & Sanjay Dhamija, Company Law and Practice, 22nd Ed., Taxmann 2017
4. K. R. Sampath, Law and Procedure on Corporate Restructure leading to
5. Mergers/Amalgamations, Takeovers, Joint Ventures Llps & Corporate Restructure, Snow White
6. Publications Pvt. Ltd, 2013
7. Sir. Dinshaw Fardunji Mulla , The Law of Insolvency in India, Lexis Nexis; First edition (1June 2013)

Web Resource(s):
1. http://www.companiesact.in/Companies-Act-2013/Useful-Websites 2. https://lawlibguides.luc.edu/c.php?g=610771&p=4239599 3. www.sebi.gov.in 4. www.nclt.gov.in

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the fundamental concepts of company law, including the definition and characteristics of a company	**K1 & K2**
CO2	Apply the principles of corporate law to real-world scenarios, demonstrating an understanding of the legal consequences of various corporate actions and decisions	**K3**
CO3	Analyze the legal framework governing corporate governance, including the roles and responsibilities of directors and shareholders	**K4**
CO4	Evaluate the complexities surrounding the Memorandum and Articles of Association, including their content, alteration, and legal implications	**K5**
CO5	Create recommendations for companies to avoid Ultra Vires and Indoor Management issues	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	3	1	2	1	3	2	2	2	2	2
CO2	2	2	2	3	1	2	3	2	2	2	2.1
CO3	3	2	2	1	3	2	2	3	2	2	2.2
CO4	1	2	3	3	1	2	2	3	3	1	2.1
CO5	2	1	3	3	2	3	2	2	3	3	2.4
										Mean Overall Score	**10.8/5=2.16**
										Correlation	**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. A. JAINULLABDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEF3	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**DESIGN THINKING AND INCUBATION**						

SYLLABUS

Unit	Contents	Hours
I	Design Thinking: elements and principles of Design - Basics of Design - Dot – Line – Shape - Form as Fundamental Design Components. Principles of Design - Design Thinking - history of Design Thinking - New materials in Industry.	**12**
II	Design thinking: Design Thinking Process (empathize, analyze, idea & prototype) - Implementing the process in driving inventions - Design Thinking in Social Innovations - Tools of Design Thinking - Person, *Costumer Journey Map* - Brain Storming - Product Development.	**12**
III	Managing the Business Incubator – Monitoring - Evaluation - Benchmarking - Implementing a Mentoring Program - Deals and Financing for Incubator Clients - Technology Commercialization - Virtual Business Incubation.	**12**
IV	Business Incubation – Principles - Incubator Models - Success Factors - Incubator Operation - Planning an Incubator - Business Incubation - Marketing and Stakeholder Management - Financing a Business Incubator.	**12**
V	Innovation: Art of innovation - Innovation and Creativity - Teams for Innovation - *Measuring the Impact and Value of Creativity* - Product Design: Problem Formation, Product Strategies, Product Value, Product Planning, Product Specifications – Role of Creativity and Innovation in Organizations.	**12**

***---* Self-study Portions**

Text Book(s):

1. Scott Swan, Michael G. Luchs, Design Thinking: New Product Development Essentials - 2016
2. Phillip H Phan, Sarfraz A Mian, Wadid Lamine, Technology Entrepreneurship And Business Incubation: Theory, Practice, Lessons Learned, 2016

Reference Book(s):

1. Shrrutin N Shetty, Design the Future: Simplifying Design Thinking to Help You, Kindle Edition, 2018
2. Pavan Soni, Design Your Thinking, Penguin Random House India Private Limited, 2020
3. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, Prentice Hall, 2013
4. M Lewrick, Design Thinking for Business Growth: How to Design and Scale Business Models and Business Ecosystems (Design Thinking Series), 2022
5. M. Leelavathi Dr. V. Suganthi Dr. P. K. Manoj Kumar, An Overview on Design Thinking,1st edition 2022

Web Resource(s):

1. Design Thinking - A Primer By Prof. Ashwin Mahalingam, Prof. Bala Ramadurai, IIT Madras

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand an in-depth understanding on various aspects of innovation, creativity, evolving business models, incubation and entrepreneurship.	**K1 & K2**
CO2	Apply and manage the business incubator	**K3**
CO2	Analyze the design thinking for designing innovative products	**K4**
CO4	Evaluate the business incubation	**K5**
CO5	Create innovation and creativity in the business	**K6**

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
Mean Overall Score											**10.1/5=2.02**
Correlation											Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr. M. SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEF4	DISCIPLINE SPECIFIC ELECTIVE	4	4	25	75	100
Course Title	**SOCIAL ENTREPRENEURSHIP**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	Introduction to Social Entrepreneurship- Factors Impacting Transformation into a Social Entrepreneur- Traits and Characteristics of Social Entrepreneurship- The Four Distinctions of Social Entrepreneurship- Roles and Responsibilities of Social Entrepreneurs - Challenges Faced by - Government Initiatives to Support Social Entrepreneurship	**12**
II	Methods of sensing opportunities and fields of opportunities - Assessing and prioritizing opportunities - Enterprise launching and its procedures – start-ups – incubation Social Innovation, Design Thinking and system thinking for social Innovation. Social Entrepreneurship and the challenges of scale.	**12**
III	Profit and non-profit Proprietorships – partnership - company -Non-Governmental Organisation - Society – Trust and Company (sec. 25) registration – Factors determining selection of forms of registration. *Business model : Types - The market intermediary model*, The employment model, The fee-for-service -model, The low in come client model, The cooperative model, The market linkage model, The service subsidization model, The organization support model	**12**
IV	Social Impact Investors vs. Venture Philanthropists- Differences from Traditional -Venture Capital and Market Investors - Types of Investments by Social Impact Investors - *Financing for Start-ups, Establishment, Growth, and Expansion* - Measuring Return on Investment (ROI) - Providing Exit Strategies for Investors - Market Influences on Social Impact Investment	**12**
V	Study of successful models like Grameen Bank – Aravind Eye Care System's – LEDeG – TERI – Pasumai Payanam, Siruthuli – SEWA – Amul – Evidence from OASiS, Case Study on SELCO, case study on Annapurna – Goonj	**12**

***---* Self-study Portions**

Text Book(s):

1. Shukla, Madhukar. Social Entrepreneurship in India: Quarter Idealism and a Pound of Pragmatism. SAGE Publications Pvt Ltd, First Edition, 2020.
2. Chang, Ann Mei. Lean Impact: How to Innovate for Radically Greater Social Good. Wiley; 1st edition, 2018.

Reference Book(s):

1. Dr Christine A. Hemingway, Corporate Social Entrepreneurship: Integrity within (Business, Value Creation, and Society), Cambridge University Press. (2014)
2. Jason Haber, The Business of Good: Social Entrepreneurship and the New Bottom Line, Entrepreneur Press (2016)
3. Chahine, T. Introduction to social entrepreneurship. Boca Raton, FL: CRC Press(2016).
4. Janus, K. K. Social startup success. New York, NY: Lifelong Books (2017)
5. Bornstein, D., & Davis, S. Social entrepreneurship: What everyone needs to know®. Oxford University Press. (2010).

Web Resource(s):
1. https://elibrary.wayne.edu/record=b4810879~S47 2. https://onlinecourses.nptel.ac.in/noc22_mg81/preview 3. https://onlinecourses.nptel.ac.in/noc22_hs110/announcements?force=true

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the principles of social entrepreneurship, opportunity identification, business models, and lifelong learning.	**K1 & K2**
CO2	Apply analytical thinking to real-life cases of social entrepreneurship to comprehend their complexities.	**K3**
CO3	Analyze and evaluate one's proficiency in decision-making, leadership, communication, critical thinking, analysis, planning, and teamwork.	**K4**
CO4	Create innovative solutions by applying acquired knowledge to address diverse challenges in various industries and contexts.	**K5**
CO5	Evaluate the role of government in business operations, recognizing its influence on entrepreneurs and established businesses.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	2	3	3	2	2	2	1	2
CO2	1	2	3	2	3	2	1	2	2	3	2.1
CO3	3	1	1	2	1	3	2	3	3	3	2.2
CO4	1	2	1	3	2	3	2	1	2	3	2
CO5	3	1	2	2	1	2	3	2	2	1	1.9
Mean Overall Score											**10.2/5=2.04**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.A.JAINULLABDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEF5	Discipline Specific Elective	4	4	25	75	100
Course Title	**BUSINESS ETHICS AND CORPORATE GOVERNANCE**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	An understanding of Ethics - Meaning of Ethics -Definition of Business Ethics - Ethical Performance - Types of Ethics - Sources of Ethics - Ethics and Business - Importance and Scope of Ethics - Factors influencing Business Ethics - Objectives of Business Ethics - Morality and Ethics	**12**
II	Ethical Codes - Managing Ethics - Ethical Activities - Ethical Dilemmas - Whistle Blowing - Making the role of Moral Philosophies in Decision Making - Ethical Organization - Ethical Issues that arise for Mangers - Kohlenberg's Model - Carrol Gilligan's Model.	**12**
III	Application of Ethical Values in Marketing, Advertising, Finance - Tax Evasion - Lack of Transparency - Speculation and Insider Trading - Application in HR Compensation - Work Place Harassment of Employees.	**12**
IV	Corporate Governance – Need and Importance - Parties to Corporate Governance - Agency Theory - Stewardship Theory - Popular Model for Governance - Anglo-American Model - Japanese Model and Indian Perspective of Corporate Governance.	**12**
V	Best practices - India's Corporate Governance Framework - SEBI, Company Law and Accounting - *CII Code on Corporate Governance* - Chandra Committee on Auditing and Governance – National Code on Corporate Governance.	**12**

***---* Self-study Portions**

Text Book(s):

1. Marianne M. Jennings, Business Ethics: Case Studies and Selected Readings, Cengage Learning 2019
2. Priyanka Kaushik Sharma, Corporate Governance Practices in India: A Synthesis of Theories, Practices, and Cases, 2015

Reference Book(s):

1. Prof.(Col) P.S. Bajaj, Dr. Raj Agarwal, Business Ethics–An Indian perspective, Pubby Biztantra, 2004
2. John R. Beatright, Ethics and the conduct of business, Pub. By Pearson Education, 2017
3. GeetaRani and R K Mishra, Corporate Governance Theory & Practice, Pub. By Excel Books,2013
4. Khanka S.S, Business Ethics and Corporate Governance (Principles and Practices), 2014
5. Fernando, Business Ethics and Corporate Governance, Second Edition, Pearson, 2012

Web Resource(s):

1. https://onlinecourses.nptel.ac.in/noc21_mg46/preview
2. Business Ethics - Course (swayam2.ac.in)

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Remember and understand business ethics and morality in performing business activities	**K1 & K2**
CO2	Apply value, norms, ethical codes, and various ethical activities in business	**K3**
CO3	Moral philosophies as a manager in an organization's decision-making and assess and apply ethical practices in business management in marketing, finance, and HRM	**K4**
CO4	Analysing the various models of corporate governance and its framework in an organization	**K5**
CO5	Create the ethical business practices and illustrate corporate governance and accounting code and standards in business	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	2	2	2	1	1	2	2	2	2	3	1.9
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
Mean Overall Score											**10/5=2.0**
Correlation											**Medium**

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.M.SABEERDEEN

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEG1	Discipline Specific Elective	4	4	25	75	100

Course Title	USING PYTHON IN DATA ANALYTICS

SYLLABUS

Unit	Contents	Hours
I	**Data Structures and OOP** Python Program Execution Procedure – Statements – Expressions – Flow of Controls – *Functions – Numeric Data Types* – Sequences – Strings – Tuples – Lists – Dictionaries. Class – Constructors – Object Creation – Inheritance – Overloading. Text Files and Binary Files – Reading and Writing.	12
II	**Numpy and Pandas Packages** Vectorization Operation -Array Indexing and Slicing -Transposing Array and Swapping Axes -Saving and Loading Array -Universal Functions Mathematical and Statistical Functions in NumPy. Pandas -Creation of Data Frames – Accessing the columns in a Data Frame -Accessing the rows in a Data Frame - Panda's Index Objects -Arithmetic Operations between Data Frames and Series - Function Application and Mapping.	12
III	**Data Wrangling** Combining and Merging Data Sets – Reshaping and Pivoting – Data Transformation – String manipulations – Regular Expressions.	12
IV	**Data Aggregation and Group Operations** #Group by Mechanics – Data Aggregation – GroupWise Operations – Transformations – Pivot Tables – Cross Tabulations# – Date and Time data types.	12
V	**Visualization in Python** #Matplotlib and Seaborn Packages – Plotting Graph -Controlling Graphs – Adding Text – More Graph Types – Getting and Setting Values – Patches#	12

*Self-study Portion #Lab-sessions

Text Book(s):

1. Kumar, M. Business Analytics using Python. Excellence Brings Success,1st edition,2022
2. Liu, Y. H. Python Machine Learning By Example: Build intelligent systems using Python, TensorFlow 2, PyTorch, and scikit-learn. Packt Publishing Ltd,1st edition 2020

Reference Book(s):

1. Massaron, L., & Boschetti, A. Regression analysis with Python. Packt Publishing Ltd,1st edition,2016
2. Joshi, P., Hearty, J., Sjardin, B., Massaron, L., & Boschetti, A. Python: Real world machine learning. Packt Publishing Ltd,1st edition,2016

Web Resource(s):

1. https://www.python.org/
2. https://onlinecourses.swayam2.ac.in/aic20_sp33/preview
3. https://www.classcentral.com/course/swayam-python-for-data-science-14266

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand the main features of Python and its applications for Analytics	**K1 & K2**
CO2	Apply the tools and techniques of the real business world problems	**K3**
CO3	Analyse present business data through specialized visualization tools,	**K4**
CO4	Apply basics of Python to solve real time problems	**K5**
CO5	Create customization python tools in analytics	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.1/5=2.02**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEG2	Discipline Specific Elective	4	4	25	75	100
Course Title	**ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Introduction to AI and Machine Learning** AI systems, Approaches to AI, Brief history of AI, Comparison Between Artificial intelligence, Machine Learning, and Deep Learning, Intelligent Agent, stimulus response agents. components of intelligence. *Machine Learning Foundations – Overview – Design of a Learning System – Types of Machine Learning – Supervised Learning and Unsupervised Learning* – Mathematical Foundations of Machine Learning – Applications of Machine Learning-Weka software	12
II	**Supervised Learning** #Simple Linear Regression – Multiple Linear Regression – Polynomial Regression – Ridge Regression – Lasso Regression – Evaluating Regression Models – Model Selection – Bagging – Ensemble Methods.	12
III	**Classification** Logistic Regression – Decision Tree Regression and Classification – Random Forest Regression and Classification – Support Vector Machine Regression and Classification -Evaluating Classification Models.	12
IV	**Unsupervised Learning** Clustering – K-Means Clustering – Density-Based Clustering – Dimensionality Reduction – Collaborative Filtering	12
V	**Association Rule Learning and Reinforcement Learning** Association Rule Learning – Apriori – Eclat – Reinforcement Learning – Upper Confidence Bound – Thompson Sampling – Q-Learning.#	12

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Text Book(s):
1.Hastie, T., Tibshirani, R., and Friedman, J. Introduction to Statistical Learning, Springer. (Free Access) ,2nd edition 2021 2.Aston Zhang, Zachary C. Lipton, Mu Li, and Alexander J. Smola. Dive into Deep Learning, Cambridge University press, (Free Access) ,1st edition 2021
Reference Book(s):
1.Larose, D.T. & Larose, C.D. Data Mining and Predictive Analytics, Wiley,2nd 2016 2.Dean, J., Big Data, Data Mining and Machine Learning: Value Creation for Business Leaders and Practitioners, Wiley,1st edition 2014
Web Resource(s):
1. https://nptel.ac.in/courses/106106139 2. https://www.weka.io/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand a set of well-known supervised, unsupervised and semi-supervised learning algorithms	**K1 & K2**
CO2	Apply a tool to implement typical clustering algorithms for different types of applications	**K3**
CO3	Analyse applications suitable for different types of machine learning with suitable justification	**K4**
CO4	Evaluate a machine learning technique and able to interpret.	**K5**
CO5	Implement probabilistic discriminative and generative algorithms for the application of your choice.	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	2	3	2	2	2	2	2.1
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	3	2	3	2	3	3	2	2	3	2.5
Mean Overall Score											**10.7/5=2.14**
Correlation											Medium
Mean Overall Score = Sum of Mean Score COs / Total Number of COs											
< 1.5						Low					
≥ 1.5 and < 2.5						Medium					
≥ 2.5						High					

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEG3	Discipline Specific Elective	4	4	25	75	100

Course Title	BIG DATA MANAGEMENT

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Introduction to big data** Big Data Platform – Challenges of Conventional Systems - Intelligent data analysis – Nature of Data - Analytic Processes and Tools - Analysis vs Reporting.	12
II	**Mining data streams** Concepts – Stream Data Model and Architecture - Stream Computing - Sampling Data in a Stream – Filtering Streams - Counting Distinct, Elements in a Stream – Estimating Moments – Counting Oneness in a Window – Decaying Window - Real time Analytics Platform (RTAP) Applications – Case Studies - Real Time, Sentiment Analysis- Stock Market Predictions.	12
III	**Hadoop** History of Hadoop- the Hadoop Distributed File System – Components of Hadoop Analysing the Data with Hadoop- Scaling Out- Hadoop Streaming- Design of HDFS-Java interfaces to HDFS Basics- Developing a Map Reduce Application- How Map Reduce Works- Anatomy of a Map Reduce Job run-Failures-Job Scheduling-Shuffle and Sort – Task execution - Map Reduce Types and Formats- Map Reduce Features - Hadoop environment.	12
IV	**Applications on Big Data** Using Pig and Hive – Data processing operators in Pig – Hive services – HiveQL – Querying Data in Hive - fundamentals of HBase and ZooKeeper - *IBM Info Sphere Big Insights and Streams*.	12
V	**Predictive Analytics** #Simple linear regression- Multiple linear regression- Interpretation of regression coefficients. Visualizations - Visual data analysis techniques- interaction techniques - Systems and applications#	12

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Text Book(s):

1. George Dimitoglou, Leonidas Deligiannidis,Big Data, Data Mining and Data Science: Algorithms, Infrastructures, Management and Security (Intelligent Computing) , De Gruyter publications,1st Edition,2024
2. Zhang and Li, Big Data Quantification for Complex Decision-Making, IGI Global publishers,1st Edition, 2024

Reference Book(s):

1. Kulkarni, P., Joshi, S. & Brown M.S., Big Data Analytics, PHI Learning, Kindle edition,2016
2. Acharya, S. & Chellappan, S. Big Data and Analytics, Wiley,2nd edition,2015

Web Resource(s):
1. https://onlinecourses.nptel.ac.in/noc20_cs92/preview 2. https://www.shiksha.com/online-courses/big-data-hadoop-courses-certification-training-by-nptel-st367

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand business decisions and create a competitive advantage with Big Data Analytics	**K1 & K2**
CO2	Apply various techniques for the mining data streams	**K3**
CO3	Analyse big data using intelligent techniques	**K4**
CO4	Evaluate the applications using Map Reduce Concepts	**K5**
CO5	Create the programming tools PIG & HIVE in the Hadoop echo system	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.1/5=2.02**
									Correlation		Medium
Mean Overall Score = Sum of Mean Score COs / Total Number of COs											
< 1.5						Low					
≥ 1.5 and < 2.5						Medium					
≥ 2.5						High					

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEG4	Discipline Specific Elective	4	4	25	75	100
Course Title	**MANAGEMENT SCIENCE**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Fundamental of decision making** Types of decisions; Steps in decision making; Quantitative analysis and decision making; *Different types of models and their uses*; Model building steps-QM for windows software.	12
II	**Linear Programming** Basic concepts; Mathematical formulation and applications; Solution of LP problem using graphic and simplex method; Sensitivity analysis and interpretation of solution; Duality in linear programming – formulation and solution, integer linear programming - solution.	12
III	**Transportation, Assignment and Trans-shipment** Formulation; Solving transportation and assignment problems; Dealing with special cases of transportation and assignment problems.	12
IV	**Simulation and Queuing Management** Concepts of heuristics; Simulation: Monte Carlo Simulation, Application of simulation in business scenario. Queuing models: Elements of a queuing system; Models with Poisson arrival and Exponential services rates- single server and infinite and finite population; Cost behaviour analysis. Stochastic analysis and Utility function.	12
V	**Project Scheduling** Concepts of PERT & CPM techniques and their applications; Network analysis-Scheduling activities, determining critical path, calculation of floats; Time-cost trade-off, resource allocation & resource levelling. Use of Software for Project Management. Markov Chains- decision processes; Market share analysis; Game Theory- Pure strategy games; Mixed strategy games; Value of the game; Rules of Dominance, Graphical methods. Algebraic methods and LPP for solving games. Orientation to Optimization package for Games and Markov analysis.	12

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Text Book(s):

1. Taha, H.A. Operations Research: An Introduction. Pearson Publication,10th edition, 2017
2. Kanti Swarup et al. Operations Research, Sultan Chand & Sons 15th edition,2020

Reference Book(s):

1. Powell, S.G, & Baker, K.R. Management Science - The Art of Modelling with Spreadsheets, Wiley, 5th edition,2017
2. Hillier, F.S., Lieberman, G.J., Nag, B. Basu, P. Introduction to Operations Research. McGraw Hill Education,10th edition,2017

Web Resource(s):
1.https://onlinecourses.nptel.ac.in/noc22_ma48/preview 2.https://qm-for-windows.software.informer.com/5.2/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand different decision making situations in business and the role of different quantitative approaches in solving them.	**K1 & K2**
CO2	Apply Markov Chains decision process and Theory of Games to the decision situations requiring prediction about outcomes.	**K3**
CO3	Analyse the quantitative approaches to problem solving in different business situations constrained by availability of resources and alternatives.	**K4**
CO4	Evaluate various models of EOQ by using simulated situations to solve the problems related to inventory and queuing management	**K5**
CO5	Create prudent and cost effective decision making transportation, assignment and transhipment problems	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	2	2	2	3	2	2	2	1	2.0
CO2	1	2	2	2	1	2	2	3	2	2	1.9
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	3	2	3	2	3	3	2	2	3	2.5
									Mean Overall Score		**10.6/5=2.12**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs	
< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
IV	23MBA4DEG5	Discipline Specific Elective	4	4	25	75	100
Course Title	**TIME SERIES ANALYTICS**						

SYLLABUS		
Unit	**Contents**	**Hours**
I	**Difference Equations** Time series models, Difference equations and their solutions, solution by iteration, an alternative solution methodology, the cobweb model, solving homogeneous difference equations, particular solutions for deterministic processes, the method of undetermined coefficients, lag operators	12
II	**Stationary Time Series Models** Stochastic difference equation models, ARMA models, stationary restrictions for ARMA(p,q) model, autocorrelation function, partial autocorrelation function, sample autocorrelations of stationary series, Box-Jenkins model selection, *properties of forecasts*, model of interest rate spread, seasonality, parameter instability and structural change	12
III	**Models with Trend** Deterministic and Stochastic trends, removing the trend, unit roots and regression residuals, Monte- Carlo method, Dickey-Fuller tests: examples and extensions, structural change, power and the deterministic regressors, test with more power, panel unit root tests, trends and univariate decompositions	12
IV	**Modelling Volatility** Economic time series: the stylized facts, ARCH processes, ARCH and GARCH estimates of inflation, examples of GARCH models, A GARCH model of risk, ARCH-M model, additional properties of GARCH processes, maximum likelihood estimation of GARCH models, other models of conditional variance, Multivariate GARCH.	12
V	**Multi-equation Time Series Models** Intervention Analysis, Transfer function analysis, estimating a transfer function, limits to a structural multivariate estimation, VAR analysis, estimation and identification, Impulse response function, testing hypothesis, Example of Simple VAR, structural VARs, examples, Granger Causality Test, Variance decomposition. Co-integration and Error Correction Models-Gretl software	12

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Text Book(s):

1. J.M. Wooldridge (W), "Introductory Econometrics: A Modern Approach, (South-Western College Publishing, 7th edition,2019
2. Brockwell, P.J. & Davis, R.A. Introduction to Time Series and Forecasting. Springer, 3rd Edition,2016
3. K. Nirmal Ravi Kumar,'Econometrics' Routledge publishers,CRC-press,1st edition,2020

Reference Book(s):

1. Gujarati, N. Damodar. Basic Econometrics, McGraw Hill education,5th edition,2017
2. Stock J.M. and Mark W. Watson,' Introduction to Econometrics' Pearson International 3rd edition,2017

Web Resource(s):
1.https://onlinecourses.swayam2.ac.in/cec22_hs38/preview 2.https://www.researchgate.net/publication/259006444_Financial_Econometrics_Methods_and_Models 3.https://gretl.sourceforge.net/

Course Outcomes		
Upon successful completion of this course, the student will be able to:		
CO No.	**CO Statement**	**Cognitive Level (K-Level)**
CO1	Understand and discuss the basics of Time Series Data.	**K1 & K2**
CO2	Apply cointegration and error correction among time series data	**K3**
CO3	Analyse, Model and Forecast using time series data	**K4**
CO4	Test and evaluate the Stationary Time series	**K5**
CO5	Model volatility using Time series	**K6**

Relationship Matrix:

COs	**POs**					**PSOs**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	2	2	1	1	1	3	2	2	2	1	1.7
CO2	1	2	2	2	1	2	2	3	3	3	2.1
CO3	3	2	2	1	1	1	2	3	2	3	2.0
CO4	1	2	2	3	2	3	2	3	2	2	2.2
CO5	2	1	2	3	2	3	3	2	2	3	2.3
									Mean Overall Score		**10.3/5=2.06**
									Correlation		Medium

Mean Overall Score = Sum of Mean Score COs / Total Number of COs

< 1.5	Low
≥ 1.5 and < 2.5	Medium
≥ 2.5	High

Course Coordinator: Dr.G.S David Sam Jayakumar