



## 8. SEMESTER-WISE CREDIT DISTRIBUTION:

8.1 The table shows the semester wise credit with total credits

Category	Sem 1	Sem 2	Sem 3	Sem 4	Total Credits
Compulsory Core Papers	24	24	6	-	54
Soft Core Papers	2	2	-	-	4
Specialization Subjects	-	-	20	20	40
General Open Elective	-	-	2	-	2
Industry Internship Program	-	-	2	-	2
Master Thesis	-	-	-	4	4
<b>Total</b>	<b>26</b>	<b>26</b>	<b>30</b>	<b>24</b>	<b>106</b>

## 9. SCHEME OF EXAMINATION

### A) Internal Assessment Test

9.1A Each course will have two components as part of assessment i.e. the First Being Internal Assessment Test and Second being Semester end exams. The Internal Assessment (IA) is based on the continuous internal assessment. There shall be two internal tests conducted for each paper.

9.2A Each paper will carry 100 marks of which 30 marks will be for Internal Assessment and remaining 70 marks for written examination (UE) to be held at the end of each semester.

9.3A The components of Internal Assessment for 30 Marks are as follows:

1 <sup>st</sup> and 2 <sup>nd</sup> Semester	Marks
Attendance	5
Two Internal test	10
Assignment	5
Case Presentation	5
Quiz on Business and Current Affairs	5
<b>Total</b>	<b>30</b>
<b>Marks for Attendance</b>	
% of Attendance	Marks
75-79 %	1
80-84 %	2
85-89 %	3
90-94 %	4
95-100 %	5

The BOE will monitor the process of Internal assessment test (Issue of Time table, preparing and transmitting the question paper via e-mail, followed by surprise check by BOE Members). The Directors of B-Schools are required to maintain the records pertaining to internal assessment tests.

## **B) Final Examination**

**9.1B** There shall be a University examination (Theory) at the end of each semester in the prescribed papers which carries 70 marks for 3 hours. (Internal Assessment: Online examination might be introduced subject to approval of appropriate Bodies of Bengaluru Central University in the course of present scheme.)

**9.2 B** For the employability skill development papers, the students are required to undertake the prescribed skill development exercises. The concerned institution shall submit the records of the exercises to the university. The university authority will pay surprise visits to the institutions for checking the employability skills possessed by the students by virtue of undertaking the exercises on the subject.

**9.3 B** Specific guidelines for practical examinations will be issued by PG Department of Management from time to time.

## **10. TIME LIMIT FOR COMPLETION**

10.1 The candidate shall complete programme within the period as prescribed in the regulations governing the maximum period for completing MBA programmes from the date of admission. It is generally twice the number of years of the stipulated minimum duration of the programme which is 4 years.

## **11. MINIMUM GRADE FOR A PASS**

11.1 A candidate shall be declared to have passed the MBA program if he/she secures at least a CGPA of 4.0-5.0 (Course Alpha-Sign Grade C) in the aggregate of both internal assessment and semester end examination marks put together in each unit such as theory papers / practical / internship / master thesis / viva-voce.

11.2 The candidate who pass in all the papers in first attempt in all four semesters is eligible for ranks provided they secure at least CGPA of 6.0-7.0(Alpha-Sign Grade A).

11.3 The results of the candidates who have passed the fourth semester examination but not passed the lower semester examinations shall be declared as NCL (Not Completed Lower semester examinations). Such candidates shall be eligible to receive the degree only on completion of all the lower semester examinations.



11.4 A candidate who passes the semester examinations **in parts** is eligible for only Class / CGPA and Alpha Sign Grade but **not be eligible for rank**.

11.5 The candidate must secure a minimum of 40% of the total marks awarded as internal components (30 marks) which shall mean there will be a minimum prescribed 12 marks which the student has to secure to pass in internal assessment.

11.6 A Candidate who fails in the Master Thesis and viva-voce exams, he/she shall re-submit and re-appear in the Master Thesis and viva-voce and pass the examination subsequently. Each student would be given a chance/attempt to clear. The supplementary examination is conducted for Odd semester along with Odd semester and Even semester with Even semester.

## 12. INDUSTRY INTERNSHIP

12.1 Each candidate should undertake an internship for a period of four weeks immediately On completion of the second semester examination and submit a bound copy of the report in III Semester. The student is required to select an organisation and identify a problem area and come out with solutions to the problem. A report containing the analysis of the problem and the solutions is to be carried out under the guidance of a faculty of the institution and industry. This could involve a desk study/data analysis/technology enabled assignment/enterprise resource planning/live case study/extension work or exploration of an idea or its implementation. Specific guidelines including Format of the report shall be issued by PG Department of Management Studies, Bengaluru Central University from time to time.

12.2 The industry internship program shall carry 50 marks, of which the internship report shall carry 25 marks and 25 marks for viva voce. The student has to secure a minimum of 25 marks out of 50 marks to pass in the internship program. The viva-voce and the internship report will be evaluated by the external examiners and internal examiners appointed by the BOE.

## 13. MASTER THESIS

13.1 Every student is required to work 45 days (30 days compulsory to attend the industry/field work) on his/her master thesis in the chosen major specialization during the 3<sup>rd</sup> and 4<sup>th</sup> semester and prepare a Master Thesis report applying research methodology under the supervision of a Faculty guide and Industry expert. The Thesis shall be based on a free-lance or industry project. Prior to the actual work, the students are required to submit a synopsis of the proposed project work incorporating the components of research design and submit the same to the PG Department of Management Studies, BCUB for approval. There is no class work during 30 days where the student is in industry/fieldwork.

Subsequent to the field work, the candidate has to involve himself/herself in writing the master thesis along with attending the classes regularly.

13.2 The students are required to submit two progress reports during the course of master thesis at the stipulated time periods.

13.3 A hard bound copy and a soft copy of the Master Thesis duly signed by the faculty guide and certified by the industry/organizations and Principal/Director/HOD has to be submitted to the PG Department Management Studies, Bengaluru Central University at the end of the fourth semester before the commencement of the end semester examination. The Master Thesis shall be evaluated for 100 marks by two examiners (One of them will be the faculty guide/member who has guided the work and other will be the external/internal examiners appointed by the BOE). A minimum of 50% marks shall be secured for a pass in the Master Thesis. There shall be a viva-voce examination for 50 marks on the Master Thesis. Viva-voce will be conducted by Board of Examiners/examiners authorized by Chairman of BOE. A minimum of 50% (25 marks) must be secured to pass in the viva-voce examination.

#### 13.4 Academic Integrity and Plagiarism

In order to maintain the quality in preparation and presentation of internship reports/master thesis in 3<sup>rd</sup> and 4<sup>th</sup> semester. All the internship reports/master thesis should undergo the anti-plagiarism check with the support of suitable software. The Post Graduate Department of Management shall inform the B- Schools about the software and provide them guidelines thereof. The similarity index permissible will be decided from time to time.

### 14. SPECIALIZATION STREAMS

14.1. The MBA program has dual specialization. It consists of major specialization and minor specialization. In 3<sup>rd</sup> and 4<sup>th</sup> semester the student has to take 3 electives in the major specialization and 2 electives in the minor specialization of each semester and his/her master thesis will be on major specialisation.

14.2 For offering any specialization indicated in the MBA program, each institution shall have a minimum of 15 students.

14.3 The Board of Studies in Management could explore collaborations and partnership either with associations, industry body, individual companies and other enterprises for the purposes of curriculum design, delivery, faculty development, publication of study material and case studies. The BOS is also authorized to make necessary changes in the specialization streams as well as electives offered under



the specialization streams. Any emerging area/subject leading to specialization will be identified and offered from time to time.

## 15. FOUNDATION COURSES AND ADD ON COURSES

15.1 The colleges are required to organize one week to ten days of induction programme for the students admitted to the first semester before the commencement of classes, since the students come from different backgrounds such as arts, science, engineering etc, the foundation courses are intended not only to provide the basics and fundamental pre-requisite knowledge on management subjects but also include value-based and familiarise the students with management concepts. Similar induction could be planned at the time of the commencement of III Semester. A detailed report has to be submitted to university. After completion of 2<sup>nd</sup> semester, the institution shall arrange for project report preparation workshops for the students to take up the master thesis work in the 4<sup>th</sup> semester confidently.

15.2 The suggestive areas for Foundation courses are Social impact of management, Fundamentals of Management, Accounting and Finance, Sustainable development, Anti-Corruption Issues, Moral Leadership, and Business Ethics. Specific guidelines will be issued by PG Department of Management from time to time.

15.3 The students are required to undergo a non credit course( at least one) Massive Open Online Course (MOOC) each year. The list of courses will be supplied by the PG Department of Management Studies, Bengaluru Central University. Students are required to produce certification of completion of course during Viva Voce Exam.

### EIGHT POINT ALPHA - SIGN GRADING SCALE under CBCS System

GRADE POINT AVERAGE	<4	4-<5	5-0.5	5.5-<6	6-<7	7-<8	8-9	9-10
ALPHA-SIGN GRADE	Re-Appeal	P	C	B	B+	A	A+	O

Note : O : Outstanding

## 16. CLASSIFICATION OF SUCCESSFUL CANDIDATES: SEMESTER WISE

The Grade Point Average (GPA) in a Semester and the Cumulative Grade Point Average (CGPA) at the end of fourth semester shall be computed as follows:

### 16.1 COMPUTATION OF GRADE POINT AVERAGE (GPA):

The grade points (GP) in a course shall be assigned based on the basis of actual marks scored in that course as per the table below. They shall be generally percentages divided by 10. The Grade Point Weights (GPW) shall then be calculated as the product of the grade points earned in the course and the credits for the course. The total GPW for a semester is obtained by adding the GPW of all the courses of the semester.

#### ILLUSTRATION 1 (26 CREDITS)

PAPERS	PI	P2	P3	P4	P5	P6	P7	TOTAL
MAX. MARKS	100	100	100	100	100	100	100	700
% MARKS OBTAINED	77	73	67	76	64	66	32	455
GRADE POINTS EARNED (G.P.)	7.7	7.3	6.7	7.6	6.4	6.6	6.4	-
CREDITS FOR THE COURSE (C)	4	4	4	4	4	4	2	26
TOTAL GPW = GP X C	30.8	29.2	26.8	30.4	25.6	26.4	12.8	182

Semester Aggregate Marks:  $455 / 650 = 70\%$

Classification of Result: First Class with Distinction The GPA shall then be computed by dividing the total GPW of all the courses of study by the total credits for the semester,  $GPA = \text{Total GPW} / \text{Total Credits} = 182 / 26 = 7$  Semester Alpha Sign Grade: A+

### 16.2 CALCULATION OF CUMULATIVE GRADE POINT AVERAGE (CGPA)

The Cumulative Grade Point Average (CGPA) at the end of the fourth semester shall be calculated as the weighted average of the semester GPW. The CGPA is obtained by dividing the total of GPW of all the four semesters by the total credits for the programme.



## ILLUSTRATION 2

SEMESTER	I	II	III	IV	TOTAL
TOTAL MARKS PER SEMESTER	650	650	900	700	2900
TOTAL MARKS SECURED	455	560	676	570	2261
SEMESTER ALPHA SIGN GRADE	A+	A++	A+	A++	-
SEMESTER GPA	7.0	8.6	7.5	8.1	-
SEMESTER CREDITS	26	26	33	26	111
SEMESTER GPW	182	223.6	247.5	210.6	863.7

Aggregate Percentage of Marks =  $2261 / 2900 = 77.96\%$

**16.3 Classification of Result:** First Class with Distinction Cumulative Grade Point Average (CGPA) = Total of Semester GPW / Total Credits for the programme =  $863.7 / 111 = 7.78$  Programme Alpha Sign Grade: A+

These are the sample illustrations of computing semester grade point averages and cumulative grade point average and the alpha - sign grades assigned.

## 17 PATTERN OF QUESTION PAPER

17.1 The pattern of question paper will be decided by the Board of Studies from time to time. The Post Graduate Department of Management of Bengaluru Central University will communicate to all affiliated colleges about the pattern as well as the changes therein.

17.1. Semester End Theory University Examination with 70 Marks

Model Question Paper :

Part /Section	No of Questions Asked	No of Questions To be Answered	Marks for Each Question	Total marks
A	7	5	5	25
B	4	3	10	30
C	1(Compulsory Case Study)	1	15	15
<b>Total</b>				<b>70</b>

## 18 OPEN ELECTIVE

18.1 One course is offered as open elective during the III semester of MBA Programme. The open elective has to be chosen by the student from the list given by the university.

## 19. SCOPE/Jurisdiction

22.1 Any conflict arising out of or in relation to the regulations is subject to jurisdiction of civil court of Bengaluru.

## 20. COURSE MATRIX

### Course Matrix of I Semester ( MBA DAY )

Paper Code	Subject	Credit	Contact Hours		I.A	U.E	Total Marks
			L	P*			
1.1	Management and Organizational Behaviour	4.0	45	15	30	70	100
1.2	Managerial Accounting	4.0	45	15	30	70	100
1.3	Business Planning and Regulations	4.0	45	15	30	70	100
1.4	Economics for Business Decisions	4.0	45	15	30	70	100
1.5	Business Statistics	4.0	45	15	30	70	100
1.6	Marketing Management	4.0	45	15	30	70	100
1.7	<b>SOFT CORE</b> Employability Skill Development – I	2.0	15	15	30	70	100
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>210</b>	<b>490</b>	<b>700</b>

\*Contact hours include work relating to Lecture and Practical (L-P)



### Course Matrix of II Semester ( MBA DAY)

Paper Code	Subject	Credit	Contact Hours		I.A	U.E (T-P)**	Total Marks
			L	P*			
2.1	Entrepreneurship and Start-up Management	4.0	45	15	30	70	100
2.2	Business Research Methods	4.0	45	15	30	70	100
2.3	Managing Human Resources	4.0	45	15	30	70	100
2.4	Business Analytics	4.0	45	15	30	70	100
2.5	Financial Management	4.0	45	15	30	70	100
2.6	Production and Operations Research	4.0	45	15	30	70	100
2.7	<b>SOFT CORE</b> Employability Skill Development – II	2.0	15	15	30	70	100
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>210</b>	<b>490</b>	<b>700</b>

\*Contact hours include work relating to Lecture and Practical (L-P)

Syllabus is subject to change as necessary

### Course Matrix of I Semester ( MBA Evening )

Paper Code	Subject	Credit	Contact Hours		I.A	U.E	Total Marks
			L	P*			
1.1	Management and Organizational Behaviour	4.0	45	15	30	70	100
1.2	Managerial Accounting	4.0	45	15	30	70	100
1.3	Business Planning and Regulations	4.0	45	15	30	70	100
1.4	Economics for Business Decisions	4.0	45	15	30	70	100
1.5	Business Statistics	4.0	45	15	30	70	100
1.6	Marketing Management	4.0	45	15	30	70	100
1.7	Project Report (Viva & Report )	2.0	15	15	30-V	70-R	100
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>210</b>	<b>490</b>	<b>700</b>

\*Contact hours include work relating to Lecture and Practical (L-P)

### Course Matrix of II Semester ( MBA Evening)

Paper Code	Subject	Credit	Contact Hours		I.A	U.E (T-P)**	Total Marks
			L	P*			
2.1	Entrepreneurship and Start-up Management	4.0	45	15	30	70	100
2.2	Business Research Methods	4.0	45	15	30	70	100
2.3	Managing Human Resources	4.0	45	15	30	70	100
2.4	Business Analytics	4.0	45	15	30	70	100
2.5	Financial Management	4.0	45	15	30	70	100
2.6	Production and Operations Research	4.0	45	15	30	70	100
2.7	Project Report ( Viva & Report)	2.0	15	15	30-V	70 -R	100
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>210</b>	<b>490</b>	<b>700</b>

\*Contact hours include work relating to Lecture and Practical (L-P)

### 1.1 MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR

#### COURSE OBJECTIVES

**60 Hours**

1. Present a thorough coverage of management theory, human behaviour, organizational behaviour and practice. The objective is to help the students understand the fundamental concepts and principles of management; the basic roles, skills, and functions of management. It is also intended to give an overview of the historical development, theoretical aspects and practical application of managerial process.

- To appraise the students on the application oriented case studies on functions of management and behavioural processes

#### LEARNING OUTCOMES

By the end of the course, the student should be able to –

- Demonstrate their conceptual skills, understanding and application of principles and functions of management, managerial actions of planning
- Demonstrate their ability in applying the managerial and behavioural concepts in real time problems.



### **MODULE 1: INTRODUCTION**

**10 Hours**

Nature of Management – The Evolution of Management – Science or Art : Functions of management- Planning and decision making, organising and Staffing, Controlling and Directing.

### **MODULE 2: ORGANISATION STRUCTURE, DESIGN, AND DEVELOPMENT** 12 Hours

Determinants and Parameters of Organisational Design-Organisation and Environment, Organisational Strategy, Organisation and Technology, Types of Organisational Structures, Organisational Decision-Making and strategy-Formulation, Organisational Culture ,Organisational Failure and Pathology ,Organisational Learning and Transformation

### **MODULE 3: INTRODUCTION TO ORGANIZATIONAL BEHAVIOUR** 08 Hours

Individual Behaviour and Learning – Personality – Transactional Analysis – Values & value systems – Emotions – Attitudes – ABC Model – Types of attitudes – Job related outcomes – Perception processes, Nature – Factors influencing individual decision making – Implications in the organizational Context.

### **MODULE 4: LEADERSHIP AND MOTIVATION**

**10 Hours**

Introduction – Leadership versus Management – Transition in Leadership theories – Leadership theories –Expectancy and the Path-goal theory of leadership, Situational Leadership Theory, Contingency theories of leadership , Exchange theories of leadership, Transformational Leadership Theory- Leadership and change, Contemporary Leadership Theories

Motivation in work settings – Managerial issues and challenges – Theories - Maslow’s Need theory, McGregor XY Theory, Herzberg’s Two Factor Theory, Vroom’s Valence and Instrumentality, New ideas in motivation – Eustress, Strength and Hope, Positive energy and full engagement.

### **MODULE 5: GROUP DYNAMICS AND TEAM BUILDING**

**10 Hours**

**Group Dynamics** –Individual and Group Behaviour – Norms of Behaviour, Group cohesion, social loafing, loss of individuality, Group Formation and Development – The five-stage model, Factors that influence Group Effectiveness – Work team structure, work team process, diversity, creativity – Empowerment Skills and Self-Managed Teams – Johari Window.

**Team building** – Working teams and Team effectiveness – Intra team dynamics – Influence of the group on individual – Group decision making – Inter group relations – Negotiation Skills - Collaboration and Conflict – Conflict management Styles – Avoiding, Accommodating, Competing, Compromising and Collaborating

## **MODULE 6: ORGANIZATIONAL CHANGE: DEVELOPMENT & TRANSFORMATION**

**10 Hours**

Introduction to organisational change, forces of change, reinventing Kurt Levin, organisational routines and mental models, change need analysis, content of change, types and styles of change, building capability for change, providing leadership for change, action research and dialogue, types of change, organisational vision, cultural change, strategic planning, creating support system and managing transition, process oriented strategies, competitor oriented strategies and customer oriented strategies, emerging trends & transformation.

### **PEDAGOGY / METHODOLOGY**

(Lectures, Case Study, Assignments, Seminar, Discussion, Role plays, Group Activity, Simulation, Business Games, Industrial and Field Visit etc.). Focus on practical exercises help students to maintain their interest levels in learning and also enhance their understanding of the subject. These activities will make the students industry ready.

### **SKILL DEVELOPMENT EXERCISES**

1. **Leadership** – Role play, case studies
2. **Motivation** – Role play, management games, Movie
3. **Role of IT in overall organizational performance** – Group Discussion, Seminar
4. **Team work** – Management games
5. **Attitude** – Ice breakers, short exercises ex: experience sharing, case studies, role play
6. **Perception** – Group Discussion, Visual exercises, quizzes
7. **Management functions (PODL)** – Real time activities like arranging for cultural, sports and other events for the department, for an external agency like NGO etc.
8. **Change management**- Management games, case studies, Workshop, role play
9. **Decision making**- Group Discussion, case studies, management games, role play
10. **Personality Profiling Exercises**

### **RECOMMENDED BOOKS**

1. Williams & Nelson, “Management and ORGB”, CengageLearning
2. Griffin, “Management: Principles and Practices”, CengageLearning
3. Fred Luthans, “Organizational Behaviour”, McGraw-Hill International
4. Stephen P. Robbins, “Organizational Behaviour”, Prentice Hall
5. Ashwathappa K, “Organizational Behaviour”, Himalaya Publication
6. Waddell, Creed, Cummings & Worley ; “Organisational Change : Development & Transformation”, Cengage Learning



## REFERENCE BOOKS

1. Nelson, Quick and Khandelwal “ORGB – A South-Asian Perspective”, Cengage
2. Stephen P. Robbins, David A. Decenzo, Sanghmitra Bhattacharya, Madhushree Nanda Agarwal, “Fundamentals of Management”, Pearson Education
3. Kreitner, “Management Theory and Applications”, Cengage Learning
4. Stephen P. Robbins and Mary A. Coulter, “Management”, Pearson Education
5. Harold Koontz, O'Donnell and Heinz Weihrich, “Essentials of Management”, Tata McGraw Hill
6. P C Tripathi, P N Reddy, “Principles of Management”, McGraw Hill Education
7. Richard L. Daft, “Principles Of Management”, Cengage Learning

## 1.2 MANAGERIAL ACCOUNTING

### COURSE OBJECTIVES

60 Hours

1. To enable the students to obtain knowledge about the concepts of accounting principles, techniques of accounting and to introduce students to modern accounting software and IFRS.
2. The syllabus also contains the practical components of the subject which enable the students gain more practical knowledge under each module.

### LEARNING OUTCOMES

1. To familiarize the students with financial statements and principles underlying them and to develop their skills in reading Annual Reports. To lay a foundation for developing student's skills in interpreting financial statements
2. To familiarise the students with cost records / statements and principles underlying them and to develop their skills in understanding and appreciating cost information. To develop an appreciation about the utility of cost information as a vital input for management information and decision making process

### MODULE 1: INTRODUCTION TO FINANCIAL ACCOUNTING

08 Hours

Purpose and objectives of accounting information – Uses and users of accounting information – Branches of accounting – Basic terminology in accounting – GAAP and the accounting environment – Accounting Concepts and Conventions

### MODULE 2: RECORDING ACCOUNTING TRANSACTIONS

16 Hours

Concept of Double Entry System – Basic knowledge of Accounting Process: Journal, Ledger-subsiary books, Trial Balance (Theory and Problems), reconciliation statement – An overview of Accounting Standards in India – Preparation of Final accounts – Income statement and Balance sheet (Problems on Vertical method)

### MODULE 3: MEASURING AND REPORTING ASSETS AND LIABILITIES

12 Hours

Accounting for Tangible & Intangible Assets: Fixed Assets(AS-10) and Depreciation(AS-6) – Inventory Valuation(AS-2): Valuation of Goodwill

### Module 4 : Analysing and Interpreting Financial Statemetns

12 Hours

Objectives of financial statements analysis, sources of information, standards of comparision, quality of earnings, techniques of financial statement analysis, analysing financial statements using ratio analysis, cash flow statement, understanding annual reports and earnings relations



## MODULE 5: COSTING

08 Hours

Meaning- Classification of Cost – Cost Sheet-cost reduction techniques, standard costing-Marginal Costing –CVP and BEP analysis (problems)– Budgetary Control—Types of budget—Problems on Flexible budget and Cash budget only.

## MODULE 6: EMERGING TRENDS

04 Hours

IFRS – Inflation accounting – Human Resource Accounting –Responsibility Accounting- Forensic Accounting – Environmental Accounting – Corporate Social Reporting- Carbon Accounting. (Only Concepts)

## SKILL DEVELOPMENT EXERCISES

1. Prepare a chart of accounting cycle
2. prepare a specimen of journal, ledger and trial balance
3. Analyse any one MNC company P&L account and balance sheet
4. Draw cost sheet for manufacturing a product
5. Preparation of budget for a company
6. Preparing BEP analysis for a new product of a company

## RECOMMENDED BOOKS (Latest Editions)

1. Narayanaswamy. R, “Financial Accounting: A Managerial Perspective”, Prentice Hall of India(PHI)
2. Paresh Shah, “Basic Financial Accounting For Management”, Oxford University Press
3. Ramachandran, N. & Kakani, R.K., “Financial Accounting for Management”, Tata McGraw Hill.
4. Godwin/Alderman/Sanyal, “Financial ACCT: A South-Asian Perspective”, Cengage Learning.
5. Bhattacharya, S.K “Accounting for Management : Text and Cases”, Vikas Publishing House
6. M.N. Arora, “Accounting for Managers”, Himalaya Publications
7. Bhattacharya, H., “How to Read a Balance Sheet: Adapted to Indian laws & requirements”, Oxford and IBH Publishing Company Pvt. Ltd

## REFERENCE BOOKS (Latest Editions)

1. Shankarnarayan/Ramanath, “Financial Accounting for Management”, Cengage Learning
2. Grewal, T.S. Introduction to Accounting. S. Chand & Company, New Delhi

3. Horngren, Charles T., Sundem, Gary L., Elliott, John.A and Philbrick, Donna, “Introduction to Financial Accounting”, Prentice Hall International Inc, Englewood Cliffs
4. Gupta, Ambrish, “Financial Accounting for Management: An Analytical Perspective” Pearson Education
5. Maheswari & Maheswari, “Accounting for Managers”, Vikas Publishing
6. Anthony, “Robert N. et al. Accounting: Text and Cases”, Tata McGraw Hill
7. M Hanif, A Mukherjee, “Financial Accounting”, McGraw Hill Education
8. Tulsian and Tulsian, “ Financial Reporting”, S.Chand



### 1.3 BUSINESS PLANNING AND REGULATIONS

#### COURSE OBJECTIVES

1. To acquaint students with general business law issues to help them become more informed, sensitive and effective business leaders
2. To understand the basic provisions of laws concerning incorporation and regulation of business organizations
3. To provide the students with an understanding of fundamental legal issues pertaining to the business world to enhance their ability to manage businesses effectively
4. To focus on legal and statutory compliances
5. To develop the skills to interpret the laws and apply it to practical problems, affecting the operations of a business enterprise

#### LEARNING OUTCOMES

By the end of the course, the student should be able to:

1. Demonstrate an understanding of the Legal Environment of Business
2. Apply basic legal knowledge to business transactions

#### MODULE 1: INTRODUCTION TO BUSINESS PLANNING

**08 Hours**

Components of Business Planning – Marketing Planning, Financial Planning, HR Planning, Production Planning, R & D Planning

#### Module 2: CORE STRUCTURE OF INDIAN ECONOMY

**10 Hours**

**Economic Environment:** Economic Factors, Claims and Counter Claims, New Economic Policy, Make in India, The Second Generation Reforms

**Agriculture:** Role Of Agriculture, Extent of Farm Output, Problems, Agenda for Action, Agricultural Policy, National Commission on Farmers.

**Industry:** Industrial Policy Resoulution 1948, Industrial Policy 1956, Industrial Policy 1991

**Services:** Finance, Marketing, Banking, Insurance, Healthcare, Education, Travel and Tourism, Telecommunication, Transport

#### MODULE 3: CORPORATE REGULATIONS

**12 Hours**

**Indian Contract Act:** Agreement and Contract, Essential of a valid Contract, Classification of Contracts, Remedies for breach of Contract.

**Negotiable Instruments:** Promissory Note, Bills of Exchange

**Company Act 2013 and 2017:** Major principles, Formation, Memorandum and Articles of Association, Prospectus, Power, Duties and Liabilities of Directors, Winding up of Companies

**Intellectual Property Right:** Trade Marks, Patents, Copyright, Trade Secrets, Geographical Indications

**MODULE 4: CONSUMER REGULATIONS**

**10 Hours**

**The Consumer Regulations Act 1986 and 2019,** Consumer Disputes, Complaint, Unfair Trade Practices, Restrictive Trade Practices, Redressal of Consumer Disputes, State Commission, National Commission, Procedure applicable to the National Commission, Consumer Protection Councils.

**Information Technology Act 2002, 2008 Amendment,** Cyber Law in India, Salient features of IT Act, Digital Signature

**MODULE 5: ENVIRONMENTAL REGULATIONS**

**08 Hours**

Environmental Protection Act 1986 – Salient features of the Act, Global Warming, Sustainable Development, Carbon Credit Accounting.

**MODULE 5: EMPLOYEE REGULATIONS**

**12 Hours**

Labor Compliances in India – Laws on Wages, Social Security, Industrial Safety & Welfare and Industrial Relations, The Sexual Harassment of Women at Workplace Prevention, Prohibition and Redressal Act, 2013

**PEDAGOGY / METHODOLOGY**

Lectures, Case Study, Business Dilemma, Critical Analysis, Assignments, Seminar and Discussion; initially conceptual clarity should be taken up followed by case studies where student-centric method is the only solution. Websites of organizations should be referred by students to write assignments to know legal practices followed by them. Illustrate the best legal practices followed by an Indian Company with examples to each such practice

**SKILL DEVELOPMENT EXERCISES**

1. Companies Act: To learn the sections and case law and strategize litigation. Create a strategy to defend your client when sued by a co-shareholder. How do you create a good corporate governance system? What are the compliances under SEBI laws for listed companies?
2. Classroom discussions can be held in respect of facts of live cases.
3. Students to collect videos/audio case lets and make presentation.
4. Case laws in respects of different acts can be listed by the students.



5. In respect of sale of goods in different terms and conditions of sale can be considered red as a case study.
6. Student can collect latest case laws, facts of the case and judgment in respect of different acts in Google / Newspapers.
7. Industrial visit to discuss about functional challenges/issues
8. Visit to NGO's to prepare a report

**RECOMMENDED BOOKS (Latest Editions)**

1. Aswathappa K, Essentials of Business Environment, Himalaya Publishing House
2. Francis Cherunilam, Business Environment, Himalaya Publishing House
3. RBI Bulletins
4. Public Sector Enterprises Survey
5. Dr. K. Ramachandra, Legal Aspects of Business
6. B.D.Singh, "Labor Laws for Managers", Excel Books
7. C.S Venkata Ratnam, "Industrial Relations", Oxford University Press
8. National Sample Survey Organization reports
9. Labour Regulations Reports

## 1.4 ECONOMICS FOR BUSINESS DECISIONS

### COURSE OBJECTIVES

**60 Hours**

1. To acquaint the participants with concepts and techniques used in Economics
2. To enable them to apply this knowledge in business decision-making

### LEARNING OUTCOMES

On completion of the course, the students will

1. Have micro and macro-economic perspective to understand the under pinning of management.
2. Be able to apply Economics principles and concepts in making Managerial Decisions

### MODULE 1: INTRODUCTION

**08 Hours**

Introduction to Managerial Economics; The roles of the firm and the House hold

Decision Making in the Household - Consumer Choice. Theory of Demand; its Determination, Estimation and Forecasting. Economic principles relevant to managerial decision making. Opportunity cost, production possibility curve, concept of increments and margin, discounting principle, Theory of business firm

### MODULE 2: DEMAND ANALYSIS AND CONSUMER EQUILIBRIUM

**10 Hours**

Demand theory and analysis, Elasticity of Demand and its role in Managerial decision making, Demand forecasting, Techniques of Demand forecasting. Consumers Equilibrium: Cardinal utility approach, Indifference curve approach, Theory of revealed preference, Consumer surplus.

### MODULE 3: THEORY OF PRODUCTION

**10 Hours**

Production function: Laws of variable proportions and Return to scale, Economies and diseconomies of scale, Isoquants and Isocost, optimum combination of inputs, Elasticity of substitutions.

### MODULE 4: COST AND REVENUE CONCEPTS

**10 Hours**

Cost and Revenue concepts: kind of costs, interrelationship of cost. Cost reduction and cost control, Short run and long run cost functions and Market Equilibrium, Revenue Concepts – Relationship between total, marginal and average revenue, significance of revenue curves, Relation between cost and revenue curves. Optimal Input Choice revisited: Cost Minimization vs. Output Maximization - Relation between SR and LR Costs - Economies of Scale in terms of Cost Function.



## **MODULE 5: MARKET STRUCTURE AND EQUILIBRIUM**

**12 Hours**

Characteristics of different market structure, Price determination and firm's equilibrium under perfect competition, monopolistic competition, monopoly and oligopoly, price discrimination, international price discrimination and dumping, pricing methods. Theories of factor pricing, theories of interest and investment decisions.

## **MODULE 6: MACROECONOMIC ANALYSIS**

**10 Hours**

Indian Economic Environment: Measurement of National Income: Basic Concepts, Components of GDP- Measuring GDP and GNP, Difficulties in measuring National Income, Growth Rate, Business Cycle – Features, Phases, Economic Indicators. Inflation: Types, causes, supply of money, fiscal and monetary Policy.

### **PEDAGOGY / METHODOLOGY**

Lectures, Case study analysis, Exercises, Guest speakers, Videos, and Role plays

### **SKILL DEVELOPMENT EXERCISES**

- Graphically portray consumer surplus.
- List at least five conceptually distinct factors that cause demand to change.
- Student is to choose a product, price quantity demand quantity supply and derive the demand and supply equations in real situation
- Categorize demand as being elastic or inelastic from given data.
- Explain the unique properties and reasons behind totally elastic and totally inelastic demand.
- Argue that a firm should not operate in the inelastic range of demand
- Business examples of opportunity cost.
- Demonstrate verbally and graphically that the profit-maximizing price occurs where demand is elastic if marginal cost is positive
- Distinguish the features of monopoly, oligopoly and monopolistic competition, giving two examples of each

### **RECOMMENDED BOOKS (Latest Editions)**

1. Gethika, Piyali Ghosh & Purba Roy Choudhury, "Managerial Economics", Tata McGraw Hill
2. Pindyck Rubinfeld & Mehta, "Microeconomics", Pearson
3. Ritika Sinha, "Economics for Manager", SBPD Publishing House
4. Pannerselvam/Sivasankaran/Senthilkumar, "Managerial Economics", Cengage Learning
5. Dwivedi D.N, "Managerial Economics", Vikas Publication

### **REFERENCE BOOKS (Latest Editions)**

1. Mankiw, "Principles of Microeconomics", Cengage Learning
2. Damodaran Suma, "Managerial Economics", Oxford University Press
3. Dominick Salvatore, "Managerial Economics", Oxford University Press
4. Petersen Lewis & Jain, "Managerial Economics", Pearson



## 1.5 BUSINESS STATISTICS

### COURSE OBJECTIVES

**60 Hours**

1. To elevate students' awareness of data in everyday life and prepare them for a career in today's age of information. To develop statistical literacy skills in students in order to comprehend and practice statistical ideas to solve problems.
2. To promote the practice of the scientific method in our students: the ability to identify questions, collect evidence (data), discover and apply tools to interpret the data, and communicate and exchange results.

### LEARNING OUTCOMES

1. At the end of this course, students will achieve statistical literacy and will be able to find ways to move beyond the-what of statistics to the how and why of statistics.
2. The techniques and tools used to come at different decisions.
3. The various analytical techniques that can be for decision making.

### MODULE 1: INTRODUCTION TO STATISTICS:

**12 Hours**

Definition, Importance of Statistics; Statistical Data – Sources and Types - Classification of data, Frequency Distribution, Diagrammatic and Graphic Representation - Histograms, Frequency Polygon, Cumulative Frequency Curves or Ogives, Numerical descriptive techniques: Measures of Central Tendencies. Measures of Variability - Range, Standard Deviation, Variance, and Coefficient of Variance; Skewness—Karl Pearson's Co-efficient of Skewness, Bowley's Co-efficient of Skewness.

### MODULE 2: TIME SERIES ANALYSIS AND INDEX NUMBERS

**10 Hours**

**Time Series:** Introduction, Objectives of Time Series, Identification of Trend - Methods of measuring: Semi averages, Moving averages, Method of Least squares, Non-linear trend. Application of time series in business.

**Index numbers:** Meaning, types and uses of Index numbers, Construction of Price, Quantity and Value indices, fixed base and Chain base method. TRT & FRT test. Consumer price index.

### MODULE 3: CORRELATION AND REGRESSION ANALYSIS

**10 Hours**

Introduction and significance, Scatter diagram, Karl Pearson's coefficient of Correlation for Uni-variate and Bi-variate series, Spearman's Rank Correlation. Regression analysis: Regression equations.

### MODULE 4: HYPOTHESIS TESTING, PARAMETRIC & NON PARAMETRIC TESTS

**14 Hours**

Hypothesis Testing, Formulation of Hypotheses, Type I and II error, z-test, t-test, f-test and Chi-Square test, Analysis of Variance (ANOVA) -one and two way. Design of experiments, Non-parametric tests – Sign test, Wilcoxon test, Mann-Whitney U test, Median test, Run test and Kolmogorov –Smirnov one sample test

## MODULE 5: THEORY OF PROBABILITY

08 Hours

Concept and Definition - Relevance to Management Decisions law of independence - Sample Space and Events – Union of events, Relevance of Permutations and Combinations to Probability - Rules of Probability, Bayes' theorem & its applications, basics of Random Variables and Concept of Probability Distribution. Theoretical Probability Distributions: Binomial, Poisson and Normal.

## MODULE 6: DECISION THEORY

Decision Theory – Decision under certainty, Decision making under risk (EMV criteria) and Decision making under uncertainty. Decision tree (Problems).

## SKILL DEVELOPMENT EXERCISES

Students are expected to perform these activities or find the following parameters for a given dataset using MS Excel and SPSS.

- Exp 1. Draw all types of Diagrams and Graphs
- Exp 2. Construction of one way and two way tables
- Exp 3. Arithmetic Mean
- Exp 4. Geometric Mean
- Exp 5. Harmonic Mean
- Exp 6. Median, Mode
- Exp 7. Minimum, Maximum, Range
- Exp 8. Quartile Deviation, Mean Deviation, Standard Deviation, Variance, Coefficient of Variance
- Exp 9. Co-efficient of Skewness: - Karl- Pearson, Bowley, Kelly.
- Exp 10. Correlation coefficient
- Exp 11. Regression coefficient - Slope (b in  $y = a + bx$ )
- Exp 12. Regression Constant - Intercept (a in  $y = a + bx$ )

## RECOMMENDED BOOKS (Latest Editions)

1. James R. Evans, “Business Analytics – Methods, Models and Decisions”, Prentice Hall
2. T N Srivastava, ShailajaRego, “Statistics for Management”, Tata McGraw Hill
3. SP Gupta, “Statistical Methods”, Sultan Chand & Sons
4. Glynn Davis and Branko Pecar, “Business Statistics using excel”, Oxford University Press
5. J K Sharma, “Fundamentals of Business Statistics”, Vikas Publication

## REFERENCE BOOKS (Latest Editions)

1. Keller/Arora, “BSTAT: A South-Asian Perspective”, Cengage Learning
2. S C Gupta, “Fundamentals of Statistics”, Himalaya Publications
3. N D Vohra, “Business Statistics”, Tata McGraw Hill



4. Levin & Rubin, “Statistics for Management”, Prentice-Hall
5. Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi, “Statistics for Management”, Pearson India
6. Amir D Aczel, Jayavel Sounderpandian, Palaniswamy Saravanan, Rohit Joshi, “Complete Business Statistics”, McGraw Hill Education

## 1.6 MARKETING MANAGEMENT

### COURSE OBJECTIVES

60 Hours

1. The course will help the learner understand the basic concepts, tools and techniques relevant to marketing management and its application.
2. Student should be able to analyse basic marketing environment and marketing mix components, construct consumer profiles using understanding of buyer behaviour, and develop marketing plans and strategies.

### LEARNING OUTCOMES

At the end of this course the students should be able to:

1. Demonstrate the basic concepts about marketing management and the marketing process and describe the environmental forces that affect the company's ability to serve its customers.
2. Use a company's resources to increase its customer base, improve customer opinions of the company's products and services and increase the company's perceived value.

### MODULE 1: INTRODUCTION TO MARKETING ENVIRONMENT

8 Hours

Fundamentals of Marketing, Evolution of Marketing – different orientations; The Need for analysis of the marketing environment, Micro and Macro factors impacting marketing, Situation analysis and market opportunity identification; Designing and managing services, New trends in marketing

### MODULE 2: MARKETING MIX & STRATEGIES

14 Hours

Market Segmentation, Targeting and Positioning, Components of marketing mix for Products and Services; The Fundamentals of product management - Introducing New Products, Product Life Cycle - concept and relationship with marketing strategies.

Marketing Channels, Distribution Strategy, Channel Management, Introduction to pricing strategies, Promotion: Integrated Marketing Communications, advertising and public relations, Personal Selling, Sales Management.

### MODULE 3: CONSUMER BEHAVIOUR AND SELECTING SEGMENTS

10 Hours

Understanding Consumer Behaviour in Indian and Global context: Factors influencing buyer behaviour – Cultural, Social, Individual and Psychological influences, understanding buyer behaviour models- Applications, Consumer buying and business buying.



#### **MODULE 4: SALES FORECASTING AND SALES MANAGEMENT**

**08 Hours**

Sales Forecasting Methods - analytical and statistical methods; Introduction to Marketing Information systems and marketing audit

Sales Management – Sales Process, sales management strategies – Business to Consumer (B2C), Business to Business (B2B).

#### **MODULE 5: CUSTOMER RELATIONSHIP MANAGEMENT (CRM)**

**10 Hours**

Customer relationship management(CRM) – CRM Cycle, implementing a CRM system, Identify customer relationship, understand interactions of current customer base, capture customer data, store and integrate customer data, identify the best customers – data mining and customer segmentation, leverage customer information – campaign management, cross-selling, retaining loyal customers, designing targeted marketing communications, reinforcing customer purchase decisions, improving customer service, privacy concerns and CRM

#### **MODULE 6: DIGITAL MARKETING**

**10 Hours**

Social Media – Social media and integrated marketing communications, creating and leveraging a social media campaign, evaluation and measurement of social media, social behaviour of consumers, social media tools – blogs, microblogs, social networks, media sharing sites, social new sites, review sites, virtual worlds and online gaming, Social media and mobile marketing.

#### **PEDAGOGY / METHODOLOGY**

Lectures, case discussions, class /group activities and role plays can be used in the class room. Student presentations of specific brands and their marketing strategies or components thereof, after every unit will provide exposure to practical aspects.

#### **SKILL DEVELOPMENT EXERCISES**

1. A number of exercises are suggested in the following websites and all the students must be asked to complete two exercises suggested by the faculty for every unit and the same needs to store after providing feedback to students

- <http://www.greatideasforteachingmarketing.com/>
- [http://www.swlearning.com/web\\_resources/marketing\\_topics.html](http://www.swlearning.com/web_resources/marketing_topics.html)
- <http://www.marketingteacher.com/>

2. Prepare a market strategy for an product of your choice
3. Using 4P's, draw a blue print
4. Meet few consumers and try to analyse their buying behaviour
5. Take some product and re-examine the pricing strategy

#### **RECOMMENDED BOOKS (Latest Editions)**

1. Lamb/Hair/Sharma/McDaniel, "MKTG: A South-Asian Perspective", Cengage Learning
2. Philip Kotler, Kevin Lane Keller, Abraham Koshy and MithileshwarJha "Marketing Management"; Pearson Education
3. Etzel, Walker, Stanton & Pandit "Marketing", Tata McGrawHill

#### **REFERENCES (Latest Editions)**

1. Paul Baines, Chris Hill and Kelly Page, "Marketing Management", Cengage Learning
2. Philip Kotler, Gary Armstrong, Prafulla Agnihotri, "Principles of Marketing", Pearson India
3. William D Perreault and Jerome McCarthy, "Basic Marketing: A Global Managerial Approach", Tata McGraw Hill
4. Gary L. Lilien, Philip Kotler, K. Sridhar Moorthy, "Marketing", Prentice-Hall
5. Rama Bijapurkar, "We are like that only ", Penguin India
6. Rama Bijapurkar, "Winning In the Indian Market", Wiley

## 1.7 EMPLOYABILITY SKILL DEVELOPMENT – I

### COURSE OBJECTIVES

45 Hours

1. To impart employability skills with activities.
2. To bridge the gap between the skill requirements of the employer or industry and the competency of the students

### LEARNING OUTCOMES

1. Demonstrate Employability skills required for business situations.
2. Inculcate potential skills to communicate effectively, take initiative, solve problems, and demonstrate a positive attitude, inter-personal skills so as to hold a good impression and positive impact

### MODULE 1: INTRODUCTION

06 Hours

Employability skills, Learning about yourself: self-appraisal, peer-appraisal and teacher/mentor appraisal, SWOC Analysis, Analyse how self-concept can affect job performance, Relating personal priorities to professional priorities, Employer perception on employability skills

### MODULE 2 : COMMUNICATION SKILL DEVELOPMENT

13 Hours

Understanding the basics of verbal communication, Types of verbal communication, Effective interaction skills, Professional telephonic conversation skills-telephone etiquette – placing and receiving telephone calls, leaving professional messages- Using digital skills- Networking through social media, Online profile management.

Non-verbal Communication – paralinguistic and proxemics - body language of a good presenter and listener

Writing effective e-mail – main elements of e-mail messages, creating professional e-mail messages, Business meetings: Pre-meeting and Post-meeting documentation, Preparation of agenda, Resolution drafting, proceedings and minutes of the meeting.

### MODULE 3: INTERPERSONAL SKILLS

05 Hours

Importance of inter-personal skills – analysis of ego states and transactions- positive relationship – positive attitude – empathise: comprehend others opinions, points of views, and face them with understanding , trust – emotional bonding – handling situations.



## **MODULE 4: TIME MANAGEMENT AND STRESS MANAGEMENT**

**10 Hours**

Time Management – importance of time management – Creating and using a to-do list using mobile phone apps to plan and keep track of progress of tasks planned and completed-identifying time wasters—day to day time management techniques– time management tools- using time management apps.

Stress Management – causes of stress and its impact – personality and stress- how to manage - stress busters - Components of Emotional Intelligence- self-awareness, self- regulation, internal motivation, empathy and social skills.

## **MODULE 5: RESUME WRITING**

**06 Hours**

Cover Letter – building careers and crafting resumes – essentials of an effective resume – planning, writing, and completing resume – sending follow-up messages

## **MODULE 6: CAREER PLANNING**

**05 Hours**

Understanding career planning, researching your options, long term career plan, short term career goals, pursuing training opportunities, planning your promotions, making career changes, preparing to leave a job, career and job websites

### **PEDAGOGY**

Ice- breaking, Brainstorming and simulation exercises, movie clips, videos, Educational games, examples, story/sharing questionnaire/role play/exercises/ Task, Video/Audio recording, Group talk, presentations, team building exercises, mock meetings

### **Record Books to be maintained by students**

#### **1. Record book for communication** – Vocabulary and Sentences

Maintain a record book of new words, phrases, idioms or sentence structures learnt.

**2. Record book for Business News** – develop understanding of the business environment by recording the latest business news stories in brief.

### **RECOMMENDED BOOKS (Latest Editions)**

1. Philips R. Hunsaker, “Training in Interpersonal Skills”, Tata McGraw Hill
2. Butterfield, “Soft Skills for Everyone”, Cengage Learning
3. Career Development Centre, “Soft Skills”, Green Pearl Publications
4. Alex K, “Soft Skills – Know Yourself & Know the World”, S.Chand & Company Ltd

### REFERENCE BOOKS (Latest Editions)

1. B N Ghosh, "Managing Soft Skills for Personality Development", McGraw Hill Education
2. Raman/Upadhyay, "Soft Skills – Key to Success in Workplace and Life", Cengage Learning
3. Monippally, Matthukutty. M, "Business Communication Strategies", Tata McGraw-Hill
4. M Ashraf Rizvi, "Effective Technical Communication", McGraw Hill Education
5. Peter W Cardon, Business Communication, McGraw Hill Education
6. Suzanne C. Janasz, Karen O. Dowd, Beth Z. Schneider, "Interpersonal Skills in Organisation", Tata McGraw Hill Education
7. Gopaldaswami Naresh, "The Ace of Soft Skills", Pearson
8. Shivkera – Personality Development (You Can Win)

## 2.1 ENTREPRENEURSHIP AND START-UP MANAGEMENT

### COURSE OBJECTIVES

60 Hours

1. To make the students aware of the importance of entrepreneurship opportunities available in the society for the entrepreneurs.
2. To acquaint them with challenges of starting new ventures and enable them to investigate, understand and internalize the process of setting up a business

### LEARNING OUTCOMES

By the end of the course, the student should be able to –

1. Demonstrate the entrepreneurial process and recognize the core role of creativity and innovation in managing the entrepreneurial process effectively.
2. Demonstrate the issues and decisions involved in financing and growing the new Venture

### MODULE 1: INTRODUCTION TO THE WORLD OF ENTREPRENEURSHIP

10 Hours

Evolution and revolution of Entrepreneurship. Three schools of thought: a. Entrepreneurship as an economic function, Trait based theory, Entrepreneurship as a behavioral phenomenon. Myths and realities of Entrepreneurship. Types of entrepreneurs. Growth of Entrepreneurship. Entrepreneurial competencies, Intrapreneurship.

Assignment: Preparing video/print profile of an entrepreneur

### MODULE 2: ENTREPRENEURSHIP PROCESSES

10 Hours

**Pre-startup**- Idea generation and evaluation. **Startup**- Evaluating the opportunity, developing the business model, writing the business plan, assessing the required resources, acquiring the required resources, Managing the venture. **Growth**- Various growth strategies that entrepreneur can pursue. **Exit**- Various exit cum harvesting strategies

### MODULE 3: BUSINESS PLAN AND FEASIBILITY ANALYSIS

10 Hours

Business plan and its contents. Financial plan, market plan, operational plan and funding plan. Feasibility analysis -Technical feasibility, market feasibility, financial feasibility, environmental feasibility, economic feasibility.

Assignment: Preparing a real time business plan and presenting into the potential investors.



#### **MODULE 4: ECO- SYSTEM SUPPORTING GROWTH OF ENTREPRENEURSHI 10 Hours**

Sources of Finance, Central government institutions and agencies: SIDBI, NABARD, NSIC, SISI, EDI, etc. State government institutions and agencies: DIC, CEDOK, KIADB, KSFC, etc. Other supporting agencies RUDSETI, Incubation centers, VCs, Makers labs, TBIs, etc. Specific initiatives to promote entrepreneurship: Startup India, Stand up India and Mudhra Make in India, other initiatives.

#### **MODULE 5: BUSINESS ETHICS AND LEGAL ASPECTS 10 Hours**

Importance and relevance of business ethics. Emerging business ethics issues. Understanding ethical decision making and corporate governance. Ethics as a dimension of social responsibility, formalities for setting up of new venture. Legal aspects involved in setting up new ventures.

#### **MODULE 6: CONTEMPORARY DEVELOPMENT IN ENTREPRENEURSHIP 07 Hours**

Social entrepreneurship, Women entrepreneurship, Next-Gen entrepreneurship, Family Business, Effectuation Theory, Problem Mapping, Design thinking, achieving entrepreneurial leadership in the new millennium, problems, challenges and success stories in start-ups.

#### **SKILL DEVELOPMENT EXERCISES**

1. Identify five Business Ideas and prepare Business Plan for those ideas.
2. Proposal to Vice-Chancellor along with presentation
3. Story-telling for New Venture Creation
4. What do you mean by viable business opportunity? Justify the stand to your answer.
5. SWOT analysis of a successful entrepreneur you know
6. How do you play the role of an Intrapreneur in an organization, give details
7. Draw up a market feasibility plan for a startup company of your choice, remember you are the consultant for them and you get consultancy charges for such service.
8. Do you agree that the government cannot facilitate growth of entrepreneurs, why? Justify your answer and give a report how can there be growth of entrepreneurship in India.
9. Why does an entrepreneur fail? Bring two case studies of both fail and turn around stories with proper analysis of the details.
10. Identify famous business person(s) of India who now play the role of venture capitalists and support startups, give details of their ventures.
11. What do you emulate from successful women entrepreneurs/ bring few examples to justify your answer.
12. What have you to say that the B-Schools should do to promote entrepreneurial culture in the campus?

### RECOMMENDED BOOKS (Latest Editions)

1. Entrepreneurship-11th edition, Robert D Hisrich, Michal P Peter, Dean A Shepherd, Tata MC Graw hill Education Pvt Ltd
2. New business ventures and the Entrepreneurs- 6th edition, Stevenson or Roberts or Grovesbeek, Irwin, Inc.merhall
3. New venture creation, entrepreneurship for the 21st century, 76th edition, Jeffrey.A.timmous, Stephen spinelli, Tata mergaw hill, edition
4. Entrepreneurship development small business enterprises Poornima, Charanti Matt edition 5th, Dorling Kindersley (India Pvt Ltd)
5. Bangalore Business ethics, ethical decision making and cases 6th edition O.C Ferrell, Jhon paeel fraedrich, lindaferrel Houghton mifflinco, USA
6. 'Effectuation'- Saras Saraswathi
7. '8 steps to innovation' – Rishiksha T Krishnan and Vinay Dabholkar; Collins Publications

### REFERENCE BOOKS (Latest Editions)

1. Reddy, "Entrepreneurship: Text & Cases", Cengage Learning
2. David H. Holt , "Entrepreneurship: New Venture Creation", Prentice-Hall of India
3. K Ram Chandran, "Entrepreneurship Development: Indian cases on Change Agents" Tata McGraw Hill
4. Brigitte Berger , "The Culture of Entrepreneurship", ICS Press
5. Vasant Desai, "Entrepreneurial Development and Management", Himalaya Publication

## 2.2 BUSINESS RESEARCH METHODS

### COURSE OBJECTIVES

60 Hours

1. To enable students acquire thought process in research,
2. To imprint on them the paradigm of research in business & to make them use research as base for decisions

### LEARNING OUTCOMES

1. Demonstrate proficiency in defining a research problem, identifying variables or phenomena, identifying research designs, and developing purpose statements, research questions, hypotheses, and data collection.



2. Demonstrate proficiency in developing a research methodology for qualitative or quantitative designs, using appropriate statistical methods for data analysis.

### **MODULE 1: INTRODUCTION TO BUSINESS RESEARCH**

**06 Hours**

Nature and role of Business Research, Types of Research based on Purpose, Process, Outcome, Nature, Action and Logic, Theory Building – constructs, propositions, variables and hypotheses, Features of a good Research Study, Research Process, Internet and research

### **MODULE 2: RESEARCH PROBLEM, HYPOTHESIS AND DESIGN**

**10 Hours**

Identification and Selection of the Problem, Definition and Statement of the Problem, Evaluation of the Problem, Criteria and sources for identifying the problem, process of defining the problem. Nature, Definition and Characteristics of Good Hypothesis & types of hypotheses, Formulation and testing of hypothesis, The Design of Research, Meaning, Need, dimensions, types of research design.

### **MODULE 3: DATA COLLECTION AND MEASUREMENT**

**15 Hours**

Primary Data Collection, Classification of Survey methods, Evaluation Criteria for Survey Methods; Observation Techniques, Classification of Observation Methods, Advantages and Limitations of Observation Techniques, Secondary Data Collection, Classification of Secondary Data Sources, Evaluation of Secondary Data, Roadmap to use Secondary Data & Benefits and Drawbacks of Secondary data. Qualitative methods, Observational Methods, Focus Group Method, Personal Interview Method and Projective Techniques

Scales of Measurement, Classification of Scales - Single Item v/s Multi Item Scales, Comparative v/s Non-Comparative scales, Continuous Rating Scales; Criteria for Good Measurement, Criteria for Questionnaire Designing; Types of Questionnaire; Questionnaire Design Procedure, Pilot test, validity and reliability of Questionnaire, Cronbach's alpha, interview schedule.

### **MODULE 4: SAMPLING AND DATA PREPARATION**

**10 Hours**

Sampling, Concept of Sample and Target Population, Census and Sampling, Sample frame, Sample unit and sample element, Sample size, Determination of Sample Size, Characteristics of a Good Sample, Sampling Design; Probability and Non Probability, Sampling v/s Non-Sampling Error Data Preparation, Field Validation, Data editing, Coding, Content Analysis, Classification and Tabulation of Data, data transformation

### **MODULE 5: DATA ANALYSIS**

**14 Hours**

Basic data analysis: Descriptive Statistics, Univariate and Bivariate, Parametric & Non-Parametric Tests; Null & Alternative Hypothesis, Error in Testing of Hypothesis, Critical Region, Degrees of Freedom, One Tailed & Two Tailed Tests, Standard Error; Procedure for Testing of Hypothesis.



Parametric test, Non parametric test (Conditions for applicability, practical applicability, Implementation and statistical Inference of all the above tests)

### **MODULE 6: RESEARCH REPORT**

**05 Hours**

Types of Research Report, Report Format, Report Writing – Insight from the communication models, Report Formulation, Guidelines for effective Documentation and visual representation and Research Briefing –Oral Presentation, reports on the internet

### **SKILL DEVELOPMENT EXERCISES**

Using MS Excel, SPSS/SYSTAT/MINITAB for Data Analysis: Entering data from questionnaire, types of analysis, types and applicability of graphs. Advanced tools of analysis: Concepts of discriminant analysis - factor analysis - cluster analysis - conjoint analysis - multi dimensional scaling - perceptual mapping to be taught through practical/real business problems

Exp 1. Z-Test, t-test, F-test Values

Exp 2. Chi-Square test Values

Exp 3. Analysis of Variance (ANOVA) Values

Exp 4. Research Proposal writing

Exp 5. Data Interpretation and report writing: Short and Long reports:

Exp 6. Report presentation methods, ex: Power Point Presentation, etc.

### **RECOMMENDED BOOKS (Latest Editions)**

1. Zikmund/Adhikari, “Business Research Methods: A Soith-Asian Perspective”, Cengage
2. Deepak Chawla & Neena Sondhi, “Research Methodology-Concepts & Cases”, Vikas Publishing House
3. Donald R Cooper, Pamela S Schneider, J K Sharma, “Business Research Methods”, McGraw Hill Education

### **REFERENCE BOOKS (Latest Editions)**

1. Naval Bajpai, “Business Research Methods”, Pearson India
2. Rummel & Ballaine, “Research Methodology in Business”, Harper & Row Publishers
3. C.R.Kothari, “Research Methodology (Methods and Techniques)”, New Age International
4. R.Pannerselvam, “Research Methodology”, Prentice-Hall of India

## 2.3 MANAGING HUMAN RESOURCES

### COURSE OBJECTIVES

60 Hours

1. This course is designed for a systematic and comprehensive study about the various facets of Human Resource Management for students of Management. In this course, students will learn the basic concepts and frameworks of Human Resource Management (HRM), and understand the role played by HRM in effective business administration.
2. Students will also get a perspective of the problems associated with HRM and their causes.

### LEARNING OUTCOMES

On completion of the course, the students will be able to:

1. Define a comprehensive Human Resources Management strategy within both entrepreneurial and non-profit organisations, also on an international scale;
2. Plan and implement end to end human resource management process from – recruitment, selection, training, compensation, personnel development, evaluation and manage industrial relations;

### MODULE 1: INTRODUCTION

12 Hours

Human Resource Management: Definition – Objectives – Functions – Scope – models of HRM– HRM in India and Global context – Evolution of HRM –HR Metrics – Qualities of a good Human Resource Manager- Human Resource Outsourcing- HR Audit – Human Resource Information System (HRIS)

**Human Resource Planning:** HR Planning as a source of Information – Methods of HR Planning – Job Analysis, Job description and Job Specification – Job redesign, HR dashboard.

### MODULE 2: RECRUITMENT, SELECTION AND RETENTION

10 Hours

Purpose and Importance of Recruitment – Sources of Recruitment – Selection Process – Selection Techniques – Selection Errors – Orientation, Induction, On boarding and Placement. Retention – managing Attrition, Retention Strategies.

### MODULE 3: TRAINING AND DEVELOPMENT, CAREER MANAGEMENT 12 Hours

**Training and Development** – Training need analysis, designing a training program, Evaluating a training program- approaches, Methods of Training: Job Instructed Training , Coaching, Mentoring, Job Rotation, Apprenticeship training, Learning Theories – Jaen Piaget’s theory, Social Learning theory, Kolb’s model on Learning style of individuals



**Career Management** – Need for career planning – Career Development (CD) – Steps in CD – Elements in CD – Career anchors in CD – Diversity in CD – Counselling and Mentoring in CD – Competency: Concept – Meaning – Types – Process of Competency Mapping

**MODULE 4: COMPENSATION AND PERFORMANCE MANAGEMENT** **10 Hours**

**Compensation and Benefits** – Basics purposes of compensation, Wages versus Salaries, Components of Remuneration, Determinants of Compensation Strategy, Job Evaluation Methods, Pay for Knowledge and Skill Based Pay, Wage and Salary Administration, Incentives and Performance Based Rewards – Individual, Team and Group Incentive Plans ,

**Performance Management** –Performance Management- Different elements of Performance Management, process and evaluation techniques, issues and dilemmas, context and design model of system, Human Resources Accounting

**MODULE 5: MANAGING EMPLOYEE RELATIONS** **07 Hours**

Employee Relations: Meaning & Characteristics – Parties to Industrial relations – Theoretical Perspectives on Industrial Relations – Nature of Trade Unions – Types of trade unions – Reasons for joining TU – Problems of Trade Union – Causes for Industrial Disputes – Grievance Procedures – Redressal of Grievances through Collective Bargaining – Features – Workers participation in management – Laws relating to Employee Relations.

**MODULE 6: THE GLOBAL ENVIRONMENT** **09 Hours**

**Global Issues in HRM** – Stages of Development of Transnational Organizations, Structural Implications, IHRM Strategy, Understanding the cultural, political and legal environment – **Domestic Issues in IHRM** – Local recruiting and selection, training and compensation issues, **Managing International transfers and assignments**– Expatriates and corporate international strategy, selecting, performance management, training and compensating expatriates – Repatriation - The future of IHRM / HRM.

**PEDAGOGY / METHODOLOGY**

Lectures, Case study analysis, Exercises, Assisted private studying, Guest speakers, Videos, Company tours, and Role plays





## 2.4 BUSINESS ANALYTICS

### COURSE OBJECTIVES

60 Hours

1. To introduce the business intelligence process that support the decision making in business operations.
2. To expose the students to analytics practices used in various verticals across industries and thereby educating students to develop basic analytical skills.

### LEARNING OUTCOMES

By the end of the course,

1. Describe how analytics are powering consumer applications and creating a new opportunity for entrepreneurship for analytics
2. Demonstrate understanding on the areas and application of Analytics

### MODULE 1: INTRODUCTION TO BUSINESS ANALYTICS

10 Hours

Introduction to Business Analytics; Challenges; Business Analytics Optimization (BAO); Data warehousing; Online Analytical Processing (OLAP); Online Transaction Processing (OLTP); Introduction to Predictive Analytics and Prescriptive Analytics; Role of Business Analyst and Data Scientist; Business Intelligence Applications.

### MODULE 2: DATA MINING

10 Hours

Meaning of Data Mining; Evolution of Data Mining; Data Mining Process; Knowledge Discovery from Data (KDD); Cross Industry Standard Process for Data Mining (CRISP-DM), Data Mining techniques; Challenges of Data Mining

### MODULE 3: PREDICTIVE ANALYTICS

15 Hours

Introduction to Simple Linear Regression, Multiple linear Regression, Logistic Regression, Time series, Decision Trees and Neural Networks

### MODULE 4: BIG DATA ANALYTICS

10 Hours

Introduction to Big Data; Need for Big data; Characteristics of Big Data; structure of Big Data (Structured, Semi-structured, Unstructured and real time data); Benefits and barriers of Big Data Analytics; Mobile Data Analytics; Social Media Analytics

**MODULE 5: AREAS AND APPLICATIONS OF ANALYTICS**

**10 Hours**

Financial Analytics; HR Analytics; Marketing Analytics; Supply Chain Analytics; Production and Operations analytics

**MODULE 6: CONTEMPORARY DEVELOPMENTS IN THE AREA OF ANALYTICS**

**05 Hours**

Machine learning; Artificial Intelligence; Deep Learning; Internet of Things (IOT); and Robotics

**REFERENCE BOOKS (Latest Editions)**

1. Albright Winston “Business Analytics, Data Analysis and Decision Making” 5<sup>th</sup> edition, Cengage Publication
2. Cindi Howson “Successful Business Intelligence” 2<sup>nd</sup> edition, Mc Graw Hill Education
3. U Dinesh Kumar “Business Analytics: The Science of Data - Driven Decision Making” by Wiley Publications



## 2.5 FINANCIAL MANAGEMENT

### COURSE OBJECTIVES

60 Hours

1. To enable a strong conceptual fundamentals for corporate finance and make the students comfortable and easy understanding of financial management and an overview of Indian and global scenario.
2. The syllabus also contains the practical components of the subject which enable the students gain more practical knowledge under each module

### LEARNING OUTCOMES

1. The student will exhibit the conceptual understanding of various steps involved in raising, allocation and distribution finance
2. The student will be able to apply concepts learnt to demonstrate the understanding of the published reports of business firms and companies and also demonstrate the ability to draw meaningful conclusions about the financial performance of business firms and companies

### MODULE 1: INTRODUCTION TO FINANCIAL MANAGEMENT

08 Hours

Introduction to Indian Financial System, General areas of finance, importance of finance in non-finance areas, Functions of Financial Management, finance and corporate strategy, Financial Goals of a firm, Emerging role of finance manager in India

### MODULE 2 TIME VALUE OF MONEY

08 Hours

Compounding, Continuous Compounding, Effective Rate of Interest, Discounting – Single Cash Flows & Series of Cash Flows, Annuity – Future Value and Present Value, Present Value of Growing Annuity, Perpetuity – Present Value, Growing Perpetuity – Present Value, Equated Annual Instalments.

### MODULE 3: INVESTMENT DECISIONS

12 Hours

Capital Budgeting, process of Capital budgeting, use of capital budgeting techniques in practice, Methods of appraising proposals; Payback period, ARR, NPV, IRR, MIRR, Profitability Index (problems). Meaning of Capital Rationing

### MODULE 4: COST OF CAPITAL AND CAPITAL STRUCTURE

16 Hours

Introduction of capital structure- optima capital structure, Factors influencing capital structure. NI Approach, NOI approach, and MM approach (Theory and simple problems only) **Leverages** - Financial Leverage – Operating Leverage and Combined Leverage. **Cost of Capital**- Meaning and

Methods of computing cost of capital: Cost of Equity Capital, Cost of Preferred Capital, Cost of Debt, Weighted Average Cost of Capital (Theory and Problems).

#### **MODULE 5: WORKING CAPITAL MANAGEMENT**

**06 Hours**

Working capital, factors determining working capital, Sources of working capital, estimating working capital needs, Cash Management, Inventory Management (Only Theory), Receivables Management.

#### **MODULE 6: DIVIDEND DECISIONS**

**10 Hours**

Dividend decisions and valuation of firms, Determinants of dividend policy, Dividend theories – relevance and irrelevance: Walter, Gordon and Modigliani-Miller Hypothesis (including problems), Bonus issues, stock split.

#### **SKILL DEVELOPMENT EXERCISES**

1. Draw a chart showing the functions of finance manager
2. List out the formulas of time value of money
3. List out the methods of capital budgeting appraisal
4. Collect the different companies debentures
5. List out the theories of dividend and importance.
6. List of companies declared different types of dividend in the last financial year.

#### **RECOMMENDED BOOKS (Latest Editions)**

1. Kishore, M. Ravi, "Financial Management – with Problems and Solutions", Taxmann Allied Services (P) Ltd.
2. I. M Pandey "Financial Management", Vikas Publishing House
3. Besley/Brigham/Parasuraman, "CFIN: A South-Asian Perspective", Cengage Learning
4. Rajiv Srivastava, Anil Misra, "Financial Management", Oxford Higher Education
5. Parasuraman, "Financial Management: A Step by Step Approach", Cengage Learning
6. Shashi K. Gupta, R. K. Sharma, "Financial Management- Theory and Practice", Kalyani Publishers
7. Bodhanwala, J. Ruzbeh, "Financial Management using Excel Spreadsheet", Taxmann Allied Services (P) Ltd.

### REFERENCE BOOKS (Latest Edition)

1. Brigham, “Fundamentals of Financial Management”, Cengage Learning
2. Prasanna Chandra, “Financial Management”, McGraw Hill Education
3. Bahal, Mohit, “Practical Aspects of Financial Management”, SuchitaPrakashan (P) Ltd
4. Sharma, Dhiraj, “Working Capital Management – A conceptual Approach”, Himalaya Publishing House
5. Bhalla, V.K., “Financial Markets and Institutions”, S.Chand and Co
6. Hampton, John, “Financial Decision Making – Concepts, Problems and Cases”, Prentice Hall of India
7. Khan, M.Y; “Indian Financial System”, TheMcGraw Hill Companies



## 2.6 PRODUCTION AND OPERATIONS RESEARCH

### COURSE OBJECTIVES

**60 Hours**

1. To provide a formal quantitative approach to problem solving and an intuition about situations where such an approach is appropriate.
2. To introduce some widely-used mathematical models. The understanding of these models will allow the students derive solutions by logic demonstrated through numbers & equip them with techniques for finding solutions.

### LEARNING OUTCOMES

1. The students acquire quantitative tools, and use these tools for the analysis and solution of business problems.
2. The emphasis will be on the concepts and application rather than derivations.

### MODULE 1: PRODUCTION AND OPERATIONS MANAGEMENT

**10 Hours**

Functions of Production and material management, Types of production Systems.

Forecasting – Forecasting types, Exponential smoothing, Measurement of errors, Box-Jenkins Method.

Facility Planning – Facilities location decisions

Facility layout planning: Layout, types of plant layouts – product layout, process layout, fixed position layout, cellular manufacturing layouts, hybrid layouts

Quality – Six Sigma, and elimination of 7 wastes (Mudas), Lean operations, JIT, KANBAN

### MODULE 2: FACILITY MANAGEMENT

**10 Hours**

Productivity and types of productivity

Materials Management – Purchase functions, Procurement procedures including bid systems, Vendor selection and development, Vendor rating, ethics in purchasing.

Concepts of lead time, purchase requisition, purchase order, amendments, forms used and records maintained.

Inventory Management: Classification, ABC, VED and FSN analysis. Inventory costs, Inventory models – EOQ, safety stocks, Re order point, Quantity discounts

Maintenance: TPM, breakdown maintenance, continuous maintenance.

### MODULE 3: INTRODUCTION AND LINEAR PROGRAMMING TECHNIQUES

**10 Hours**

Introduction Decision Making, Quantitative Approach to Decision Making, Nature and Significance of OR in Decision Making, Scientific Methods in Operations Research, Models in Operations Research, Application Areas of OR in Management.

Linear Programming: Model Formulation, Graphical Methods, Simplex Method, Maximization and Minimization of L.P.P, Degeneracy in L.P.P.

#### **MODULE 4: TRANSPORTATION MODELS**

**10 Hours**

General Structure; Various methods for finding initial solution: North West Corner Method, Least Cost Method, Vogel's Approximation Method; Test for optimality (MODI method only) Alternate Optimal solutions. Variations: Balanced Transportation Problem, Maximization problem, Degenerate Solution.

#### **MODULE 5: ASSIGNMENT PROBLEMS**

**10 Hours**

Concepts, Mathematical Formulation of an Assignment Problem, The Assignment Algorithm (Hungarian Assignment method), Balanced and Unbalanced Assignment Problems, Travelling Salesman Problem as an Assignment Problem.

Sequencing: Terminology and notations, types of sequencing problems, processing  $n$  jobs through 2 machines, processing  $N$  jobs in  $N$  Machine.

#### **MODULE 6: NETWORK ANALYSIS**

**10 Hours**

Terminology; Networking Concepts; Rules for drawing network diagram; CPM Computations: CPM Terminology, Finding critical path – Different Floats; PERT Computations: Probability of meeting the scheduled dates; difference between PERT and CPM, Crashing of a Project.

Replacement Models Types of Failure, Replacement of Items whose efficiency deteriorates with Time, Replacement of Items that Fail Completely

#### **SKILL DEVELOPMENT EXERCISES**

1. Linear programming is a general method usable for a wide range of problems. Visit any nutrition center which sells health-food. Bring into play the applications of LP in formation and building
2. Transportation programming techniques facilitates in maintaining traffic rules. Apply with the help of illustrations
3. Visit your nearest fast moving consumer goods manufacturing company like LG, Samsung, Videocon etc. and apply the concept of assignment model to increase its produce line.
4. Visit one of the construction companies and analyze its modus-operandi to function. Apply the concept of network model (PERT and CPM) to proper completion of work in time
5. Apply the queuing theory to regulate the problem of huge waiting lines at the railway reservation counters



## **PEDAGOGY**

Use of case studies and Methods to solve the problems of OR using MS Excel or TORA.

### **RECOMMENDED BOOKS (Latest Editions)**

1. Hillier, Lieberman, Nag & Basu, "Introduction to Operations Research", McGraw Hill Education(India)
2. Ravindran, Phillips & Solberg , "Operations Research – Principles & Practice", Wiley India
3. Hamdy A. Taha, "Operations Research: An Introduction", Pearson
4. H.M. Wagner, "Principles of Operations Research with Application to Managerial Decisions", Prentice Hall of India

### **REFERENCE BOOKS (Latest Editions)**

1. Srinivas Reddy, "Operations Research", Cengage Learning
2. J. K. Sharma, "Operations Research-Theory & Applications", MacMillan. India Ltd
3. V. K. Kapoor, "Operations Research-Techniques for Management", Sultan Chand & Sons
4. Hiller & Lieberman, "Introduction to Operations Research-Concepts & Cases", Tata-McGraw Hill
5. Gupta & Hira , "Operations Research", S.Chand& Co
6. Chawla, "Operation Research", Kalyani Publishers
7. Mahadevan B, "Production and Operations Management", Pearson Education India, 2010
8. J.P Saxena, "Production and Operations Management", Tata Mcgraw-Hill Education Pvt Ltd.,
9. Ajay K.Garg, "Production and Operations Management", Tata McGraw-Hill Education Pvt Ltd.,
10. Norman Gaither and Greg Frazier, "Operations Management", South – Western College Pub.1999
11. Clifford Gray and Larson, "Project Management", MC Graw-Hill/Irwin,2008





## MODULE 2: INFORMATION TECHNOLOGY SKILLS:

12 Hours

### MS Word

1. Understanding the Business Functionalities of various options available in MS Word
  - a) Creating a new document – Typing Skills (25 to 30 wpm)
  - b) Editing a document
  - c) Text formatting
  - d) Finding and replacing text and checking spelling
  - e) Using Clip gallery
  - f) Working with tables
  - g) Using Mail merge
  - h) Creating a new data source
  - i) Accessing the data document
  - j) Printing a document

### MS Excel:

1. Understanding the various functionalities of MS Excel
  - a) Basic operations: Operators in Excel, Modifying the worksheet layout, Working with functions – Date and Time function, Statistical function, financial function, Mathematical function.
  - b) Formatting Charts
  - c) Finding Trends in Data
2. Using Sorting, Filter Functions, Text to Column Functions
3. Learning and Implementing Conditional Formatting
4. Learning and Implementing V-Lookup and H-Lookup
5. Learning and Implementing PIVOT
6. Inserting Charts, Graphs, Tables etc.

## MODULE 3: PRESENTATION SKILLS

06 Hours

Designing and delivering business presentations – planning an effective business presentation – identify your key message, know your audience, organizing the content, vocal quality, delivery style – Exercises: short presentations.

### Power Point Presentation:

- 1) Understanding the various functionalities of MS Power Point
  - a) Creating a presentation slide
  - b) Working with the text
  - c) Moving the frame and inserting clip art

- d) Formatting the slide design
- 2) Designing the Master Slide and Theme Slide
- 3) Implementing the Organizational Charts, Functional Charts, Process Flow Charts, Timing Diagram, Gaunt Charts and Other Project Management Tools required for the business.
- 4) Running Slide Shows: Adding Transitions and Animations

#### **MODULE 4: INTERVIEW SKILLS**

**06 Hours**

Understanding the interview process – ground work before interview – interviewing for success – Tips on power dressing – exhibiting appropriate body language – Mock interviews and assessment

#### **MODULE 5: IMAGE MANAGEMENT**

**06 Hours**

The 4 C's of Personal branding, Step by step process of personal branding- Art and Science of Creating a First Image, Clothes Power, Etiquette Ready, Fitness, Colour and Clinic, Make-up, Grooming Personal Hygiene, and Business Etiquette.

#### **MODULE 6: SKILL DEVELOPMENT ACTIVITIES**

**05 Hours**

Training Need Analysis, Skill development activities on leadership, team building, conflict management, event management, self-management, life skills, Emotional Intelligence, positive thinking, crisis management, Digital skills: mock trading activities, e-HR activities and other related skill development activities.

#### **PEDAGOGY / METHODOLOGY**

Movie clips, videos, Educational games, examples, story/sharing questionnaire/role play/exercises/ Task, Video/Audio recording, Group talk. Numerous GDs, Mock Interviews followed by exhaustive feedback rounds. Pedagogy exhaustively involves Methodologies to Crack GDs', Resume Building Techniques & Tips to Crack Interviews

#### **RECOMMENDED BOOKS (Latest Editions)**

1. Butterfield, "Soft Skills for Everyone", Cengage Learning
2. Lehman / Dufrene / Sinha , "BCOM – A South-Asian Perspective", Cengage Learning
3. Andrews, Sudhir, "How to Succeed at Interviews", Tata McGraw Hill
4. R. Alec Mackenzie , "The Time Trap: The Classic book on Time Management", AMACOM

#### **REFERENCE BOOKS (Latest Editions)**

1. Gopaldaswami Naresh, "The Ace of Soft Skills", Pearson
2. Raman/Upadhyay, "Soft Skills – Key to Success in Workplace and Life", Cengage Learning
3. Computer Fundamentals- Anita Goel- Pearson



4. Information Technology- Dr. Sushila Madan, 4<sup>th</sup> Edition, Taxmann's
5. Career Development Centre, "Soft Skills", Green Pearl Publications
6. M Ashraf Rizvi, "Resumes and Interviews: The Art of Winning", McGraw Hill Education
7. M Ashraf Rizvi, "Effective Technical Communication", McGraw Hill Education
8. Peter W Cardon, Business Communication, McGraw Hill Education
9. Suzanne C. Janasz, Karen O. Dowd, Beth Z. Schneider, "Interpersonal Skills in Organisation", Tata McGraw Hill Education
10. B N Ghosh, "Managing Soft Skills for Personality Development", McGraw Hill Education
11. Levitt and Harwood, "Your Career: How to Make it Happen", Cengage Learning

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*Niceela M*

## COURSE MATRIX

### THIRD SEMESTER MBA ( DAY & EVE)

PAPER	SUBJECTS	
<b>CORE SUBJECTS</b>		
3.1	<b>STRATEGIC MANAGEMENT AND BUSINESS ETHICS</b>	
3.2	<b>FINANCE</b> <b>3.2.1 INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT</b> <b>3.2.2 CORPORATE TAXATION FOR MANAGERS</b> <b>3.2.3 CORPORATE VALUATION AND FINANCIAL MODELLING</b>	
3.3	<b>MARKETING</b> <b>3.3.1 RURAL AND GREEN MARKETING</b> <b>3.3.2 BUSINESS AND SOCIAL MARKETING</b> <b>3.3.3 CONSUMER BEHAVIOUR AND NEUROMARKETING</b>	
3.4	<b>HUMAN RESOURCES</b> <b>3.4.1. PERFORMANCE MANAGEMENT AND COMPETENCY MAPPING.</b> <b>3.4.2.TALENT MANAGEMENT AND EMPLOYEE ENGAGEMENT</b> <b>3.4.3. LEARNING AND DEVELOPMENT HUMAN RESOURCES</b>	
3.5	<b>ENTREPRENEURSHIP AND STARTUPS</b> <b>3.5.1. IDEATION, DESIGN THINKING AND INNOVATION</b> <b>3.5.2.MANAGEMENT OF SMES AND FAMILY BUSINESS</b> <b>3.5.3. CORPORATE ENTREPRENEURSHIP AND NEW VENTURE CREATION.</b>	
3.6	<b>PRODUCTION AND OPERATIONS MANAGEMENT</b> <b>3.6.1. ADVANCED PRODUCTION SYSTEM.</b> <b>3.6.2. AGILE &amp; LEAN MANUFACTURING.</b> <b>3.6.3. ENTERPRISE RESOURCE PLANNING.</b>	
3.7	<b>BUSINESS ANALYTICS</b> <b>3.7.1. BUSINESS INTELLIGENCE</b> <b>3.7.2.PREDICTIVE ANALYTICS USING R</b> <b>3.7.3.DATA WAREHOUSING AND DATA MINING</b>	
3.8	<b>OPEN ELECTIVE</b>  <b>MANAGEMENT PERSPECTIVES</b>	<b>(TO BE OFFERED TO OTHER PG STUDENTS BY CBSMS UNDER CBCS SCHEME)</b>
3.9	<b>PROJECT WORK FOR 4 WEEKS</b>  <b>( BETWEEN II &amp; III SEMESTER)</b>	

### 3.1. STRATEGIC MANAGEMENT AND BUSINESS ETHICS

#### 1. GENERAL INFORMATION

No. of Credits 4

No. of Hours per week 4

#### 2. PERSPECTIVE OF THE COURSE

In today's economy, strategy plays an important role in gaining and sustaining a competitive advantage, which has become harder than ever. The syllabus captures the complexity of the current business environment and delivers the latest skills and strategic process adopted by companies, which will help students develop strategic prowess.

#### 3. COURSE OBJECTIVES AND OUTCOME

##### **OBJECTIVES**

To enlighten the students with the Concepts and Practical applications of Strategic Management and 'Business Ethics

##### **OUTCOME**

By the end of this course, a student would learn Identifying Strategic alternatives, Applying Ethical corporate behavior and Governance Mechanism

#### 4. COURSE CONTENT AND STRUCTURE

##### **MODULE 1: STRATEGY AND PROCESS 08 HOURS**

Historical perspective of Strategic Management, Conceptual framework for strategic management, the concept of strategy and strategy formation process-Stakeholders in business - Vision, Mission and purpose-Business definition, Objectives and goals, The strategic management model, the competitive Landscape, Global Economy.

##### **MODULE 2: COMPETITIVE ADVANTAGE 08 HOURS**

External Environment - QUEST, SWOT (TOWS) PESTEL Analysis, Porters five forces model, the competitive profile matrix (CPM), Globalisation and industry structure- Resources, Capabilities and Distinctive competencies, Low cost and differentiation, Generic Building Blocks of Competitive Advantage, Avoiding failures and sustaining competitive advantage, Value chain analysis. Building Competitive advantage through Functional-Level Strategy, Internal Factor evaluation matrix.

##### **MODULE 3: FORMULATION OF STRATEGIC ACTIONS 10 HOURS**

Corporate Level Strategies – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy: Cost, Differentiation, and Focus Strategies- Strategy in the Global Environment - Corporate Strategy - Vertical Integration - Diversification and Strategic Alliances- Building and Restructuring the corporation- Strategic analysis and choice – Environmental Threat and Opportunity Profile (ETOP) – Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis – GAP Analysis - Mc Kinsey's 7s Framework - GE 9 Cell Model – BCG Matrix - Balance Score Card, Internal Factor Evaluation (IFV) Matrix

##### **MODULE 4: NEW BUSINESS MODELS AND INNOVATIVE STRATEGIES 10 HOURS**

Introduction to Business models- Demystifying Strategy Using the Business Model Canvas (BMC): Business model Disruptions – Product, Customer, Resource ,and Finance driven Disruptions, Disruptive Revenue models, Managing Technology and



Innovation- Blue Ocean Strategy, managing in an economic crisis, new directions in strategic thinking, Strategic issues for Non Profit organizations, Small Scale Industries, New Business Models and strategies for Internet Economy.

#### **MODULE 5: IMPLEMENTATION AND EVALUATION OF STRATEGIC ACTIONS 10 HOURS**

The implementation process, Resource allocation, designing organizational structure - Designing Strategic Control Systems -, Matching Structure and Control to Strategy - Implementing Strategic Change, Techniques of strategic evaluation & control, Balanced Score Card, Leadership implications for strategy. Importance of Strategic leaders, Strategic leadership and style.

#### **MODULE 6: CORPORATE GOVERNANCE AND BUSINESS ETHICS 10 HOURS**

Governance Mechanism and Ethical corporate Behaviour, Ethical Decision making, Ethical Leadership,. Ethics in Functional areas, Exploring Corporate Governance and the Relationships between Internal and External Stakeholders, The organization's Responsibility and Accountability to its stakeholders - CSR, Role and Responsibilities of the Board, Integrity and Ethical Behaviour: Disclosure and Transparency.

#### **5. PEDAGOGY**

- a) Lectures
- b) Templates
- c) Practical Exercises – Individual and Group
- d) Case Studies

#### **6. TEACHING LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1. AzharKazmi, Strategic Management & Business Policy, Tata McGraw Hill
2. Charles W.L.Hill& Gareth R.Jones, Strategic Management Theory, An Integrated approach, Cengage learning.
3. Fred.R.David, Strategic Management and cases, PHI Learning,
4. Hitt,Ireland,Hoskisson,Manikutty, Strategic management ,Cengage
5. Thomas L. Wheelen, J.David Hunger and KrishRangarajan, Strategic Management and Business policy, Pearson Education.

##### **REFERENCES**

1. AdriaHaberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press.
2. Anthony E Henry: Strategic Management ,oxford publication
3. Gregory Dess and G.T. Lumpkin: Strategic Management Creating Competitive Advantage, TMH,
4. Gupta, Gollakota and Srinivasan, .Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2nd edition, 2007
5. Harvard Business Review, Business Policy – part I & II, Harvard Business School.
6. Mason A Carpenter, WM Gerard Sanders and PrashanthSalwan:Strategic Management ,Pearson
7. NitishSen Gupta and JS Chandan :Strategic Management ,Vikas Publication
8. UpendraHachru , Strategic Management concepts & cases , Excel Books

<b>ELECTIVE SUBJECTS</b>	
<b>3.2</b>	<b>FINANCE</b> <b>3.2.1 INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT</b> <b>3.2.2 CORPORATE TAXATION FOR MANAGERS</b> <b>3.2.3 CORPORATE VALUATION AND FINANCIAL MODELLING</b>

### **3.2.1. INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT**

#### **1. GENERAL INFORMATION**

No. of Credits per week 4

No. of Hours per week 4

#### **2. PERSPECTIVE OF THE COURSE**

Good return is the hallmark of a good investment. Investing surplus funds for generating some returns is common among individuals and organizations. When a business enterprise has idle funds for a certain period of time, it is prudent on the part of the enterprise to invest it wisely and generate decent returns, the onus of which lies on finance manager. Hence, it is essential for finance professional to have knowledge on the process of making and managing investments.

#### **3. COURSE OBJECTIVES AND OUTCOMES**

##### ***OBJECTIVES***

To provide knowledge and skill in identifying various investment alternatives and choosing the suitable one.  
 To orient on the procedures and formalities involved in investing.

##### ***OUTCOME***

By the end of this course, a student would learn

- Identifying investment goals and constraints
- Identifying investment alternatives
- Choosing the best / suitable alternatives
- Portfolio Management

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE1: THE INVESTMENT BACKGROUND AND FINANCIAL MARKETS 6 HOURS**

Concepts of Investments, Investment objectives, Process, Planning, Investment Vs Speculation, Gambling and Arbitrage: investment alternatives, Macro economic factors influencing investment, Investment environment in India : Individual Investment Life Cycle, the need for Investment Policy Statement. Approaches to Investment Decisions: Code of Ethics and Standards for investment professionals.

Financial Markets and Participants in Securities Market in India, New issue Market, Secondary market, Stock market Indices, Debt market, Money market Instruments and Recent development in Indian capital markets

##### **MODULE 2: RISK AND RETURN ANALYSIS 6 HOURS**

Concept of Realised and Expected Return. Real and Nominal rate of return Required return, Excess Return and holding period return ,Measurement of Ex -post and Expected Return, Continuous probability Distribution, Concept of Risk, Upside and Downside Risk, Sources of Risk, Types of Risk-Systematic and unsystematic Risk; Risk Aversion. Measurement of Risk of individual security, Standard Deviation, Coefficient of variation; Beta as a measure of Risk.

##### **Module3: PORTFOLIO ANALYSIS: THE MECHANICS OF INVESTMENT 12 HOURS**

Modern Portfolio Theory: Conceptual framework, Diversification and Portfolio Risk; Markowitz Risk Return optimization: The Mathematical Model, Quantification of Portfolio Risk and Return: Effect of combining securities in Portfolio, Efficient Frontier, Computing Utility and Selection of Optimal Portfolio.

Single Index Model- Concept of alpha and Beta- Corner Portfolio, Sharpe's Portfolio Risk and Return, Security Characteristics line, Portfolio optimization and selection.

#### **MODULE 4: CAPM AND ARBITRAGE PRICING THEORY 10 HOURS**

Capital Asset Pricing Model, Construction of optimal portfolio with Risky and riskless assets, The separation Theorem, Capital Market Line and Security Market Line - Applications of Security Market Line, Empirical Evidence of Capital Asset Pricing Model, Beta of CAPM.

Arbitrage Pricing Theory, Building of Arbitrage Portfolio, Return Generating process, Factor Model for Security Return volatility.

#### **MODULE 5: PERFORMANCE EVALUATION AND REVISION OF PORTFOLIOS 10 HOURS**

Performance Evaluation- Sharpe's Performance Index, Treynor's Performance Index and Jensen's Measure to identify the predictive ability, Information Ratio, Sortino's Ratio, Challenges in Performance management .

Portfolio Revision Methods- Investment Timing, Formula Plans Constant Dollar Value Plan, Constant Ratio Plan, Variable Ratio Plan

#### **MODULE 6: SECURITY ANALYSIS AND BEHAVIOURAL FINANCE 12 HOURS**

Fundamental Analysis: E-I-C approach. Variables used in E-I-C analysis. Technical Analysis Vs Fundamental Analysis. Efficient Market Hypothesis; Concept and Forms of Market Efficiency.

Technical Analysis: Basic tenets and Premises of Technical Analysis; Dow Theory, Price and volume charts, Moving Averages, Relative Strength Index, Rate of change, Stochastic Oscillators .

Behavioural finance and Technical Analysis, Introduction to Behavioural finance and how it differs from the tenets of traditional finance, Assumptions, Biases, Errors and Irrationalities that can affect Investment Behaviour, Takeaway from Behaviourists arguments.

##### **5. PEDAGOGY**

- a) Lectures
- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies

##### **6. TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1. Shalini Talwar "Security Analysis and Portfolio Management", CENGAGE
2. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House Private Limited, Fifth Reprint Edition.
3. Fischer, E Donald and Jordan, J Ronald (2005); "Security Analysis and Portfolio Management", Prentice Hall of India Private Ltd., 6th Edition.
4. Bodie, Kane, Marcus and Mohanty (2009); "Investments", McGraw Hill Education (India) Private Limited, 8th Edition.
5. Ranganatham and Madhumathi (2005); "Investment Analysis and Portfolio Management", Pearson Education, First Edition.
6. Chandra, Prasanna , "Investment Analysis and Portfolio Management", McGraw Hill Education (India) Private Limited, 4th Edition.

##### **REFERENCES**

1. Haugen Robert (2003); "Modern Investment Theory", Pearson Education, 5th Edition.
2. Bhalla, V.K. (2006); "Investment Management", S. Chand; 12th Edition.
3. Hirschey and Nofsinger (2008); "Investments – Analysis and Behaviour", Tata McGraw Hill Publishing Company Limited, Special Indian Edition.
4. Avadhani V.A (2006), "Securities Analysis and Portfolio Management", Himalaya Publishing House, Eighth Revised Edition.
5. Sharpe, Alexander and Bailey (1996); "Investments", Prentice Hall of India Private Limited, 5th Edition.
6. Kevin (2008); "Security Analysis and Portfolio Management", Prentice Hall of India Private Limited, First Reprint Edition.
7. Maheshwari, Yogesh (2008); "Investment Management", PHI Learning Private Limited, First Edition.
8. Indian Institute of Banking and Finance (2004); "Technical and Fundamental Analysis of Companies", Taxmann Publications, First Edition.
9. Stock Market Book" (2005); Dalal Street Journal.
10. "Survey of Indian Industry (2008); The Hindu.
11. "The Layman's Guide to Mutual Funds" (2004), Outlook Publishing (India) Private Limited, First Edition



### 3.2.2. CORPORATE TAXATION FOR MANAGERS

#### 1. GENERAL INFORMATION

No. of Credits – 4  
No. of hours per week – 4

#### 2. PERSPECTIVE OF THE COURSE

External environment, especially political and legal environment, has a huge impact and influence on conducting business. One among the factors which has a big impact on both the business enterprise and economy is the element of taxation. Unless a finance manager can analyze and think from tax perspective, no decision is complete and accurate. It is highly essential to understand the various taxes that have an impact on business, procedures to be followed and adopted for meeting tax regulatory requirements, and the system that governs them. Hence, this Course is introduced to orient a prospective finance manager regarding the tax matters that influences business and train him on making decisions considering such influence.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVE

To impart students with knowledge on tax, types of tax and their modalities.  
To give insight on the taxes influencing a corporate entity – both direct and indirect.  
To orient the students on the procedures and formalities to be adhered, with regard to tax matters.

##### OUTCOMES

By the end of this course, a student would learn  
The taxonomy of taxation and GST in India.  
Computation of income tax liability of a corporate entity and the strategies for legally reducing tax burden.

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: ASSESSMENT OF COMPANIES

**12 HOURS**

Introduction of Indian Tax Structure: Types of Companies, Residential Status and Incidence of Tax- Depreciation u/s 32- Computation of Tax liability of companies, Book Profits, Minimum Alternative Tax (Sec.115JB) – Deductions u/s 80 for companies, Carry forward and set-off of losses.

##### MODULE 2: TAX PLANNING

**14HOURS**

Tax planning, Tax avoidance and Tax evasion – Meaning and difference. Areas of tax planning- Tax planning with respect to Setting up New Business-Form of Organisation, Tax planning with respect to location and Nature of Business. Tax Planning with reference to Financial Managerial Decisions-Capital Structure Decision, Dividend Policy, Inter-Corporate Dividends and Bonus Shares, Specific Managerial Decisions- Purchase of asset, Lease, Instalment, Hire, Make or buy, Repair, replace, renewal or renovation, Tax planning for Distribution of Assets by Companies in liquidation, Amalgamation and Demerger.

##### MODULE 3: CUSTOMS DUTY

**08 HOURS**

Valuation rules for customs duty, Computation of assessable value and calculation of customs duty. Baggage, Postal articles and stores rules. Import and Export procedure.

##### MODULE 4: GOODS AND SERVICES TAX

**06 HOURS**

Introduction to Goods and Services Tax, Constitutional Framework, Orientation to CGST, SGST and IGST, Definitions – Supply, Inward Supply, Outward Supply, Continuous Supply, Time of Supply, Place of Supply, Goods, Services, Person, Taxable Person, Related Person, Business, Place of Business, Business Verticals, Consideration, Capital Goods, Input and Input Service, Input Tax, Output Tax, Aggregate Turnover, Deemed Exports, Recipient, Reverse Charge, Works Contract,

## **MODULE 5: VALUATION OF GST AND COMPUTATION OF GST LIABILITIES      08 HOURS**

Taxable and Exempted Goods; Valuation of Taxable Supply of Goods, Computation of GST Liability on Supply of Goods, Set-off of Input Tax Credit; Taxable and Exempted Services; Valuation of Taxable Value of Services; Computation of GST Liability on Supply of Services, Set-off of Input Tax Credit; Reverse Charge Mechanism.

## **MODULE6: GST PROCEDURE      08 HOURS**

Registration under GST, Tax Invoice, Levy and Collection of GST, Composition Scheme, Due dates for Payment of GST, GST Returns – Types of Returns, Monthly Returns, Annual Return and Final Return – Due dates for filing of returns. Final Assessment.

### **5. PEDAGOGY**

- (i) Lectures.
- (ii) Demonstrations using template forms of tax
- (iii) Practical Exercises – Individual and Group
- (iv) Case Studies.

### **6. TEACHING AND LEARNING RESOURCES**

- (a) [www.finmin.ninc.in](http://www.finmin.ninc.in)
- (b) [www.incometaxindia.gov.in](http://www.incometaxindia.gov.in)
- (c) [www.cbec.gov.in](http://www.cbec.gov.in)
- (d) [www.gstn.org](http://www.gstn.org)

### **RECOMMENDED READINGS**

#### **Essential Readings**

1. Singhania, Vinod, and Singhania, Kapil, “Direct Taxes – Law and Practice”, Taxmann.
2. H.C.Meharotra,” Direct tax law and practice including tax planning” Sahitya Bhavan Publications
3. Ahuja, Girish and Gupta, Ravi, “Direct Taxes – Law and Practice”, Bharat Publications.
4. Manoharan, T. N and Hari, G.R., “Direct Tax Laws”, Snow White Publications.
5. V.S.Datey, Indirect tax laws, Taxmann
6. Hiregange, Jain and Nayak, “Student’s Handbook on Goods and Services Tax”, Puliani and Puliani.

#### **References**

Study material of the Institute of Chartered Accountants of India available at [http://www.icaai.org/post.html?post\\_id=10169](http://www.icaai.org/post.html?post_id=10169) and [http://www.icaai.org/post.html?post\\_id=10172](http://www.icaai.org/post.html?post_id=10172)

### **3.2.3.CORPORATE VALUATION AND FINANCIAL MODELLING**

#### **1. GENERAL INFORMATION**

No. of Credits: 04

No. of Hours per Week: 04

#### **2. PERSPECTIVE OF THE COURSE:**

The course facilitates to know real worth of any asset. What an asset is worth and what determines the value is a pre-requisite for intelligent decision making, in choosing investments for a portfolio, in deciding on the appropriate price to pay or receive in a takeover and in making investment, financing and dividend choices when running a business. The term valuation in finance is mainly associated with Mergers and Acquisitions, Stock valuation and Bond Valuation. The ultimate goal for the business enterprise is “wealth maximization or value maximization”. A business enterprise must manage itself in order to achieve that goal. For making students to understand the essence of value based management, they must be oriented about valuation, value drivers and the strategies that can help in reaching the goals – both organic and inorganic. This course “Corporate Valuation and Financial Modelling” aims at orienting finance professionals about the essential components of value based management.

#### **3. COURSE OBJECTIVES AND OUTCOMES**

##### **OBJECTIVES**

- To facilitate understanding of corporate valuation techniques and restructuring activities in M&A
- To communicate to the students the role that M&A plays in the contemporary corporate world.
- To enable the students to use the financial modeling techniques by using advanced tools.

##### **OUTCOMES**

After the successful completion of this course the students should be able;

- To understand the corporate valuation background, importance and process.
- To develop analytical skills to compute different corporate valuation techniques
- To understand the corporate restructure methods and its importance
- To compute and evaluate the value of business for M&A decision
- To formulate the analytical skills to apply compute valuation methods as financial modelling

#### **4. COURSE CONTENTS AND STRUCTURE**

##### **MODULE 1: INTRODUCTION TO VALUATION METHODS AND STANDARDS**

**08 Hours**

Introduction to Corporate Valuation, Approaches to valuation, Role of Valuation, Concepts of value, Valuation Standards, Features of valuation and its process.

Methods: Adjusted Book Value Approach, Stock & Debt Approach and Direct Comparison Approach, Discounted Cash flow Approach and Analysing historical performance, Estimating the Cost of Capital, Forecasting performance- Estimating the continuing value- Calculating and interpreting the results, Beta – Un-levering and Re-levering.

##### **MODULE 2: CORPORATE VALUATION: ASSETS, MARKET AND INCOME BASED VALUATION METHODS**

**20 Hours**

Valuation of Firm and Valuation of Equity – Net Asset-Based Approach, Earnings Based Approach (Earnings-Capitalisation Method, P/E Ratio), Relative Valuation and Chop Shop Method.



DCF Approach of Two and Three stage model, Equity DCF Model: Dividend discount model, Free Cash Flow to Equity (FCFE) model, Adjusted Present Value (APV) model, Economic Value Added method and Valuation of Bond, Valuation of Equity shares.

### **Financial Modelling**

Preparation of spread sheet: Cash Flow and Free Cash Flow Computation, Cash Flow Estimation, Estimate Cost of Equity, debt and Capital, Stock Valuation using discounting of (a) Dividends (Dividend discount model - DDM) (b) Free Cash Flow to Firm (FCFF) and (c) Free Cash Flow to Equity (FCFE).

## **MODULE 3: ADVANCED ISSUES IN VALUATION AND PERFORMANCE METRICS**

**06 Hours**

Components and Valuation of Intellectual capital: Market to book ratio. Tobin's Q Ratio, Analytical Approaches: Balanced Score card, Human Resource Accounting, Valuation of Private Companies and Valuation of Start-ups.

## **MODULE 4: CORPORATE RESTRUCTURING**

**08 Hours**

Corporate Restructuring: Ownership Restructuring, Business Restructuring, Asset Restructuring, Organisational Restructuring.

Financial Restructuring - designing or redesigning capital structure, financial restructuring in the event of change in legal requirements, financial restructuring in the event of continuous losses, Buy-back of Shares, Rights Issue, Convertible Instruments, Callable Bonds.

## **MODULE 5: FINANCIAL EVALUATION OF M&A**

**10 Hours**

Valuation of Target Firm, Financing of Mergers and Acquisitions, Determination of Exchange Ratio – Conn & Nielson Model, Terms of Merger; Feasibility of Mergers.

## **MODULE 6: TAKEOVER & DEFENCE STRATEGIES**

**04 Hours**

Meaning and types of takeovers and SEBI Regulation on takeover, Anti-takeover defense: strategies, Anti-takeover amendments: Legal aspect of M&A, Combination and Competition Act, 2002.

## **TEACHING AND LEARNING RESOURCES**

- (a) Donaldson, Gordon, "Financial Goals and Strategic Consequences", Harvard Business Review, May-June 1985, pp57-66.
- (b) Barwise, Marsh and Wensley, "Must Finance and Strategy clash?", Harvard Business Review, September-October, 1989, pp1-7.
- (c) Day and Fahey, "Putting Strategy into Shareholder Value Analysis", Harvard Business Review, March-April, 1990, pp1-7.
- (d) Leuhrman, Timothy, "Corporate Valuation and Market Multiples", Harvard Business School Case No. 9-206-039, 2009.
- (e) Baldwin, Carliss, "Fundamental Enterprise Valuation: An Introduction", Harvard Business School Case No. 9-801-121, 2002.
- (f) Ruback, Richard, "Mariott Corporation: The Cost of Capital", Harvard Business School Case No. 9-298-101, 1998.
- (g) Leuhrman, Timothy, "What is it worth? A General Manager's Guide for Valuation", Harvard Business Review, May-June, 1997, pp131-142.

- (h) Leuhrman, Timothy, “Using APV: A Better Tools for valuing Operations”, Harvard Business Review, May-June, 1997, pp143-154.
- (i) Esty, Benjamin, “A Note on Value Drivers”, Harvard Business School Case No. 9-297-082, 1997.
- (j) Rappaport, Alfred, “Selecting Strategies that create shareholder value”, Harvard Business Review, May-June, 1981, pp138-149.
- (k) Rappaport, Alfred, “Ten ways to create Shareholder Value”, Harvard Business Review, September 2006, pp 1-14.
- (l) Contrada, Michael, “Using the Balance Scorecard to manage the value in your business”, Harvard Business Review, 1999, Reprint B0001C.

## **RECOMMENDED READINGS**

### **Essential Readings**

1. Bender, Ruth and Ward, Keith, “Corporate Financial Strategy”, Butterworth Heinemann.
2. Damodaran, Aswath, “Damodaran on Valuation”, John Wiley.
3. Damodaran, Aswath, “The Dark Side of Valuation”, John Wiley.
4. Chandra, Prasanna, “Corporate Valuation and Value Creation”, Mc Graw Hill.
5. Allen, David, “An Introduction to Strategic Financial Management – The Key to Long Term Profitability”, The Chartered Institute of Management Accountants, Kogan Page.
6. Allen, David, “Financial Decisions – A Guide to the Evaluation and Monitoring of Business Strategy”, The Chartered Institute of Management Accountants, Kogan Page.
7. Hampton, John, “Financial Decision Making – Concepts, Problems and Cases”, Prentice Hall of India.

### **References**

1. Penman, H Stephen, “Financial Statement Analysis and Security Valuation”, Tata McGraw-Hill Publishing Company Limited.
2. Grinblatt, Mark and Titman, Sheridan, “Financial Markets and Corporate Strategy”, Tata McGraw Hill.
3. Chandra, Prasanna, “Financial Management”, Tata McGraw Hill Publishing Limited.
4. Hawawini, Gabriel and Viallet, Claude; “Finance for Non-finance Managers”, South-Western CENGAGE Learning.
5. Weaver, Samuel and Weston, Fred; “Strategic Corporate Finance” South-Western CENGAGE Learning.
6. Jakhotiya, G.P., “Strategic Financial Management”, Vikas Publishing House Private Limited.
7. Vedpuriswar, A.V, “Strategic Financial Management – Achieving Sustainable Competitive Advantage”, Vision Books.
8. Marshall, John and Bansal, Vipul, “Financial Engineering – A Complete Guide to Financial Innovation”.
9. Copeland, Tom, Koller, Tim and Murrin, Jack, “Valuation – Measuring and Managing the Value of Companies”, McKinsey Quarterly, Wiley Finance.

<b>ELECTIVE SUBJECTS</b>	
<b>3.3</b>	<b>MARKETING</b> <b>3.3.1 RURAL AND GREEN MARKETING</b> <b>3.3.2 BUSINESS AND SOCIAL MARKETING</b> <b>3.3.3 CONSUMER BEHAVIOUR AND NEUROMARKETING</b>

### 3.3.1 RURAL AND GREEN MARKETING

#### 1. GENERAL INFORMATION

**No. of Credits 04**

**No. of Hours per week 04**

#### 2. PERSPECTIVE OF THE COURSE

The course is designed to Sensitise students on the nuances of rural marketing environment and Develop capabilities for clearly identifying, complex, real life rural and green marketing problems in a holistic perspective

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To understand the opportunities and challenges in rural and green marketing  
 To identify and assess rural market potential for products and services  
 To evaluate different marketing strategies used in rural and green marketing

##### OUTCOMES

At the end of the course, the student must develop interest towards rural and green marketing  
 As a student, future manager and entrepreneur one should be aware of challenges and opportunities in the area of rural and green marketing.

#### 4. COURSE CONTENT AND STRUCTURE

##### **MODULE 1 : INTRODUCTION TO RURAL MARKETING 10HOURS**

Introduction to Rural Marketing: Definition and Scope of Rural Marketing, Components of Rural Markets, Classification of Rural Markets, Rural vs. Urban Markets, Frameworks of Rural Marketing, Rural Retail outlets, The Rural Marketing Process, A Bop Portrait, Potential of Rural Market, Government Initiatives, The Rural Market Paradox ,Composition of the Rural Market, Market Size, Influences in Rural Markets.

##### **MODULE 2 : RURAL MARKETING ENVIRONMENT 08 HOURS**

The Rural Marketing Environment, Differences Between Rural and Urban Shoppers, Profiling the Rural Consumer, Rural Market Segmentation, Rural Marketing Strategies, Marketing Principles in Rural Areas, Rural Market Research, Distribution to Villages, Distribution of Rural Products, Existing Marketing Systems, Pricing Policy and Strategy, Rural Communications.

##### **MODULE 3: RURAL MARKETING SYTEMS 10 HOURS**

Rural Marketing Value Chain, Existing Marketing Systems, Improving Rural Marketing in India, E-Rural Marketing, ICT Essentials, ICT in Rural Markets and Problems in Implementation, Role of Government and NGOs in Rural Marketing, Problems of Sales Management in Rural Areas, Resolving Rural Sales Management Issues, The Rural Salesperson, Rural Sales Organization, Identifying Rural Clusters.

##### **MODULE 4: GREEN MARKETING 08 HOURS**

Green Marketing, Paths to Develop Sustainable Products, The Rules of Green Marketing, Green Marketing Segments, Ecotourism, The General Principles, Business Implications, Role of Consumers, Barriers to Change, Ecological Footprint and Carbon Footprint, Role of Business, Innovation, Advertising in Green Marketing



## **MODULE 5: SUSTAINABILITY**

**10 Hours**

Sustainable Strategy, Sustainable Value Creation, Global Drivers of Sustainability, Ladder of Sustainability, Four System Conditions for Sustainability, Strategies for Action, Industrial Ecology, Systems Analysis, Tools for Sustainability, Environmental Management System, Total Quality Environmental Management, Sustainable Value Stream Mapping, Sustainability Balanced Scorecard, Green Procurement, Green, Sustainable Supply Chains, Align the Green Supply Chain With Business Goals, Green Suppliers and Material Refurbishment, Ten Steps to Create a Sustainable Supply Chain, Logistics and Transportation.

## **MODULE 6: TRENDS IN RURAL AND GREEN MARKETING**

**10 Hours**

Trends in Rural and Green Marketing, Towards a New Economic System, The Future of Rural & Green Marketing, Triple Bottom Line, Key Corporate Social Responsibility Areas, Corporate Social Responsibility Policies, Benefits of Corporate Social Responsibility, Challenges of Corporate Social Responsibility, International Organization for Standardization Standards, ISO 14001, ISO 14025, ISO 14040, ISO 14064, ISO 26000: Social Responsibility.

### **5. PEDAGOGY**

Class teaching augmented with relevant case studies. Field trips and live projects are compulsory in the light of understanding the practicality of the subject.

Evaluation of Rural and Green products on the dimension of sustainability. Comparative assessment of green packaging, advertisement and service quality of products and services.

CSR is connecting with marketing activities

### **6. TEACHING AND LEARNING RESOURCES**

#### **ESSENTIAL READINGS**

1. Scott T. Young & Kanwalroop Kathy Dhanda (2013), Sustainability: Essentials for Business, SAGE Publications.

2. Pradeep Kashyap (2012), Rural Marketing, Pearson 2nd edition, Balram Dogra & Karminder Ghuman, Rural Marketing: Concepts and Cases, Tata McGraw Hill Education Pvt Ltd

#### **REFERENCE BOOKS : (Latest Editions)**

1. Krishnamacharyulu and Lalitha Ramakrishnan (2011), 2<sup>nd</sup> Edition, Rural Marketing: Texts and Cases, Pearson Education.
2. Abhijit Roy (2012), SAGE Brief Guide to Marketing Ethics, SAGE Publications.
3. Ghosh (2013) 1<sup>st</sup> Edition, India's Agricultural Marketing: Market Reforms and Emergence of New Channels, Springer India.
4. Dr. Subhash Bhave, Agribusiness Management in India –Text & Cases

[www.ruralmarketingsolutions.com](http://www.ruralmarketingsolutions.com)

[www.rmai.in](http://www.rmai.in)

[www.ruralyellow.in](http://www.ruralyellow.in)

[www.inc.com](http://www.inc.com) › encyclopedia › green-marketing

[www.campaignindia.in](http://www.campaignindia.in)

[www.rwp.in](http://www.rwp.in)

International Journal of Rural Marketing ,

Prajnan journal of Social and Management Science

### 3.3.2. BUSINESS AND SOCIAL MARKETING

- **GENERAL INFORMATION**

**No. of Credits 04**

**No. of Hours per week 04**

**PERSPECTIVE OF THE COURSE**

Meeting the needs of Business organizations and Society are very important for marketing professionals. Both are crucial and at the same time both demands different skills to cater to their requirements. Often termed industrial marketing, business to business (B2B) marketing is a key part of the marketing spectra in the workplace. At the same time the use of marketing principles to develop social marketing strategies and programs to bring behavioral change for a social good is also important. This course will teach the students the basic institutional details and principles of business marketing and social marketing. It will give the students tools and frameworks to think strategically in a fast changing industrial marketing landscape and examine issues of social responsibility in business and how marketing may be used to promote more environmentally and socially conscious business practices.

- **COURSE OBJECTIVES AND OUTCOME**

**OBJECTIVES**

To describe the applications, challenges and the dynamic environment of B2B marketing, including the unique nature of organizational buying behaviour.

To apply the basic and advanced techniques for development of social marketing strategies and develop price, promotion and place strategies for a chosen social marketing issue.

**OUTCOME**

At the end of the course, student must be able to understand the essential components of Business Marketing and will be able to serve B2B customers successfully and also learns to design Social marketing programmes and implement it successfully.

- **COURSE CONTENT AND STRUCTURE**

**MODULE 1: INTRODUCTION TO BUSINESS MARKETING 10 HOURS**

Business Marketing Concept, Business vs. Consumer Marketing, Types of Industrial Markets, Types of Business Customers, Classifying Industrial Products & Services. Organizational Buying Process: Types of purchases / buying situations, Buying Centre Concept, Inter Personal Dynamics of Business Buying Behaviour and Roles of Buying centre. The Webster & Wind model of Organizational Buying Behaviour, Ethics in Purchasing.

**MODULE 2: BUSINESS MARKETING STRATEGIES 12 HOURS**

Segmenting, Targeting and Positioning of Business Market: Value based segmentation, Model for segmenting the organizational Market. Product & Brand Strategy: Developing Product Strategy, Analyzing Industrial Product Life Cycle, Developing Strategies for new and existing products, Branding process & Brand strategy. Formulating Channel Strategy: Nature of Business Marketing channels, Intermediaries, Direct and Indirect Channels, Recent trends in Advertising.

**MODULE 3: PRICING AND PROMOTION IN BUSINESS MARKETING 10 HOURS**

Price Determinants, Factors that Influence the Pricing Strategies, Pricing Methods and strategies. Concept of learning curves Competitive Bidding, and Leasing. Promotional Strategies: Communication Objectives, Role of B-2-B Advertising, Sales Promotion in Industrial Markets, Trade shows and Exhibitions and Personal Selling, Managing the Industrial Sales Force. Customer Relationship Management Strategies for Business Markets.

**MODULE 4: INTRODUCTION TO SOCIAL MARKETING 6 HOURS**

Difference between commercial marketing and social marketing, evolution of social marketing. The Marketing mix of Social Marketing, Criteria for social marketing programs, Spread Stages of social marketing, Social Marketing Wheel, Ten steps to developing a social marketing plan. Challenges in social marketing

**MODULE 5: DEVELOPING SOCIAL MARKETING STRATEGIES 10 HOURS**

Crafting a Desired Positioning, Product: Creating a Product Platform, Branding and Ethical Considerations for Product Platform. Price: Determining Incentives and Disincentives, More on Commitments and Pledges, Setting Prices for Tangible Goods and Services, Ethical Considerations for Pricing Strategies. Place: Making Access Convenient and Pleasant, Develop Place Strategy, Social Franchising, Managing Distribution Channels. Promotion: Deciding on Messages, Messengers, and Creative Strategies, Develop a Promotion Strategy, Selecting Communication Channels – traditional and Non traditional media channels. Factors Guiding Communication Channel Decisions.

#### **MODULE 6 : MANAGING SOCIAL MARKETING PROGRAMS:**

08 HOURS

Budgets and Funding Sources of social Marketing programmes, Monitoring and Evaluation, Implementation and Sustaining Behaviour Plans. Application of social marketing models in Healthcare and public health management can be discussed through Case studies like social marketing for family planning, Malaria control, obesity prevention campaign, HIV prevention, tobacco control and Pulse Polio campaign in India.

#### **5. PEDAGOGY**

1. Lecture Method
2. Mini project
3. Case study
4. Industrial visit
5. Video cases
6. Experiential learning

#### **6.TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

- 1.Robert R Reeder & Reeder; Industrial Marketing ,2nd Edition; Prentice Hall International Publication.
- 2.Krishna K Havaladar, Business Marketing , Tata McGraw Hill Publication.
- 3.Michael D Hutt, Thomas W Speh, Business Marketing Management, Cengage Learning Publication.
- 4.Sameer Deshpande, Nancy R. Lee ; Social Marketing in India ,Sage Publications
- 5.Nancy R Lee & Philip Kotler; Social Marketing: Behaviour Change for Social Good, Sage Publications.

##### **REFERENCE BOOKS**

1. Frank G Bingham Jr., Business Marketing, Tata McGraw Hill Publication.
2. Mukherjee H S, Industrial Marketing ,Excel BOOKS Publication.
3. PK Ghosh, Industrial Marketing , Oxford University Press.
4. Evans, 'How Social marketing works in Healthcare' 2006, BMJ, BMJ Publishing Group Ltd.
5. Kotler, P. and Lee, N. Up and out of poverty: the social marketing solution, Pearson Education.



### 3.3.3. CONSUMER BEHAVIOUR AND NEUROMARKETING

#### 1. GENERAL INFORMATION

**No. of Credits 04**

**No. of Hours per week 04**

#### 2. PERSPECTIVE OF THE COURSE

A diverse and fascinating range of internal and external factors influences even the simplest buying decisions. An understanding of the driving forces behind why customers buy can empower a marketer to reach key consumers. This course equips the students plan effective strategies to structure messages to maximize persuasion.

#### 3. COURSE OBJECTIVES AND OUTCOME

##### OBJECTIVES

- To understand personal, socio-cultural, and environmental dimensions that influence consumer decisions making.
- To understand how the human brain processes information and generates responses while incorporating risk, feelings and reasoning and apply this understanding into developing, communicating and delivering effective marketing offerings.

##### OUTCOME

The completion of this course, students will have

- To enable students in designing and evaluating the marketing strategies based on fundamentals of consumer buying behaviour.
- To get an exposure to different neuro marketing techniques and understand the benefits and limitations of these techniques.

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE1: INTRODUCTION

**08 HOURS**

Consumer behaviour - concepts, dimensions of consumer behaviours, application of consumer behaviour knowledge in marketing decisions .Segmenting targeting and Positioning; Impact of technology on consumer behaviour and strategic marketing Characteristics of Indian Consumers.

##### MODULE 2: CONSUMER AS AN INDIVIDUAL

**08 HOURS**

Consumer needs and motives, personality and consumer behaviour, consumer perception, learning, consumer attitudes, attitude formation and change, communication and persuasion, self-image, life style analysis.

##### MODULE 3: CONSUMERS IN SOCIAL AND CULTURAL SETTINGS 10 HOURS

Group dynamics and consumer reference groups, Family – Social class cultural and sub-cultural aspects, cross cultural consumer behaviour. Cultural Values and consumer behaviour, Persuading Consumers – Broad casting vs narrow casting models. Diffusion of Innovations Reference groups and communities, Opinion Leaders and word of mouth.

##### MODULE 4: CONSUMER DECISION PROCESS AND POST PURCHASE BEHAVIOUR 12 HOURS

Consumer decision making process, models of consumer decision process, Nicosia- Howard Sheth and Engel-Kollat- model, post purchase processes, Customer Satisfaction, and Customer Commitment, managing dissonance, consumer loyalty. Online consumer behaviour, its diffusion in India.

##### MODULE 5: INTRODUCTION TO NEUROMARKETING 12 HOURS

An overview of neuroscience and neuromarketing ,Interdisciplinary nature of Neuro marketing, Neuromarketing versus traditional methods- key benefits and issues, Mapping the brain. Attention and Consciousness, Sensory NeuroMarketing, Learning and Memory.

**MODULE 6 : NEUROMARKETING AND ETHICS                      06 HOURS**

Neural Marketing cases in India, Neuro Ethics and Consumer Aberration, Ethical and Socially responsible Marketing, Consumerism, Ethical Consumption, Sustainable Consumption.

**5. PEDAGOGY**

Classroom teaching to be supplemented with case studies, simulations and other experiential learning activities.

**6. TEACHING /LEARNING RESOURCES**

**ESSENTIAL READINGS**

1. Schiffman LG ,Wisnblit J and Kumar R S Consumer Behaviour, 12<sup>th</sup> Edition Pearsons(2019)
2. Sethna R , Blythe J Consumer Behavior 4 e , Sage Publications ( 2019)
3. Sangeetha Sahwney .Consumer Behaviour , Oxford University Press
4. Dutta T, and Mandal M K Neuromarketing in India , Routledge (2018)
5. Ramsay T Z ; Introduction to Neuromarketing & Consumer Neuroscience.

**REFERENCE BOOKS**

1. Solomon, Consumer Behavior 13 th Edition Pearsons (2019)
2. Hawkins D, Motherbaugh D L and Mookerjee A ; Consumer Behavior 12 th Edition, Mc Graw Hill Education
3. Morin C, Renvoise P, The Persuasion Code , Wiley (2018)
4. Bijapurkar R, Never Before World, Penguin (2014)

<b>ELECTIVE SUBJECTS</b>	
<b>3.4</b>	<b>HUMAN RESOURCES</b> <b>3.4.1. PERFORMANCE MANAGEMENT AND COMPETENCY MAPPING</b> <b>3.4.2.TALENT MANAGEMENT AND EMPLOYEE ENGAGEMENT</b> <b>3.4.3. LEARNING AND DEVELOPMENT</b>

### **3.4.1. PERFORMANCE MANAGEMENT AND COMPETENCY MAPPING**

#### **1. GENERAL INFORMATION**

No. of Credits 4

No. of Hours per week 4

#### **2. PERSPECTIVE OF THE COURSE**

Performance management is basically a system of different processes that combine to create an effective workforce within the company that can effectively reach the business goals. There are many different aspects of performance management, but in most cases it can be broken down into a few simple steps. Performance management and competency mapping tools that can help the student to formulate plans, monitor progress closely, and even track and manage rewards.

#### **3. COURSE OBJECTIVES AND LEARNINGS**

##### **OBJECTIVES**

The objective of this course is to equip students with comprehensive knowledge and practical skills to improve their ability for performance management through appraisal and competency mapping in their organizations.

##### **OUTCOMES**

At the end of the course, students will be able to demonstrate knowledge and skills in the contemporary aspects of performance management and competency mapping and will be able to design the appropriate system in an organization

#### **4.COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: INTRODUCTION**

**08 HOURS**

Conceptual aspects of Performance System, Dimensions and excellence in performance- Pillars of human performance - Theoretical base for PMS - Objectives and functions of PMS - Performance Management Prism - Competency based PMS - Electronic PMS- Potential appraisal and HRM , Performance Management and Employee Development, Performance Equation, – Emerging trends in performance appraisal.

##### **MODULE 2: PERFORMANCE EVALUATION**

**08 HOURS**

Objectives, Process, Pros and cons of Performance appraisal, Performance Planning, Performance Execution, Performance Assessment, Performance Review, Performance Renewal ,Re-contracting-Design on appraisal forms of using rating scales- Different methods of appraisals- past, present and future oriented methods.

##### **MODULE 3: PERFORMANCE MANAGEMENT MECHANISMS 10 HOURS**

Team performance Management - Building and leading high performance teams - Virtual teams - Remote working, prerequisites of remote team performance -Role of team leaders - Drivers of performance - Designing appraisal programs - Conducting appraisals - individuals and teams - Feedback mechanisms – Individual and team rewards.



Performance management guidelines and checklists for managers - Common problems in assessment - Ways to avoid pain during appraisals.

**MODULE 4: LEGAL ASPECTS OF PERFORMANCE MANAGEMENT 10 HOURS**

Managing high performance - Pay for performance - Performance improvement - Identification of gaps - Creative performance strategies - Performance management skills. Legal issues associated with performance appraisals - Mentoring and coaching -Counseling and Monitoring, Managing development - Guidelines on appraising expatriate's Performance, counseling for better performance - Six sigma and bench marking.

**MODULE 5: COMPETENCY MAPPING**

**10 HOURS**

History and evolution of competency, competence v/s competency; performance v/s competency; skills v/s competency; behaviour indicators, Types of competencies-generic/specific, threshold/performance and differentiating technical, managerial and human. Promoting competency culture, context and relevance of competencies in modern organisations, competencies applications, Trans-cultural Managerial Competencies and Proficiency Level of Competency;

**MODULE 6: COMPETENCY MANAGEMENT FRAMEWORK**

**10 HOURS**

Macro view of Competency Management framework: strategic framework-linking HR processes to organisational strategy, competency framework-development of personal competency framework, Lancaster model of managerial competencies, competency modelling framework-developing a competency model, stages in design and implementation of competency model-general competency framework, competency identification- competency assessment and competency development, competency mapping, integration of HR function.

• **PEDAGOGY**

Lectures, Practical Exercises – Individual and Group, Case Studies, Inviting Practitioners from India Inc to deliver Expert Lecture and Guidance

• **TEACHING/LEARNING RESOURCES**

**ESSENTIAL READINGS**

1. SoumendraNarainBagchi, Performance Management, Cengage Learning.
2. Seema Sanghi, The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, Sage Publications India Private Limited, New Delhi.
3. Herman Aguinis, Performance Management, Pearson Education.
4. Prem Chadha, Performance Management: It's about Performing not about Appraising, McMillan Business Books.
5. Sraban Mukherjee, Competency Mapping for Superior Results, Tata McGraw Hill, New Delhi

**REFERENCES**

- 1.S Kohli and T Deb, Performance Management, Oxford Higher Education.
- 2.AnindyaBasu Roy and Sumati Ray, Competency-Based Human Resource Management, Sage Publications India Private Limited, New Delhi, 2019.
- 3.Lyle M Spencer, Signe M. Spencer, Competence at Work Models for Superior Performance, Wiley India Private Limited, New Delhi
- 4.Margaret Dale and Paul Iles, 2002, Assessing Management Skills – A Guide to Competencies and Evaluation Techniques, Jaico Publishing House, Mumbai.
- 5.Radha R Sharma, 360 Degree Feedback, Competency Mapping and Assessment Centers, Tata McGraw Hill, New Delhi
- 6.Competency Mapping Education Kit, T V Rao Learning Systems Private Limited, Ahmadabad-Bangalore(www.tvrls.com).
- 7.T V Rao Learning Systems Private Limited, Are You an Average Performer? Perfect Professional, May-August, 2015 (<http://perfectprofessional.in/product/are-you-an-average-performer/>).
- 8.TV Rao, Performance Management towards Organizational Excellence, Sage Publications India Private Limited, New Delhi.

### **3.4.2 TALENT MANAGEMENT AND EMPLOYEE ENGAGEMENT**

#### **1. GENERAL INFORMATION**

No. of Credits 4

No. of Hours per week: 4

#### **2. PERSPECTIVE OF THE COURSE**

In order to Sustain in the Global Competitive Environment, Organisations are investing their time and money by retaining Talent Employees in order to make them more productive and efficient. The present course is designed to study the concepts of Attracting, Retaining and Developing the most Talented employees in the organisation.

#### **3. COURSE OBJECTIVES AND OUTCOMES**

##### **OBJECTIVES**

The Objective of the subject is to enhance the readers' understanding of the domain of talent management and employee engagement, and how the former culminates in the latter, specifically as a tool for retention of employees.

##### **OUTCOMES**

On completion of the course, the students will be able to feel committed to their organization's goals and values and motivated to contribute to organizational success, whilst at the same time enhancing their own sense of wellbeing

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: INTRODUCTION TO TALENT MANAGEMENT**

**10 HOURS**

Introduction to Talent Management: Key Process of Talent Management, Talent Management v/s knowledge Management, Sources of Talent Management, Elements of talent friendly organisations, Retention and Challenges in Managing Talent, Talent value Chain, Tools for Managing Talent, Building Blocks for Talent Management, Effective Talent Management System, Modern practices in talent Attraction, Engagement and Retention, Talent Management Framework.

##### **MODULE 2: TALENT PLANNING**

**10 HOURS**

Talent Planning and Development – Concept of Talent Planning, Talent strategies & Future of Work & Changing Paradigm, Succession Planning, integrating succession planning and Career planning, Designing Succession Planning Program, Strategic Accountability Approach in Developing the Workforce, Contingency Plan for Talent, Compensation Management within the context of Talent Management.

##### **MODULE 3: DEVELOPING AND RETAINING TALENT**

**10 HOURS**

Developing and Retaining Talent – Potential Identification and Development, Coaching for Sustained & Desired Change, Integrating Coaching, Training and Development with Talent Management, Employee Retention - Motivation and Engagement, Return on Investment on Talent, Developing talent management information system.

##### **MODULE 4: EMPLOYEE ENGAGEMENT**

**10 HOURS**

Employee Engagement – Concept of Employee Engagement, Success factors to Employee Engagement, Assessing the Levels of Engagement, Managing and Implementing Change in Employee Engagement practices, War of talent and Imperatives, Engaging and building Employee - Employer partnership in the Digital age, Workplace Challenges and strategies for Effective Engagement.

##### **MODULE 5: IT AND EFFECTIVE TALENT MANAGEMENT**

**10 HOURS**

Role of Information Technology in Effective Talent Management Systems – Introduction, Role of Information Technology in Talent Management Systems, Creating Business Value through Information Technology, Five steps to a Talent Management

Information Strategy, HR Analytics for TM Processes, Design Development through Rapid prototyping and Scaling, Implementation and Maintenance, Audit and Update.

**MODULE 6: CONTEMPORARY STUDIES**

**06 HOURS**

Conduct Interviews with HR Head and Senior Executives of two or three organisations on their best talent Management practices and Retention Strategies - Video and report writing.

**5.PEDAGOGY**

Lectures, Case study analysis, Exercises, Guest speakers, Videos, and Role plays

**6. TEACHING /LEARNING RESOURCES**

**ESSENTIAL READINGS**

1. Berger, Lance A and Dorothy Berger (Eds.) The Talent Management Handbook,Tata Mc Graw Hill, New Delhi
2. Chowdhary, Subir, The Talent Era, Financial Times/Prentice Hall International

**REFERENCES**

3. William H.Macey, BenjaminSchneide, Karen M.Barbera,ScottA.Young,Employee Engagement : Tools for Analysis,Practice, and Competitive Advantage,Wiley-Blackwell.
4. Simon L.Albrecht,Handbook of Employee Engagement:Perspectives,Issues,Research and Practices;Edward
5. SonalMinocha and Dean Hristov: Global Talent Management an integrated approach, Sage Publication.



### 3.4.3 LEARNING AND DEVELOPMENT

#### 1. GENERAL INFORMATION:

No. of Credits 4

No. of Hours per week: 4

#### 2. COURSE PERSPECTIVE

In order to sustain in the global competitive environment, organizations are investing their time and money in providing adequate training and development to employees in order to make them more productive and effective. The present course is designed to study the concepts and process of learning/training and development of employees in the organization.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To enable the students to understand various concepts and process of learning and development.

To design and implement Training Need Analysis for different levels of employees in organizations

To understand different types of learning and development methods based on needs of the organization and to evaluate the effectiveness of the same.

##### OUTCOMES

1. Design and implement training need analysis based on the needs of an organization.
2. Implement different types of training methods depending upon the requirement of the organization
3. Evaluate the effectiveness of the training programmes conducted in the organization

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: INTRODUCTION

8 HOURS

Introduction – Objectives of Training - Benefits of Training to Organizations - Difference between Training and Development - Difference between Training, Learning and Development - Steps involved in training and development process - Importance of Training Administration- Training Administration Procedure.

##### MODULE 2: TRAINING NEED ANALYSIS

10 HOURS

Training Need Analysis – Importance of Training Need Analysis – Different Types of Training Needs – Components/Levels of Training Needs Analysis – Organizational Analysis, Task Analysis, Person Analysis – Techniques of Training Needs Assessment – Organization of Training Programme – Selection of Trainees, Trainee Readiness, Trainee Motivation to learn, Preparedness of Trainer, Duration of Training Programme, Training Environment.

##### MODULE 3: METHODS OF TRAINING

12 HOURS

Principles of Andragogy in Training/Learning. Methods of Training – On-the-Job Training Methods - Off-the-Job Training Methods - E-Learning Methods- Hybrid/Blended Learning Methods – MOOCs, YouTube, Skype, Podcasts, Webinars, Edu blogs, Edpuzzle, Google Classroom, Kahoot – Management Development Methods. Outward Bound Learning – Process of OBL – Framing, Implementation, Debriefing. Risks, Safety and Ethical issues in OBL.

##### MODULE 4: TRAINING EVALUATION

10 HOURS

Training Evaluation – Purpose of Training Evaluation – Principles of Evaluation – Formative Evaluation – Summative Evaluation – Evaluation Variables - Types of Evaluation Instruments – Types of Experimental Designs – Non-Experimental, Experimental and Quasi Experimental Designs - Models of Training Evaluation- Kirkpatrick's Four Level Model - Kaufman's Five Level Model - The CIRO Approach - The Philip's Five Level Model – Approaches to ROI on Training - Guidelines for Training Effectiveness.

##### MODULE 5: HRD AND CAREER MANAGEMENT

08 HOURS

Introduction to HRD – HRD at Micro and Macro Levels - Objectives of HRD – Functions of HRD – Benefits of HRD - Concept of Career and Career Planning – Career Anchors – Process of Career planning – Stages of Career Development – Issues in

Career Development – Benefits of Career planning to Organization and to an Individual Employee - Guidelines for Effective Career Management - Contemporary Trends in Training and Development.

## **MODULE 6: INNOVATIVE PRACTICES OF LEARNING AND DEVELOPMENT 08 HOURS**

Practical – A team (Trainers) need to design and conduct a Training Program (5-6 students in a team) to a Group (Trainees) related to topics in Soft Skills/ Personality Development Programme. (Examples: Effective Time Management, E-mail and Telephone Etiquette, Public Speaking, Body Language, Six Thinking Hats –Edward de Bono, Seven Habits of Highly Effective People – Stephen Covey etc.,)

### **5. PEDAGOGY**

Lectures, Case study analysis, Exercises, Assisted private studying, Guest speakers, Videos, and Role plays

## **6. TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

1. Noe, A Raymond & Kodwani, Deo Amitabh, "Employee Training and Development", 5e, McGraw Hill Publications
2. Dr. B. Janakiram, "Training and Development", Biztantra Publications
3. G Pandu Naik, "Training And development", Excel Books Publications
4. Goldstein Irwin L, "Training In Organizations - Needs Assessment, Development & Evaluation", Wordsworth Publication
5. Lynton & Parekh, "Training for Development", Sage Publications

### **REFERENCE BOOKS**

1. Rao TV, "Readings in HRD", Oxford & IBH
2. Badrul Khan, Managing E-Learning Strategies: Design, Delivery, Implementation and Evaluation, Information Science Publishing
3. Dipak Kumar Bhattacharyya, Training and Development: Theories and Applications: Theory and Applications, Sage Publications
4. Donald Kirkpatrick and James D. Kirkpatrick, Evaluating Training Programs: The Four Levels, Berrett-Koehler Publishers, NC
5. *Karl M. Kapp, The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education*
6. *Steven A. Beebe, Timothy P. Mottet and K. David Roach, Training and Development: Enhancing Communication and Leadership Skills, Pearson Publications*

<b>ELECTIVE SUBJECTS</b>	
<b>3.5</b>	<b>ENTREPRENEURSHIP AND START-UPS</b>
	<b>3.5.1. IDEATION, DESIGN THINKING AND INNOVATION</b>
	<b>3.5.2.MANAGEMENT OF SMES AND FAMILY BUSINESS</b>
	<b>3.5.3. CORPORATE ENTREPRENEURSHIP AND NEW VENTURE CREATION</b>

### **3.5.1. IDEATION, DESIGN THINKING AND INNOVATION**

#### **1.GENERAL INFORMATION**

No.of Credits	4
No.of Hours Per Week	4

#### **2.COURSE PERSPECTIVE**

Ideation, Design Thinking and Innovation – aims at bringing out the primary stage and integral of entrepreneurship process. Ideation methods is discussed explaining the best method that can be adopted. Innovation in the entrepreneurial process is seen as a necessity for a creating a well-defined entrepreneurial idea. Integrating innovation in the entrepreneurial process and the government policies and support to make Innovation easy to embrace and implement.

#### **3.COURSE OBJECTIVES AND OUTCOMES**

##### **OBJECTIVES**

- 1.To make students of entrepreneurship understand and implement the ideation process.
- 2.To adopt design thinking process to ensure ideation is inclusive and customer centric- that it meets market needs.
- 3.To build an innovative temperament for all ideas generated and To apply the recent innovative models and technology to build new ideas.

##### **OUTCOME**

To equip students with comprehensive and well-defined means and tools of Ideation.  
 To ensure students are trained on the much used and largely accepted ideation methods such as design thinking.  
 To initiate innovative thinking and ensure innovative practices are inculcated in all their entrepreneurial thinking.

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: INTRODUCTION AND BASIC CONCEPTS OF ENTREPRENEURIAL IDEATION PROCESS 10 HOURS**

Introduction to Entrepreneurship process, Entrepreneurship decision making and thinking process, Difference between managerial decision making and entrepreneurial decision making, Source of Ideas, Methods of idea generation and Creative Problem Solving

##### **MODULE 2: OPPORTUNITY ANALYSIS 12 HOURS**

Opportunity analysis –Source of opportunity, Opportunity-trends, Basic concepts of creative thinking modes-Divergent, Convergent, Emergent thinking, Nurture Creative Ideation through Lateral Thinking –De Bono theory of six thinking hats – Use of Lateral thinking ways for generating Ideas and Use of Design thinking for creative ideation.

##### **MODULE 3: DESIGN THINKING FOR IDEATION AND FORMALIZING IDEATION 08 HOURS**

Basic concepts of design thinking, Stages in design thinking-empathies, define, ideate, prototype, test. Importance of design thinking in today’s Disruptive world. Advantages of design thinking in making an idea viable.

##### **MODULE 4: DESIGN THINKING - FORMALIZING IDEATION AND COMMERCIALIZING 08 HRS**

Idea Validation-Idea validation based on Usability; Idea validation based on Feasibility, Ideation and its relevance to building - Consumer experience -consumer-centric for improved consumer experience. Build a viable user interface for making the idea commercial and adaptable.

#### **MODULE 5: INTRODUCTION TO INNOVATION**

**08 HOURS**

Creativity, Invention and innovation, Types of Innovation, Relevance of Technology for Innovation. The Indian innovations and opportunities, Innovators and Imitators

#### **MODULE 6: LEGAL ASPECTS REGARDING INNOVATION, INNOVATION RISK**

**10 HOURS**

Patents, Trademarks, Intellectual Property Government policies regarding Innovation, Exploring, Executing, Leveraging and renewing innovation, Enhancing Innovation Potential & Formulating strategies for Innovation Risks and barriers for introducing products and services Selecting a Strategy, setting up the Investment and establishing organization, Evaluating the Costs and impact of the Project, Cases on Innovation among entrepreneurs in India.

#### **5.PEDAGOGY**

A mix of lectures, case study, learn through project and interactions with budding entrepreneurs. Project work in a team of 10 and work on a detailed Entrepreneurial Idea Development project by using the design thinking method

Project should include: - Idea generated through the design thinking stages (empathies, define, ideate, prototype, test.)  
Student team presentation-The project will bring out a prototype and test results this will be presented by the students.

#### **6.SKILL SET DEVELOPMENT**

MOOCS on Design thinking from any reputed online programming platforms (some of the courses are IDEO.org, Harvard course on Design Thinking.).

Creative thinking or Critical thinking online course can be completed by the students

Attending Mentoring programs at a registered accelerator or Incubator

Attend Open houses session at NSRCEL, Bangalore, for getting first-hand experience of How Entrepreneurial Idea generation process can be initiated

#### **7.TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

- 1.Design Thinking: Integrating Innovation, Customer Experience, and Brand Value Paperback - 2009, Thomas Lockwood.
- 2.Non-Designers-Guide-Design-Thinking-Marketer- Saso Kunitake, Hiroshi Ishii

##### **REFERENCES**

1.[Entrepreneurship Development Robert D Hisrich](#)

2.Entrepreneurship Development B.Jankiram and M.Rizwana, Excel Books

3.Edward de Bono, New think: The use of lateral thinking in the generation of new ideas, 1967

4.Ella Miron-Spektor, Miriam Erez, and Eitan Naveh. To Drive Creativity, Add Some Conformity. Harvard Business Review, March 2012:<https://hbr.org/2012/03/to-drive-creativity-add-so...>

5. Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation by Tim Brown ([Goodreads](#))

6. The Design of Business: Why Design Thinking is the Next Competitive Advantage by Roger L. Martin ([Goodreads](#))

7. Human-Centered Design Toolkit: An Open-Source Toolkit To Inspire New Solutions in the Developing World by IDEO and The Bill & Melinda Gates Foundation ([Goodreads](#))

8. Innovation and Entrepreneurship, Peter .F.Drucker

9. The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm by Tom Kelley and Jonathan Littman ([Goodreads](#))



### 3.5.2. MANAGEMENT OF SMEs AND FAMILY BUSINESS

#### 1. GENERAL INFORMATION

No. of Credits	4
No. of Hours Per Week	4

#### 2. COURSE PERSPECTIVES

The course perspective is to give exposure to the students about the special approach that needs to be taken with respect to managing MSMEs in different stages of its life cycle including family business aspects as a part of successor panning.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To make students aware that managing small enterprises require different approach visa Vis managing large enterprises.

To make students understand how managing a Family business calls for a balanced approach of professional inputs to be competitive

##### OUTCOMES

By the end of the course the students would Gather adequate knowledge to adopt various tools & techniques of Management to run a small enterprise efficiently. Know the intricacies involved in managing a Family business without sacrificing the advantages of a professional setup.

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: OVERVIEW OF MANAGING SMES                      08 HOURS

Introduction to SMEs, Typical structure, Role of Managers and Entrepreneurs, Managing Small Enterprises & Large Enterprises, Managerial functions, Tasks & Skills required constraints in SMEs.

##### MODULE 2: MSME                      08 HOURS

**Sensitivity to environment:** Social, economic, political & technical aspects & awareness of change at the market place.

**Managing Crisis:** During starting phase, cash crisis/finance crisis, delegation crisis, leadership crisis. Developing problem solving attitude, Importance of communication.

##### MODULE 3: PRIORITISING AND FOCUSING ON KEY AREAS                      12HOURS

**Production:** Production planning and control, productivity enhancement

**Finance:** Financial Planning, Issues related costing and maintenance of accounts

**Marketing:** Market studies for small entrepreneurs, product selection, pricing, promotion and distribution aspects of MSMEs

**Human Resource:** Planning, requirement, training, retaining, also maintaining in MSMEs.

##### MODULE 4: NEGOTIATION                      10HOURS

Importance of communication, time management, negotiations, problem solving & issues related to growth & legal aspects with reference to SMEs. Sickness in industries, causes & remedial measures, revival support & Turn around strategies. New government policies for Entrepreneurship ( Central and State Government)

##### MODULE 5: AN OVERVIEW OF FAMILY BUSINESS.                      8HOURS

Introduction, economic impact, special strengths, dilemmas & challenges, competitive edge, Founders, teams, designing family governance, council, retreats & constitutions. Non family employees, importance of external expertise, pit falls in family business and overcome. Family reunions & bringing in cohesion.

##### MODULE 6: MANAGING A FAMILY ENTERPRISE                      10HOURS

Issues related to working in Business, Inducting family members, training & development, mentors, gaining respect from employees, sibling rivalry, establishing personal identity. Relationship with members belonging to other generations, seeking balanced approach. Professionalizing the management, use of external resources- Professional advisers & consultants.

## **5.PEDAGOGY**

A mix of lectures, case study and interactions with budding entrepreneurs.

## **6. TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

- 1.Mary Jane Byrd/Leon C Megginson: Small Business Management, Mc Graw Hill Higher Education
- 2.Thomas W Zimmer: Effective Small Business Management, Printice Hall
- 3.Donald Kurato & Richard M Hodgetts: Small Business Management, Profile Books
- 4.Michael K Allio & Robert J Allio: Practical Strategy for Family Business, Tats Mac Graw Hill

### **REFERENCES**

- 1.David Cadden & Sandra Lucder: Small Business Management in 21<sup>st</sup> Century, Saylor foundation
- 2.Soni Sharma: Entrepreneurship and small Business Management, Vayu Education of India
- 3.Walter Vieira, Mita Dixit : The 5Gs of Family Business, Sage Publication
- 4.Arjun Kakkar: Small Business Management, Global India Publications Pvt. Ltd
- 5.V G Patel, The seven Business Crisis- SAGE Journal/Publications
- 6.Eric Ries, The start-up Way
- 7.Jim Collins, Turning the Fly wheel, Harper business

### 3.5.3. CORPORATE ENTREPRENEURSHIP AND NEW VENTURE CREATION

#### 1.GENERAL INFORMATION

No.of Credits 4

No.of Hours Per Week 4

#### 2.COURSE PERSPECTIVE

Corporate entrepreneurship and venture creation is the practice of employing entrepreneurial skills and approaches within an organization. To achieve and sustain a true competitive advantage in today's global business environment, companies must be faster, more creative, nimble, flexible and innovative. Resource availability may be limited or non-existent to support new innovations and initiatives. In other words, organizations must be more entrepreneurial in approach.

#### 3.COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To Understanding Corporate Entrepreneurship, its origin and growth in modern times

To apply the entrepreneurial process to the operations of a department or functional area within an established organisation

To formulate corporate objectives and strategies that support entrepreneurial behaviour

To Understand and evaluate the ethical dimensions of corporate entrepreneurial behaviour

##### OUTCOMES

By the end of the course, the students must get clarity and understanding of corporate entrepreneurship concept and manage it.

#### 4.COURSE CONTENT AND STRUCTURE

##### **MODULE 1: INTRODUCTION TO CORPORATE ENTREPRENEURSHIP 08 HOURS**

Introduction to Corporate entrepreneurship, forms and history of corporate entrepreneurship, entrepreneurial orientation and architecture, building entrepreneurial architecture, corporate entrepreneurship strategy, Corporate entrepreneurship Vs. role of managers

##### **MODULE 2: BUILDING AN ORGANISATION 10 HOURS**

Introduction to Building an organisation, Types of Entrepreneurship organisational structures, building supportive organisational cultures, Vision, Mission, Aligning Vision & Mission with Objectives

##### **MODULE 3: ENTREPRENEURIAL LEADERSHIP 10 HOURS**

Introduction to Entrepreneurial leadership, Qualities of Entrepreneurial control systems, obstacles to and risk of corporate entrepreneurship, Eco system plans

##### **MODULE 4: INTERNATIONAL CORPORATE ENTREPRENEURSHIP 10 HOURS**

International corporate entrepreneurship, ICE and organisational learning, Setting Goals and Strategies, selected international entrepreneurial best practices and Case Studies

##### **MODULE 5: CORPORATE CULTURE AND ORGANISATIONAL STRUCTURE 10 HOURS**

Corporate culture, Values, Norms, Expectations. Ethical & Compliances in Corporate Entrepreneurship, shared resources, Mentoring opportunities

##### **MODULE 6: INTRAPRENEURSHIP 08 HOURS**

History of Intrapreneurship, Differences between Entrepreneur and Intrapreneur, Intrapreneurial activities, Benefits to the organisation and Intrapreneur, Case Studies of organisations supported and nurtured the Intrapreneurship.

Introduction to new venture creation, Development and New Venture Formation; Growth and Development Phases of Venture Creation.

#### 5.PEDAGOGY

A mix of lectures, case study, interactions, industrial visits and a hands-on project

## **SKILL DEVELOPMENT EXERCISES**

Identify 4 start-ups which were incubated by an organisation and prepare a document on how these intimated

Prepare a SWOT analysis of any 2 start-ups

Prepare a proposal to Chairman of your organisation with a product idea and how it can be created

Profile any 4 Entrepreneurs and chart their journey from idea generation to growth

## **6.TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

1. Corporate Innovation & Entrepreneurship: Entrepreneurial development with organisations – Kuratko, D F; Morris, M H; & Cavin, J G
2. Corporate Entrepreneurship: Innovation and Strategy in Large organisations – Burns, P
3. Corporate Entrepreneurship: How to create a thriving entrepreneurial spirit throughout your company – Hisrich, R D and Kearney C
4. Corporate Entrepreneurship – Jerome A Katz and Dean A Shepherd
5. Corporate Entrepreneurship & Innovation – Morris M H, Kuratko D. F and Covin J C

### **Reference Books**

1. Operations Management for Competitive Advantage – Chase, R.B
2. The Entrepreneur's guide to hiring a building the team – Ken Tanner
3. Indian Entrepreneurial Culture – A Gupta
4. The Success Story Behind the World's Most Unusual Workspace – Semler, Ricardo.
5. David H Holt, 'Entrepreneurship: New Venture Creation', Pearson Education India
6. Timmons, 'New Venture Creation', McGraw Hill





Product Design, Capacity Planning, Process Selection and Facility layout Selection, Product Life Cycle and its Stages, Product Development Process in the changing global environment: Stages of Product Development- Early Design, Detailed Design, Prototyping and Manufacturing, Servicing, Discard/Recycle. Product Development Organisation: Concurrent Engineering- CE Design, Methodologies.

#### **MODULE 4: PRODUCTION SCHEDULING**

**8 HOURS**

Introduction to Production Scheduling, Scheduling Objectives, Scheduling Models, Gantt Charts, Scheduling Environment and Constraints. Planning and Scheduling of Production Systems: Tools and techniques, Problems, Scheduling Decisions. Introduction to Production Scheduling Software.

#### **MODULE 5: PRODUCTIVITY IN MANUFACTURING**

**10 HOURS**

Productivity Improvement, Importance of Improved Productivity, Techniques of Productivity Improvement, Techniques of Measurement of Productivity Improvement: Work Study and Work Measurement. Role of Automation in Productivity Improvement.

Production Management System: Role of MIS in Production, Schematic representation of Production Management System, Decision Making through MIS in Production.

#### **MODULE 6: GREEN AND AGILE MANUFACTURING**

**10 HOURS**

Introduction, Agility through Group Technology, Concept of FMEA, JIT, SMED, KANBAN, SCM, Sustainable Manufacturing Systems. Digital Manufacturing: Functions of Digital Manufacturing, Manufacturing Simulation and Validation, role of Robust in manufacturing, Design for Manufacturing: Functions, Aesthetics, Environment, Reuse, Recycle and Re-manufacturing.

### **5. PEDAGOGY**

Emphasis have to be given on class room teaching, practices like problem solving should be the part of explanation and compulsory mini project assignments to be given to enhance the students understanding of the subject. Production related videos can also be used to demonstrate the functioning of production units in organisations

### **6. TEACHING/LEARNING RESOURCES**

#### **ESSENTIAL READING**

1. Martand T. Telsang, "Production Management", S Chand & Company Pvt Ltd
2. MartandTelsang, "Industrial Engineering Production Management", S Chand & Company Pvt Ltd
3. K. Hans Raj, S. N. Dwivedi, D. S. Mishra, Alok K. Verma, C. Patvardhan. (2012). Agile Manufacturing Systems: Approach for Enhancing Agility of Organisations and Processes. Narosa Publishing House.
4. Ohno, T. (1988). Toyota production system: beyond large-scale production. crc Press.
5. Kumar, S. A., & Suresh, N. (2006). Production and operations management. New Age International.

#### **REFERENCES**

1. Groover, M. P. (2016). Automation, production systems, and computer-integrated manufacturing. Pearson Education India.
2. Panneerselvam, R. (2012). Production and operations management. PHI Learning Pvt. Ltd..
3. Martinich, J. S. (2008). Production and operations management: An applied modern approach. John Wiley & Sons.
4. Chowdiah, M. P. (2011). Agile Manufacturing: Globalised Customerised Green Products. I. K International Publishing House.

### 3.6.2. AGILE AND LEAN MANUFACTURING

#### 1.GENERAL INFORMATION

No.of Credits	4
No.of Hours Per Week	4

#### 2. PERSPECTIVE OF THE COURSE

The organization requirements vary industry to industry and Lean Manufacturing has always been challenge. Every business function needs Lean Management FMCG to Industrial products which involves raw materials to produce a finished product. This mean every stage of Manufacturing – required to understand and analyzing production planning and control tools for efficient production systems. This helps senior management to take decisions. Lean Management helps in decision making and helps to eliminate waste in the production Process problems.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To Demonstrate basic understanding of concepts about Lean Manufacturing  
To Understanding real-time lean manufacturing data requirements through best practices adopted by organizations

##### OUTCOMES

Exhibit critical thinking capabilities that are necessary to interpret them as requirement by the management  
Acquire competency in the area of forecasting, creating reports, for seamless decision making

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE1: AGILE AND VALUE CREATION 8 HOURS

Role of value in Lean and Agile Environment: Lean Philosophy, Agile Philosophy, Lean and Agile value creation, Product development in Lean and Agile value creation , Minimum Viable Product (MVP), Iterative breakdown to find MVP, Modern Approach to Business and Value

##### MODULE 2 : LEAN MANAGEMNT 10HOURS

Need & Importance of Lean Management, Approach for Identifying Productivity Improvements, Process Flow diagram, Inventory & material Purchase, Cellular Manufacturing, Material Flow, Automation, Quick Changeover, Quality Control , 5S Principals and Implementation, Preventive Maintenance. Types of Seven waste, causes and effects, and stock less production.

##### MODULE3: PLANNING & CONTROL 08 HOURS

The Manufacturing Planning and Control System, Closed Loop system, Planning & control Process, Manufacturing Planning and control activities, Business Planning, sales and operations Planning. Master Production Scheduling (MPS)

##### MODULE 4 : LEAN MANUFACTURING TOOLS & TECHNIQUES 10 HOURS

Lean Manufacturing Tools & techniques, 3 Toolboxes for Lean Manufacturing, Tool 1: From 5S to Kanban, Cellular Manufacturing, Kaizen, and Kanban. Tool 2: Lean Metrics to Standard Rate, Lean Office, Single Minute Exchange of Die (SMED), Tool 3: Takt time to Workflow diagram, Total Productive Maintenance, Value Stream Mapping,

##### MODULE 5 : JIDOKA 8HOURS

Jidoka – Introduction, process, comparison, Principles of Jidoka, Jidoka Problem Solving, benefits Jidoka, and a study on Toyota Production Systems. Lean & Green, Lean Manufacturing & Environment, difference between Lean & green Manufacturing,

##### MODULE 6: SCRUM 12 HOURS

SCRUM frame work: Introduction to SCRUM framework ; SCRUM roles : Product owner role, SCRUM Master role , The SCRUM Team; Product backlog , Requirement levels ; SCRUM Story : User Story and Acceptance levels , Sizing stories and Relative sizing, Good User Story attributes; SCRUM Ceremonies , Sprint Planning , Stand up ( Daily SCRUM meeting), Backlog refinement (grooming) , Measuring team velocity , Burn UP and Burn Down Charts , Sprint review and Sprint retrospective

## **5.PEDAGOGY**

The Agile and lean manufacturing the concepts used in all advanced production systems. The use of videos on advanced production systems and discussions on how the Agile , Lean and SCRUM are used in different stages of production management. Case studies must be used for all modules.

## **6.TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

- 1. Lean Manufacturing: Business Bottom-Line Based - By John X Wang**
- 2. Lean Manufacturing Implementation – Dennis P. Hobbs**

### **REFERENCES**

- 1. Lean Manufacturing – John W Davis**
- 2. Six Sigma for optimal System Performance in Manufacturing and Service Organizations - Edem g Tetteh – Rowan College at Burlington, Country USA**
- 3. Hans Chapman – Cape Fear Community College USA**
- 4. Essential Scrum: A Practical Guide To The Most Popular Agile Process by Kenneth S. Rubin*



### 3.6.3. ENTERPRISE RESOURCE PLANNING

#### 1. GENERAL INFORMATION

No. of Credits	4
No. of Hours Per Week	4

#### 2. PERSPECTIVE OF THE COURSE

Enterprise resource planning is to make them aware of real time requirements in resource planning, automation of documentation and decision process, and industry preparedness. The organization requirements vary industry to industry. By running the ERP system, the organization can gain speed, efficiency, and accuracy in its business operations. Through automation and integration, the system increases the organization's productivity while reducing time and labour costs.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

- To provide a contemporary and forward-looking on the theory and practice of Enterprise Resource Planning Technology.
- To focus on a strong emphasis upon practice of theory in Applications and Practical oriented approach.

##### OUTCOMES

- To train the students to develop the basic understanding of how ERP enriches the business organizations in achieving a multidimensional growth.
- To aim at preparing the students technological competitive and make them ready to self-upgrade with the higher technical skills.

#### 4. COURSE CONTENTS AND STRUCTURE

##### MODULE1: INTRODUCTION

**10 HOURS**

Overview of Enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be considered in planning design and implementation of cross functional integrated ERP systems, Case studies

##### MODULE2: ERP SOLUTIONS AND FUNCTIONAL MODULES

**10 HOURS**

Overview of ERP software solutions- Small medium and large enterprise vendor solutions, BPR, Business Engineering and best Business practices - Business process Management. Overview of ERP modules -sales and Marketing, Accounting and Finance, Materials and Production management etc. Quality Management - Functions of Quality Management; CAQ and CIQ; Materials Management- Pre-purchasing; Purchasing; Vendor Evaluation; Inventory Management and Invoice Verification and Material Inspection

##### MODULE3: ERP AND RELATED TECHNOLOGIES

**10 HOURS**

Business Process Re-engineering, Management Information systems, Decision Support Systems, Executive Information Systems- Advantages of EIS; Disadvantages of EIS, Data Warehousing, Data Mining, On-Line Analytical Processing, Product Life Cycle Management, Supply Chain Management, ERP Security

##### MODULE 4 : ERP IMPLEMENTATION

**10 HOURS**

Planning Evaluation and selection of ERP systems-Implementation life cycle - ERP implementation, Methodology and Framework- Training – Data Migration. People Organization in implementation-Consultants, Vendors and Employees, Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of and ERP Implementation

##### MODULE 5: ERP VENDORS

**08 HOURS**

ERP Vendors, SAP-AG: Products and technology R/3 overview; SAP advantage, Baan Company, Oracle Corporation: Products and technology; Oracle Application; Vertical solutions, Microsoft Corporation, Ramco Systems, Systems Software Associates Inc. (SSA), QAD

##### MODULE 6: EMERGING TRENDS IN ERP

**08 HOURS**

Extended ERP systems and ERP bolt on CRM, SCM, Business analytics, ERP to ERP II-Implementation of Organisation Wide ERP, Development of New Markets and Channels, Latest ERP Implementation Methodologies, ERP and E-business, Market Snapshot, The SOA Factor.

## **5. PEDAGOGY**

The ERP paper is to develop an insight on the resource planning on documentation and decision making process. Hence, a mini project can be suggested to analyze different ERP programs commercially available and open source programs. A mini project can be used to explain how to develop a ERP system for a small firm. Case studies can be used to explain different concepts in ERP .

## **6. TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

1. Enterprise Resource Planning Alexis Leon McGraw Hill
2. Enterprise Resource Planning ,Mary Summer Pearson; 1 Edition

### **REFERENCES**

2. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2006.
- 2.Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill,
3. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill,
4. Mahadeo Jaiswal and Ganesh Vanapalli, ERP, Macmillan India,
5. Vinod Kumar Garg and N.K. Venkitakrishnan, ERP- Concepts and Practice, Prentice Hall of India,
6. Summer, ERP, Pearson Education,

<b>ELECTIVE SUBJECTS</b>	
<b>3.7</b>	<b>BUSINESS ANALYTICS</b> <b>3.7.1. BUSINESS INTELLIGENCE</b> <b>3.7.2.PREDICTIVE ANALYTICS USING R</b> <b>3.7.3.DATA WAREHOUSING AND DATA MINING</b>

### **3.7.1. BUSINESS INTELLIGENCE**

#### **1. GENERAL INFORMATION**

No. of Credits: 04

No. of Hours per Week: 04

#### **2. COURSE PERSPECTIVE**

In the age of technological progression, digital advancements have completely revolutionized our everyday lives and the business world has been impacted to a maximum extent. It is prudent on the part of the companies to develop and invest in technologies, applications, strategies and practices to collect, analyze, integrate and present pertinent business information. The entire purpose of Business Intelligence is to support and facilitate better business decisions. Hence, it is essential for business management students to have knowledge on the process of business intelligence. This course entitled - Business Intelligence is introduced to orient a business professional regarding access to information, analyze and draw insights that is critical to the success of an enterprise.

#### **3. COURSE OBJECTIVES AND OUTCOMES**

##### **OBJECTIVES**

- To orient the students on the fundamentals of Business Intelligence
- To make students understand the Business Intelligence types and environment
- To provide knowledge on Business Intelligence Architecture, life cycle, issues and challenges
- To enable students to understand the issues and challenges associated with Business Intelligence.
- To acquaint students on contemporary developments and emerging trends in Business Intelligence

##### **OUTCOMES**

**By successfully completing the course the students will be able to:**

- Understand and describe the fundamentals of business intelligence
- Implement the process of business intelligence to make better business decisions.
- Explain the issues and challenges associated with business intelligence
- Analyse the emerging trends in Business Intelligence

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE 1 BUSINESS INTELLIGENCE AN INTRODUCTION 10 HOURS**

History and Evolution, Business Intelligence Segments, Difference between Information and Intelligence, Defining Business Intelligence Value Chain, Factors of Business Intelligence System, Real time Business Intelligence, Business Intelligence Applications. Benefits of BI, Maximize value from Business systems, Business Role of BI

##### **MODULE 2 BUSINESS INTELLIGENCE ESSENTIALS & TYPES 12 HOURS**

Creating Business Intelligence Environment, Business Intelligence Platform, Roles of Business Intelligence in Modern Business, Types of Business Intelligence: Multiplicity of Business Intelligence Tools, Modern Business Intelligence, the Enterprise Business Intelligence, Information Workers

##### **MODULE 3 BUSINESS INTELLIGENCE LIFE CYCLE 10 HOURS**

Business Intelligence Lifecycle, Enterprise Performance Life Cycle (EPLC) Framework Elements, Human Factors in BI Implementation, BI Strategy, Objectives and Deliverables, Transformation process, Building a transformation roadmap, BI Development Stages, Parallel Development Tracks, BI Framework

##### **MODULE 4 BUSINESS INTELLIGENCE ISSUES AND CHALLENGES 10 HOURS**

Critical Challenges for Business Intelligence success, Cross-Organizational collaboration, Business Sponsors, Dedicated Business Representation, Availability of Skilled Team Members, Business Intelligence Application Development methodology, Planning the BI Projects, Business Analysis and Data Standardization, Creating Cost Effective Enterprise friendly BI solution, Real world Applications and Used cases

## **MODULE 5 IMPLEMENTING BUSINESS INTELLIGENCE**

**06 HOURS**

Business Intelligence Platform, Business Intelligence Platform Capability Matrix, BI Target Databases, Data Marts, BI Products and Vendors, The Big Four Business Intelligence vendors, BI Components and Architecture, Functional areas of BI Tools

## **MODULE 6 CONTEMPORARY DEVELOPMENTS AND EMERGING TRENDS IN BUSINESS INTELLIGENCE:**

**08 HOURS**

Artificial intelligence, Automation, Storytelling, Data governance, Data privacy, Cyber security, Natural Language Processing

### **5.PEDAGOGY**

- Lectures
- Case studies
- Practical Exercises - Individual & Group
- Demonstrations using Excel and R
- Talk by the industry experts and visit to industry

### **6.TEACHING/LEARNING RESOURCES**

#### **ESSENTIAL READINGS**

1. Business Intelligence and Analytics by Efraim Turban, Ramesh Sharda and DursunDelen by Pearson Publications
2. Business Intelligence (Data Mining & Optimization for Decision Making) by Carlo Vercellin by Wiley Publications

#### **REFERENCES**

3. Business Intelligence for Dummies, Swain Scheps, Wiley Publication
4. Successful Business Intelligence by Cindi Howson, McGraw Hill
5. Business Intelligence by David Leshin, Elsevier, second edition
6. Data mining for Business Intelligence, GalitShmueli, Nitin R Patel & Peter C Bruce, Wiley Publication
7. Business Intelligence, Practices, Technologies and Management, Rajiv Sabherwal, Irma Becerra-Fernandes, Wiley Publication
8. Business Intelligence Guide book, Rick Sherman, Elsevier
9. Business Intelligence Strategy & Big data analytics, Steve Williams, Elsevier

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### 3.7.2. PREDICTIVE ANALYTICS USING R

#### 1. GENERAL INFORMATION

No. of Credits: 04

No. of Hours per Week: 04

#### 2. COURSE PERSPECTIVE:

The amount of data in the world is increasing exponentially as time passes. It is estimated that the total amount of data produced in 2020 will be 20 zettabytes (Kotov, 2014), that is, 20 billion terabytes. Many businesses invest lots of money and efforts for collecting the data and most of it is not analysed fully and / or not analysed appropriately. The main reason to analyse the data is to predict the future i.e. to construct actionable knowledge. This course will help and allows the students to do data analysis and build models while learning various tools & techniques. The prerequisite of the course is students must have undergone basic courses on Statistical modelling.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

- To enable the students to be able to understand the predictive analytics in present scenario and its applications by the industry.
- Formulate the regression models for prediction

##### OUTCOMES

By successfully completing the course the students will be able to examine the data for model fitness and ETL process and to formulate and evaluate the prediction using regression, time series analysis, neural networks and decision tree model.

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: INTRODUCTION TO PREDICTIVE ANALYTICS

**06 HOURS**

Introduction to predictive analytics, definition, Evolution of Data Analytics, Applications of predictive analytics, Predictive models: Propensity model, Clustering Model & Collaborative filtering; used cases on predictive analytics.

##### MODULE 2: EXPLORATORY DATA ANALYSIS

**12 HOURS**

**Time Series Data Analysis:** Organizing and processing of data with R, Data Cleaning – Missing values, Outlier treatment, Pre-processing and cleaning and Univariate Analysis, ARIMA model for forecasting.

##### MODULE 3: PREDICTION- LINEAR REGRESSION

**14 HOURS**

Understanding simple regression in R, Scenarios for using OLS regression, Computing the intercept and slope coefficient, Obtaining the residuals, Computing the significance of the coefficient. Correlation &  $R^2$ , Multiple Linear Regression in R, Model building.

##### MODULE 4: DECISION TREES & LOGISTIC REGRESSION

**10 HOURS**

Introduction to Decision trees, Data pre-processing, Model building in R, Model comparison. Introduction to Logistic Regression: Interpreting the model parameters and assessing the impact of predictors on the probability of outcome.

##### MODULE 5: NEURAL NETWORKS

**08 Hours**

Introduction, Structure of neural networks, Information flow, Types of layers, Training a neural network, Back Propagation, Neural networks in R

##### MODULE- 6: INTRODUCTION TO OTHER REGRESSION ANALYSIS

**06 HOURS**

Introduction to other regression analysis Polynomial, Multiple linear, Poisson, Nonlinear and Nonparametric.

#### **Predictive Analytics Using R – Laboratory driven course.**

1. Demonstration of Reading data from files and working with datasets
2. Demonstration of Graphs: Basic high-level plots, Modifications of scatter plots, Modifications of histograms, parallel box plots
3. Demonstration of Exploratory Data Analysis: Missing values, Outlier treatment
4. Demonstration of Univariate Analysis
5. Demonstration of Time Series Data Analysis
6. Demonstration of Linear Regression
7. Demonstration of Multiple Regression
8. Demonstration of Decision Trees
9. Demonstration of Logistic Regression
10. Demonstration of Neural Networks

#### **Note:**

- For all the above Exercises Students can use their own datasets or Used Cases
- For all Exercises Writing programs, taking output print and writing Interpretation is compulsory in the Lab Journal
- In the practical Examination student are expected to execute the R program and write Interpretation for two exercises out of 10 exercises.

- Change of exercise is not permitted in the Practical Examination.

#### 5. University Examination for 70 marks Evaluation Pattern

Details	Marks
Lab session - Execution of the program and drawing insights using simple or multiple regression model. (R)	20
Lab session - Execution of the program and drawing insights using time series, neural networks, decision model correlation model (Using R).	20
Viva Voice	10
Lab Journal	20
<b>Total</b>	<b>70</b>

#### EXAMINER PROFILE

A person should be proficient in R and should have some experience in analytics using R. The BOE Chairperson has the discretion to select the Examiner.

#### 6. PEDAGOGY

1. The course pedagogy includes; Lab driven sessions, Programme Writing, Lecturers, Real world Case studies, Capstone Projects, Individual and group projects, Working with Cross sectional data, Time series data and Panel data, Preparing Econometrics Model. Analyzing and interpreting the results.
2. Talk by the industry experts and industry visit.

#### 7. TEACHING /LEARNING RESOURCES

1. Evans, J. R. (2013). Business Analytics: Methods, Models, and Decisions
2. Robert Stine, Dean Foster, "Statistics for Business: Decision Making and Analysis", Pearson Education, 2nd edition, 2013.
3. Turban, E., Aronson, J. E., Liang, T. P., & Sharda, R. (2010). Decision support and business intelligence systems (9th ed., p. 720). Prentice-Hall.
4. Berson, A., Smith, S. J., & F. (1997). Data Warehousing, Data Mining and OLAP (1st ed., p 640). Computing McGraw-Hill.
5. Han, J., & Kamber, M. (2000). Data Mining : Concepts and Techniques (1st ed., p. 550). Morgan Kaufmann
6. Robert Kabacoff, Second Edition (2015), Manning publications: R in Action Data analysis and graphics with R
7. U Dinesh Kumar, "Business Analytics" Wiley India Pvt. Ltd publication, 2017
8. Dr. Umesh R. Hodeghatta and Umesh Nayak, Apress publication : Business Analytics Using R - A Practical Approach
9. Jeffrey S. Strickland, Simulation Educators (2014) Predictive Analytics using R
10. Subhashini Sharma Tripathi, Apress publication, Learn Business Analytics in Six Steps Using SAS and R

#### R – Programming

1. Wickham H., Golemund G. (2016). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media.
2. Cotton, R. (2013). Learning R: A Step-by-Step Function Guide to Data Analysis 1st Edition [Kindle Version]. Retrieved from <http://www.amazon.in>.
3. Knell, R. (2013) Introductory R: A Beginner's Guide to Data Visualisation, Statistical Analysis and Programming in R. [Kindle Version]. Retrieved from <http://www.amazon.in>.
4. Murray, S. (2013) Learn R in a Day. [Kindle Version]. Retrieved from <http://www.amazon.in>.

### 3.7.3. DATA WAREHOUSING AND DATA MINING

#### 1. GENERAL INFORMATION

No. of Credits: 04

No. of Hours per Week: 04

#### 2. COURSE PERSPECTIVE

This course will give an introduction to methods and theory for development of data warehouses and data analysis using data mining. It will allow them to store voluminous data for online processing, pre-process the data for mining applications, apply association rules for mining the data and many more. Students will also be able to discover the knowledge imbedded in the high dimensional system.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

1. To enable students to use data warehouse design and architecture tools.
2. To be able to carry out the ETL process and use OLAP databases and their schemas
3. To enable students to apply the association rules in data mining technology and to draw insights from it.

##### OUTCOMES

**By successfully completing the course the students will be able to** Pre process the data for mining applications and Apply the association rules for mining the data and query the Data Warehouse using OLAP tools

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: INTRODUCTION TO DATA WAREHOUSING

**10 HOURS**

Characteristics of Data Warehouse, Types of Data; Differences between OLTP Systems and OLAP systems; Data Mart, Aspects of a Data Mart, Functionality of Data Warehouse: Advantages and Applications of Data Warehousing; Emergence of cloud services and infrastructure in Data Warehousing;

##### MODULE 2: DATA WAREHOUSE PLANNING AND ARCHITECTURE

**10 HOURS**

Planning a Data Warehouse and Key Issues: Planning and Project Management in constructing Data warehouse; Data Warehouse development Life Cycle; Kimball Lifecycle Diagram, Requirements Gathering Approaches: Team organization, Roles, and Responsibilities; Data Warehouse Architecture: MOLAP, ROLAP, HOLAP; Creation of Fact tables and Dimension Tables in Data warehousing; Basic Querying and Reporting on an OLAP database; Data Warehouse Schemas; Star Schema, Snowflake Schema.

##### MODULE 3: EXTRACT, TRANSFORM AND LOAD

**12 HOURS**

Introduction: ETL Overview or Introduction to ETL: ETL requirements and Steps: Data Extraction Methods, Handling Missing Data, Outlier detection, Automated Data Preparation, Combining data files, Aggregate Data, Duplicate Removal; Data Transformation; Basic Tasks in Transformation, Error detection and correction: Data Loading; Data Loading Techniques: ETL Tools:

##### MODULE 4: INTRODUCTION TO DATA MINING

**8 HOURS**

Introduction and Concept of Data mining; Data mining parameters, Architecture of Data Mining, Functionalities of Data Mining, Kinds of Data which can be mined, Classification of a Data Mining System, Advantages and Challenges in Data Mining, Ethical issues in Data Mining and their Analysis; Global issues in Data Mining; Data Mining Techniques - Association rules, Classification, Clustering, Neural networks, Decision Trees.

##### MODULE 5: DATA MINING APPLICATIONS

**8 HOURS**

Business Applications Using Data Mining such as Risk management, Targeted marketing, Customer profiles and feature construction; Application of Data mining in Health Care Sector, Retail Sector, Financial Services and other sectors.

##### MODULE 6: EMERGING TRENDS

**8 HOURS**

Emergence of cloud services and infrastructure in Data Warehousing; Data Lakes: Difference between Data Lakes and Data Warehouses; Managed Data Warehouse Services (e.g. Amazon RedShift, Azure SQL Data Warehouse.).

#### 5. PEDAGOGY

- Lectures,
- Real World Case Study,
- Assignments and projects
- Seminar,

- Focus on practical exercises help students to maintain their interest levels in learning and also enhance their understanding of the subject. These activities will make the students industry ready.

## **6.TEACHING/LEARNING RESOURCE**

### **ESSENTIAL READINGS**

1. Ralph Kimball and Margy Ross, “**The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling**”, (Third Edition). John Wiley and Sons.
2. J. Han and M. Kamber, "**Data Mining: Concepts and Techniques**", Morgan Kaufman, 3/E, 2011.
3. Vaisman, Alejandro; Zimanyi, Esteban, “**Data Warehouse Systems**”, Springer, 2014.

### **REFERENCE**

4. Golfarelli, Matteo; Rizzi, Stefano, “**Data Warehouse Design : modern principles and methodologies**”, McGraw Hill, 2009.
5. Jensen, Christian S; Pedersen, Torben Bach; Thomsen, Christian W, Morgan & Claypool, “**Multidimensional Databases and Data warehousing**”, cop. 2010.
6. Kimball, Ralph, “**The Data warehouse lifecycle toolkit: expert methods for designing, developing, and deploying data warehouses**”, John Wiley & Sons, 1998.
7. Alex Berson, StephenJ. Smith, "**Data Warehousing, Data Mining, and OLAP**", MGH,1998

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## OPEN ELECTIVE

### 3.9 MANAGEMENT PERSPECTIVES

#### 1. GENERAL INFORMATION

No. of Credits per week 03

No. of Hours per week 03

#### 2. PERSPECTIVE OF THE COURSE

This course is designed to impart knowledge of the concepts, principles and functions of Management to non-management students. It further aims at enhancing the Management knowledge of non management students

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

To enable the students to gain insight into the fundamentals of Management as a discipline

##### OUTCOMES

This course develops appreciation of management as a subject and discipline

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1: INTRODUCTION TO MANAGEMENT 10 HOURS

Nature of Management, Purpose, Importance & Functions.

Brief Introduction of various management functions: Planning, Organizing, Staffing, Directing, Co-Ordinating, Reporting, Budgeting

##### MODULE 2: MANAGEMENT OF ORGANISATIONS 8 HOURS

Types of Organizations, Organization Structure

Introduction to Functional areas of Organization: Human Resource, Finance, Marketing and Production

##### MODULE 3: LEADERSHIP 8 HOURS

Leadership v/s Management; Styles of Leaderships; Control v/s Delegation; Conditions and Principles of Delegation. Motivation: Basic Theories of Motivation, Sources of Motivation

##### MODULE 4: TOOLS OF MANAGEMENT

8 HOURS

Brain Storming, SWOT Analysis, Pareto Chart, Fishbone Diagram, Process Chart, Quality Circles,

##### MODULE 5: MANAGERIAL SKILLS 8 HOURS

Business Communication: Process, Methods and Barriers of Communication

Meetings: Planning, Process, Evaluation Team work; Characteristic Features of Successful Teams; Stages of the Development of a Team; Group Discussion, Presentation Skills.

Writing effective e-mail-mail elements of e-mail messages, creating professional e-mail messages.

#### 5. TEACHING/LEARNING RESOURCES

## ESSENTIAL READINGS

1. HenzWehrich, Mark and, Koontz ,Management, McGraw Hill
2. Meenakshi Raman and PrakashSingh, Business Communication ,Oxford
3. Morey Stettner, Skills for New Managers, Kindle Edition.
4. McGrath. E.H, S.J, “Basic Managerial Skills for All, PHI Learning

**PS: This course is offered to other PG students by CBSMS. Whereas, MBA students have to study any one of the open electives offered by other PG Departments based on their choice.**

**CANARA BANK SCHOOL OF MANAGEMENT STUDIES**

**BENGALURU CITY UNIVERSITY  
BANGALORE**

**IV SEMESTER**

**MASTER OF BUSINESS ADMINISTRATION [DAY & EVE] UNDER  
CHOICE BASED CREDIT SYSTEM (CBCS) (2019 -2020  
ONWARDS)**

**COURSE MATRIX**

**FOURTH SEMESTER MBA (DAY & EVE)**

<b>PAPER</b>	<b>SUBJECTS</b>
<b>CORE SUBJECTS</b>	
4.1	<b>INTERNATIONAL BUSINESS</b>
<b>ELECTIVE SUBJECTS</b>	
4.2	<b>FINANCE</b> 4.2.1. PROJECT MANAGEMENT AND ANALYSIS 4.2.2. INTERNATIONAL FINANCIAL MANAGEMENT 4.2.3. DERIVATIVES AND RISK MANAGEMENT
4.3	<b>MARKETING</b> 4.3.1. SALES AND DISTRIBUTION MANAGEMENT AND RETAILING. 4.3.2. SERVICES MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT . 4.3.3. INTEGRATED MARKETING COMMUNICATION AND DIGITAL MARKETING
4.4	<b>HUMAN RESOURCES</b> 4.4.1. GLOBAL HRM 4.4.2. STRATEGIC HRM 4.4.3. INDUSTRIAL RELATIONS AND HR AUDIT
4.5	<b>ENTREPRENEURSHIP AND STARTUPS</b> 4.5.1. TECHNOLOGY FOR NEW VENTURES 4.5.2. SCALING UP AND SUSTAINABILITY OF START-UPS 4.5.3. ENTREPRENEURIAL FINANCE
4.6	<b>PRODUCTION AND OPERATIONS MANAGEMENT</b> 4.6.1. RESOURCE OPTIMIZATION AND PROJECT RISK MANAGEMENT.  4.6.2. SUPPLY CHAIN MANAGEMENT.  4.6.3. TOTAL QUALITY MANAGEMENT
4.7	<b>BUSINESS ANALYTICS</b> 4.7.1. BIG DATA ANALYTICS 4.7.2. DATA VISUALIZATION AND BUSINESS REPORTING USING TABLEAU 4.7.3. EMERGING TECHNOLOGIES AND FUTURE SKILLS FOR BUSINESS LEADERS
4.8	<b>MASTER THESIS FOR 6 WEEKS IN AN ORGANISATION</b>



## 4.1 INTERNATIONAL BUSINESS

### 1. GENERAL INFORMATION

No. of Credits            04

No. of Hours per week 04

### 2. PERSPECTIVE OF THE COURSE

International Business concerns those firms that do not restrict their processes to a single state or populace. International business dissects the reasons for the existence of firms engaged in International business, how they flourish in the intricate and unpredictable international environment, and what their undertakings mean for the countries in which they do business. Culture, language, political systems, geography, and socio-economic factors all influence a company's business practices. Therefore, expanses of study comprise of the challenges of managing international companies, whether enormous or diminutive; the rudiments of strategic management; cross-cultural management; globalization; and the regulation and politics of international business.

Students who aspire to intensify their understanding of global markets need to study international business, since it delivers insights into the global economic and business climates. International business studies encompass topics across a spectrum of business fields, from finance and marketing to management and accounting.

### 3. COURSE OBJECTIVES AND OUTCOMES

#### OBJECTIVES

To make students to learn how business organizations operate in an international environment.

To understand the impact of international influences on business.

To help students to plan a career in international business.

#### OUTCOMES

By the end of the course, the students must have increased confidence to take up a career in international business.

### 4. COURSE CONTENTS AND STRUCTURE

#### MODULE 1: INTERNATIONAL BUSINESS ENVIRONMENT    10 HOURS

Evolution, Drivers and Challenges of IB as compared to Domestic Business, National and organizational competitive advantage over the world, Modes of entry, Active players in multinational business.

The International environment of IB - Political, Legal, Technological, Cultural, Demographic and Economic environment. Cross-cultural management, levels of culture, models of Culture

#### MODULE 2: GLOBALIZATION

8 HOURS

Routes of globalization, Modes of International Business-Organizing international business – international designs, factors influencing choice of a design, issues in organization design. Conflict management, reconciliation, adjudication and arbitration issues, supporting Institutions, Negotiations.

#### MODULE 3: WTO AND TRADING BLOCKS

8 HOURS

WTO and LPG policies, Its Implications on India— Regional Trade Blocks, Integration between countries, levels of integration and impact of integration. International strategic alliances.

#### MODULE 4: GLOBAL TRADE AND INVESTMENT

10 HOURS

Theories of global trade and investment, Mercantilism, theory of absolute advantage, theory of comparative advantage, factor endowment theory, product life cycle theory, Porter's national competitive advantage.

FDI- in World Economy, horizontal and vertical FDI, benefits of FDI to home and Host Country. FDI- Indian Scenario. EXIM TRADE- Export and Import financing, Export marketing, EXIM policy. Roles of Institutions connected with EXIM trade.

#### **MODULE 5: GLOBAL ETHICS AND E-COMMERCE**

**10 HOURS**

Social responsibility and ethical issues in international business – national differences in ethics and social responsibility, code of conduct for MNC's.

Global E-Business, E- Commerce in India. Atmanirbhar and International Business.

#### **MODULE 6: GLOBAL BUSINESS OPERATIONS 10 HOURS**

Global- Operations management and competitive advantage, strategic issues in operations management,(Manufacturing Management, Logistics Management and Procuring), Technology transfers – issues arising out of technology transfers.

International Finance –Balance of Payments

Marketing Management, benefits of international markets, major activities in international marketing

Human Resource Management: Approaches, Expatriation and Repatriation Process, Training, Compensation, Industrial Relations.

#### **5. PEDAGOGY**

Conceptual explanation in detail in the class room sessions and relevant cases will give students a better perspective. Live projects should be the part of curriculum compulsorily.

#### **6. TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1. Francis Cherunilam; International Business, Prentice Hall of India.
2. Charles Hill, International Business, McGraw-Hill-Irwin.
3. John D. Daniels, Lee Radebaugh and Daniel P. Sullivan, "International Business", Prentice Hall.

##### **REFERENCES**

1. Richard M Hodgetts And Fred Luthans, "International Management", McGraw-Hill,
2. Hill, C.W.L. and Jain, A.K., International Business: Competing in the Global
3. Marketplace, 6th Edition, Tata McGraw-Hill Education,
4. Paul, J., International Business, 5th Edition, PHI Learning,
5. Ball, D., Geringer, M., Minor, M. and McNett, J., International Business: The
6. Challenge of Global Competition, Tata-McGraw-Hill Education,
7. Deresky, H, International Management: Managing Across Borders and Cultures, 6<sup>th</sup> Edition, Pearson.
8. Griffin, R., International Business, 7th Edition, Pearson Education.
9. Anant K Sundaram & J Stewart Black, The International Business Environment, Prentice Hall Of India.
10. Tayeb, Monis H: The Global Business Environment – An Introduction, Sage Publication, New Delhi.
11. Francis Cherunilam, International Business Environment, Himalaya Publishing House.

<b>ELECTIVE SUBJECTS</b>	
<b>4.2</b>	<b>FINANCE</b> <b>4.2.1.PROJECT MANAGEMENT AND ANALYSIS</b> <b>4.2.2.INTERNATIONAL FINANCIAL MANAGEMENT</b> <b>4.2.3.DERIVATIVES AND RISK MANAGEMENT</b>

### **4.2.1 PROJECT ANALYSIS AND MANAGEMENT**

#### **1. GENERAL INFORMATION**

No. of Credits per week 4

No. of Hours per week 4

#### **2. PERSPECTIVE OF THE COURSE**

This course develops the competencies and skills for planning and controlling projects and understanding interpersonal issues that drive successful project outcomes. A finance professional needs knowledge of Project management practices within the organization which influences the profitability of the organization. A thorough understanding of all the components of project planning and management will equip a project manager to make better and informed decisions while investing on projects. Hence, the course on “Project Analysis and Management” which orients the learner all factors influencing financial and strategic decisions of project management in a business enterprise is introduced.

#### **3. COURSE OBJECTIVES AND OUTCOMES**

##### **OBJECTIVES**

To know the project manager’s roles and responsibilities and financial projections.

To understand project selection and criteria and feasibility analysis

To understand UNIDO approach for Social Cost Benefit analysis

##### **OUTCOMES**

At the end of the course, student will learn project management design, development, and deployment by using project management tools, techniques, and skills, to understand the implications, challenges, and opportunities of organizational dynamics in project management.

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: INTRODUCTION 12 HOURS**

Project: Meaning, ten subsystems of project, generation and screening of project ideas, types of projects, Feasibility of a project; Market feasibility, Technical feasibility, Financial feasibility – Projected Cash flow Statement and Projected Balance Sheet; relate capital budgeting concepts to investments on projects, role of a project manager.

##### **MODULE 2: EVALUATION OF PROJECTS 8 HOURS**

Project Organization, Project Planning, Project Control, Pre-requisites for successful Project Implementation – Network techniques: Development of Project Network, Time Estimation, scheduling, PERT, CPM, Network Cost System.

##### **MODULE 3: RISK ANALYSIS IN PROJECT MANAGEMENT 18 HOURS**

Types and measure of project risk – simple estimation of risk – sensitivity analysis – scenario analysis – Monte Carlo simulation – Decision tree analysis – Managing risk – selection of projects under risk – risk analysis in practice. Social cost benefit analysis: UNIDO Approach, Little Mirrlees Approach. (Theory and Problems)-Special Decision Situations : Choice between mutually exclusive projects, Adjusted NPV, Optimal Timing, Uniform Annual Equivalent (replacement period), and Adjusted Cost of Capital.

##### **MODULE 4: VENTURE CAPITAL PROJECTS 06 HOURS**

Venture Capital and Private Equity – Meaning, Stages in venture capital financing, Venture capital investment appraisal process, Valuation of venture capital, Venture capital financing in India, Private equity funding trends

**MODULE 5: PUBLIC-PRIVATE PARTNERSHIP PROJECTS 06 HOURS**

Infrastructure Projects and PPP – Characteristics of infrastructure projects, Risks in infrastructure projects and managing such risks, Typical structures, Financial evaluation of infrastructure projects, PPP – Meaning, Structures of PPP, Financing sources for PPP projects.

**MODULE 6: PROJECT NEGOTIATIONS 06 HOURS**

Conflict and Negotiation, The Nature and Type of Negotiation, Project Review and Administrative Aspects, Post Completion Audits, Abandonment Analysis.

**5. PEDAGOGY**

- a) Lectures.
- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies.
- e) Business Planning

**6. TEACHING/LEARNING RESOURCES**

**ESSENTIAL READINGS**

1. Prasanna Chandra, Projects: Planning, Analysis, Selection, Implementation & Review, Tata McGraw Hill.
2. Bhavesh M. Patel, Project Management, Vikas Publishing House, New Delhi.
3. Vasant Desai, Project Management, Second Revised Edition, Himalaya Publishing House

**REFERENCES**

1. P.C.K. Rao, Project Management and Control, Sultan Chand & Sons
2. Clifford F. Gray and Erik W. Larson, Project Management, Tata McGraw Hill
3. K. Nagarajan, Project Management, Third Edition, New Age International
4. Project Management: The Managerial Process – Gray & Larson
5. UNIDO SERIES on Project Management.
6. B.B. Goel, Project Management – Principles and Techniques, Deep and Deep
7. Gopalakrishnan P and Ramamoorthy, V.E., Project Management, Macmillan

## 4.2.2. INTERNATIONAL FINANCIAL MANAGEMENT

### 1. GENERAL INFORMATION

No. of Credits 4

No. of Hours per week 4

### 2. PERSPECTIVE OF THE COURSE

All Countries, companies and people on the globe are increasingly integrated in their economic activities. Globalization offers several opportunities but also pose risks.

The course emphasizes on the practical implications of finance theory and its application in international financial management. This subject will help students to understand various analytical tools and techniques for financial decision making in a international setting and prepare them for careers in international finance.

### 3. COURSE OBJECTIVES AND OUTCOMES

#### OBJECTIVES

To understand exchange rates, and their relationship with Economic variables.

To study the impact of exchange risk Hedging tools and techniques.

#### OUTCOMES

After completing this course, students should be able to- Analyse the global financial environment, currency system, relationship between economies and its impact on international transactions and understand functioning of international financial markets.

## 4. COURSE CONTENT AND STRUCTURE

### MODULE 1: GLOBAL MONETARY SYSTEM

5 HOURS

Introduction and Scope of International finance, Evolution of International Monetary System. The current Exchange Rate Agreements, European Monetary System, Fixed vs. Flexible Exchange Rate Regime, Exchange rate policy and Monetary policy, International liquidity and International reserves.

### MODULE 2: BALANCE OF PAYMENTS (BOP)

5 HOURS

Introduction, Functions and Principles of BOP, BOP accounting, Components of the BOP, 'Surplus' and 'Deficit' in BOP, Importance and limitations of BOP Statistics, Relationship of BOP with other economic variables. Capital account convertibility.

### Module 3: FOREIGN EXCHANGE MARKETS

14 HOURS

Introduction, Structure of Foreign Exchange Market, Mechanics of Currency Trading, Types of Transactions and Settlement Dates, Exchange Rate Quotations and Arbitrage, Exchange Rate Determination and Forecasting, Introduction to Currency Futures, Currency Options, Forwards and Swaps.

### MODULE 4: FOREIGN EXCHANGE RATE DETERMINATION 8 HOURS

Introduction, Purchasing Power Parity Theory, Interest Rate Parity Theory, International Fischer's Effect, Pure Expectations Theory

### MODULE 5: MANAGEMENT OF FOREIGN EXCHANGE RISK 12 HOURS

Exchange Risk, Types of Exposure, Tools and Techniques of Foreign exchange risk management, Management of Translation Risk Management of Transaction Risk, Management of Economic Risk (including simple problems),

Risk Hedging Strategies: Internal –Netting, Lead and Lags. External – Forwards, Futures, Options, Money-market Hedging, Currency Swaps.

### MODULE 6: MANAGING FOREIGN OPERATIONS

12 HOURS

Foreign Direct Investment, Multinational Capital Budgeting (including problems). Control and Performance Evaluation of Multinational Companies.

International Taxations (Double Taxation Avoidance , Relief Provision in India, Special Prov. Relating avoidance of tax ), International Banking ( International Debt Crisis, Banker's Plan), Financial Depressions -Effects on International Banking. Crypto currency, ADR and GDR.



## **5. PEDAGOGY**

- a) Lectures.
- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies.

## **6. TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

1. Alan Shapiro: Multinational Financial Management , Prentice Hall, New Delhi.
2. Apte, Prakash, “International Finance – A Business Perspective”, Tata McGraw Hill.
3. David B. Zenoff& Jack Zwick: International Financial Management.
4. Rita M. Rodriguez L. Bigame Carter: International Financial Management.
5. V. A. Avadhani: International Finance- Theory and Practice, Himalaya Publishing House.

### **REFERENCES**

1. Madura, Jeff, “International Corporate Finance”, Thomson South-Western.
  2. Vyuptakesh Sharan,, “International Financial Management”, Prentice Hall of India.
  3. Jain, Peyrard, and Yadav’ “International Financial Management”, MacMillan
  4. J. Fred Weston, Bart: Guide to International Financial Management.
  5. Robery O. Edmister: Financial Institutions - markets and Management.
  6. A.V. Rajwade: Foreign Exchange International Finance and Risk Management, Prentice Hall.
  7. Apte P.G., International Financial Management, Tata McGraw Hill,
  8. Eun and Resnik, International Financial Management, Tata Mcgraw Hill
  9. Bekaert, Greet and Hodrick, Robert J., ‘International Financial Management’, Prentice Hall.
  10. Shapiro, Alan C., ‘Multinational Financial Management’, John Wiley.
  11. Adrian Buckley, Multinational finance, Third Edition, Prentice-Hall of India Pvt. Ltd.,
  12. Madhu Vij, International Financial Management, Excel Books
  13. H.R. Machiraju, International Financial Management, Himalaya Publishing House
  14. Thummuluri Siddaiah, International Financial Management, Pearson
- Note: Latest edition of the readings may be used.

## 4.2.3.DERIVATIVES AND RISK MANAGEMENT

### 1.GENERAL INFORMATION

No of Credits 4

No of hours per week: 4

### 2.PERSPECTIVE OF THE COURSE

The primary purpose behind this course is to make student to understand the dynamics of risk management by using derivatives as a tool and to understand the transfer of risk without the need to trade the underlying. This allows for more effective risk management within companies and the broader economy. In addition, the derivatives market plays a role in information discovery and market efficiency. Despite the benefits, there are criticisms that derivatives are misused and add to market volatility. They are complex financial instruments that are used for various purposes, including hedging and getting access to additional assets or markets.

### 3.COURSE OBJECTIVES AND OUTCOME

#### OBJECTIVES

To provide the concepts and foundations of managing financial risk in business enterprises

To provide the concept of Derivatives, its types and how to minimise risk by using derivatives as a tool and acquaint the knowledge of Options and Futures using F&O for Hedging and the development position of Derivatives in India.

#### OUTCOME

By the end of this course, a student is expected to understand Risks associated stocks and commodities and how to minimise it by using derivatives as a risk management tool.

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE 1: DERIVATIVES – AN INTRODUCTION

**6 HOURS**

Concept of Risk -Types of Risks of a Business Enterprise. Financial Risk and Its Types (Market Risk, Credit Risk, Liquidity Risk and Operational Risk). Risk Analysis in Capital Budgeting (only theory)– Measuring and Managing Capital Budgeting Risks – Sensitivity Analysis, Scenario Analysis, Simulation, Standard Deviation and Co-efficient of Variation, Risk Adjusted Discount Rate Method, Certainty Equivalent Co-efficient Method, Decision Tree Analysis and Probability Distribution Method.

An Introduction to derivatives, Elements of a Derivative Contract, Factors Driving Growth of Derivatives Market, Types of Derivatives, Types of Underlying Assets, Participants in Derivatives Market, Advantages and Disadvantages of Trading in Derivatives Market, Derivative Trade in India – A current scenario.

#### MODULE 2: FORWARD AND FUTURES

**12 HOURS**

Forward Contract, settlement of Forward Contract, Futures contract, Futures Contract Specification and Terminologies, difference, Pricing, Arbitrage, Concept of Convergence Relationship between Futures Price and Expected Spot Price, Basis and Basis Risk, Pricing of Futures Contract, Cost of Carry Model. Speculation and Arbitrage using Futures, Long Hedge – Short Hedge, Cash and Carry Arbitrage, Reverse Cash and Carry Arbitrage, Payoff Charts and Diagrams for Futures Contract, Perfect and Imperfect Hedge.

**Stocks and Index Futures:** Stock & Index Futures Index Futures, forward contracts & stocks, Future contract on indices & individual stocks, Features, specifications, pricing, Hedging, Speculation & arbitrage with stock index futures

#### MODULE 3: COMMODITY FUTURES

**8 HOURS**

History and Origin, Types of Commodities Traded, Structures of Commodities Market in India, Participants in Commodities Market, Trading in Commodities in India (Cash and Derivative Segment), Commodity Exchange in India and Abroad, Reasons for Investing in Commodities. Commodity Derivatives, Commodity Exchanges and Commodity Contracts. Pricing Commodity

Forward, Futures & Options. Crude oil, Gold, Base Metal Derivatives. Pricing, hedging, Perfect & imperfect hedge, Basis Risk, Optimal Hedge Ratio. Trading, Clearing and Settlement in Derivatives Market.

#### **MODULE 4 : OPTIONS**

**12 HOURS**

Options Contract Specifications, Terminologies, Call Option, Put Option, American, & European Options. Difference between Futures and Options, Pay-off and Pay-off Diagrams. Understanding Options Quotations, Trading & settlement. Option Pricing: Boundary conditions for option pricing. Factors Affecting Option Premium. Moneyness in case of options, intrinsic value & time value, arbitrage-based relationship of option pricing.

#### **Module 5 OPTIONS VALUATIONS AND STRATEGIES**

**12 HOURS**

Price Difference Approach; Expected Gains Approach; Binomial Model; Risk Neutral Method and Black- Scholes Model – Assumption, Interpretation. Factors affecting option price. Option strategies: Put call parity, Protective Put, Covered Call. Trading Strategies with Options – Straddle, Strip, Strap, Strangle, Spreads- butterfly spread. Options-Sensitivities Delta & Delta Hedging, Theta, Gamma & Neutrality, Greek Letters

#### **Module 6 TRADING, CLEARING AND SETTLEMENT IN DERIVATIVES MARKET** **6 HOURS**

Meaning and Concept, SEBI Guidelines, Trading Mechanism – Types of Orders, Clearing Mechanism – NSCCL – its Objectives and Functions, Settlement Mechanism – Types of Settlement. (b) Types of Risk: Value at Risk, Methods of Calculating VaR, Risk Management Measures, Types of Margins, SPAN Margin (only theory).

#### **5. PEDAGOGY**

- **Spreadsheets**
- **Live case studies connecting with capital markets**
- **Mock trading with derivatives**

#### **6. TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1. FUTURES AND OPTIONS: N D Vohra and B Bagri. McGraw Hill
2. Fundamentals of Financial Derivatives. N. R. Parasuraman. Wiley.

##### **REFERENCES**

1. Fundamentals of Financial Derivatives. S S S Kumar. PHI.
2. Options, Future & Other Derivatives - John C. Hull and Sankarshan Basu. Tenth Edition – Pearson
3. Fundamentals of Futures and Options Markets - John C. Hull. Pearson.
4. Introduction to Derivatives and Risk Management (Book Only) 8th Edition by Don M. Chance & Roberts Brooks
5. Derivatives & Risk Management, Rajiv Srivastava, 4th Edition, Oxford Publication House Reference Books:
6. Financial derivatives: theory, concepts and problems – S L Gupta. PHI
7. Derivatives and Risk Management Kindle Edition. Sundaram Janakiraman. Pearson.

<b>ELECTIVE SUBJECTS</b>	
<b>4.3</b>	<b>MARKETING</b> <b>4.3.1. SALES AND DISTRIBUTION MANAGEMENT AND RETAILING.</b> <b>4.3.2. SERVICE MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT.</b> <b>4.3.3. INTEGRATED MARKETING COMMUNICATIONS AND DIGITAL MARKETING</b>

### **4.3.1 SALES AND DISTRIBUTION MANAGEMENT AND RETAILING**

#### **1. GENERAL INFORMATION**

No. of Credits 4

No. of Hours per week 4

#### **2. PERSPECTIVE OF THE COURSE**

Effective Sales and Distribution management is critical to deliver goods and services to the end consumers efficiently and in line with the marketing strategies of a firm. Distribution is not just about reaching the target customers but also about doing it in a profitable manner and in a way that suits the firm's image. Retailing, the last mile of distribution, involves major decisions on types of outlets, merchandising, store management and retailing mix. This course attempts to familiarize students with the strategies involved in sales and distribution management and retailing.

#### **3. COURSE OBJECTIVES AND OUTCOME**

##### **OBJECTIVES**

To understand the services domain from a marketing perspective.

To understand retailing as a business and have a comprehensive view of the marketing and store management functions in a retailing organization.

##### **OUTCOME**

At the end of the course, student must be able to understand the essential components of a service business and manage retailing.

#### **4. COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: DISTRIBUTION MANAGEMENT AND MARKETING MIX 8 HOURS**

An overview of distribution, Channel levels; Channel formats; Designing channel systems; Channel management; Supply chain management.

##### **MODULE 2: SALES AS A MARKETING FUNCTION 12 HOURS**

Sales objectives; Personal selling and Buying situations; Buying decision process; Sales forecasting methods; Organising and staffing sales force; Management of sales territories; Training and motivating sales force.

Analysis of sales and marketing costs, Evaluation of salespeople's performance. comprehensive sales force cases and exercises.

##### **MODULE 3: INTRODUCTION TO RETAILING 10 HOURS**

Introduction to retailing; Role in distribution channel; Functions of retailing; Theories of retail development; Types of retailers and Retail formats; Retail management decision process; Retailing environment in India; Global growth opportunities.

##### **MODULE 4: RETAIL STRATEGY 10 HOURS**

Consumer shopping behaviour and decision making process; Market segmentation; Target market and retail format; Retail mix; Strategy for competitive advantage; Strategic retail planning process; Location strategy; Growth strategies; Pricing strategy; Communication mix; Measuring performance in retail.

##### **MODULE 5: STORE MANAGEMENT 8 HOURS**

Key elements of store operations and managing touch points; Role of a store manager; Store design and layouts; Merchandise planning system; Merchandise buying process; Private labels; Visual Merchandising; Customer service in retailing; Customer relationship management.

#### **MODULE6: WEB, NON STORE AND NON TRADITIONAL RETAILING 8 HOURS**

Advantages and disadvantages of e tailing; E commerce business models; Online payment systems; Marketing mix for e tailing; Customer relationship management in e tailing; Other non traditional retailing formats.

#### **5. PEDAGOGY**

- Case study
- Live projects and mini projects
- Presentations
- Group discussions

#### **6. TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1. Valarie A Zeithml, Mary Jo Bitner and Ajay Pandit , Services Marketing – Integrating customer focus across the firm, McGraw hill –Irwin Publication, 6th edition, 2012
2. SwapnaPradhan , “Retailing Management text and cases”, Tata McGraw hill Education, 4th edition, 2012
3. Michael Levy, Barton Weitz, and Ajay Pandit , Retailing Management, McGraw Hill Education, 8th edition, 2012

##### **REFERENCES**

1. PacoUnderhill , Why we buy – The Science of Shopping , Simon & Schuster; Updated and revised edition, 2008.
2. G.P.Sudhakar , Integrated Retail Communication, Prentice Hall of India Pvt Ltd, 2012
3. Sriram B Iyer , Retail Store Operations , Tata McGraw Hill Education Pvt Ltd, Ist Edition , 2011
4. Rosemary Varley and Routledge , Retail Product management: Buying and Merchandising ,Routledge Publication, 2 edition 2005

##### **JOURNALS**

1. Journal of retailing and consumer services - elsevier
2. Journal of retailing
3. Journal of services marketing

##### **WEB RESOURCES**

1. [www.retailmarketing.com](http://www.retailmarketing.com)
2. [www.forbes.com](http://www.forbes.com)



## 4.3.2. SERVICES MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT

### 1. GENERAL INFORMATION

No. of Credits 4

No. of Hours per week 4

### 2.PERSPECTIVE OF THE COURSE

Marketing of services has emerged as a distinct area over the last couple of decades. Service industry is a large employer and contributes substantially to the economy. Marketing of services needs additional skills and understanding. There is a need to understand marketing of services including good customer relationship management.

### 3.COURSE OBJECTIVES AND OUTCOME

#### OBJECTIVES

To appreciate the challenges involved in managing the services and analyse the strategies to deal with these challenges.

To give insights about the foundations of services marketing, customer expectations of services and gap existing in the service delivery processes and service Quality.

To understand the need and importance of maintaining a good customer relationship.

#### OUTCOME

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

Demonstrate integrative knowledge of marketing issues associated with service productivity, perceived quality, customer satisfaction and loyalty.

Develop blueprint for the services sector and develop a better appreciation of the necessary strategies to create a service excellence.

Recognise the challenges faced in services delivery as outlined in the services gap model.

To use strategic customer acquisition and retention techniques in CRM.

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE 1 : INTRODUCTION TO SERVICES MARKETING 12 HOURS

Definition – Service Economy – Evolution and growth of service sector - Challenges and issues in Services Marketing – Services Marketing Mix - Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality Function Development.

#### MODULE 2: SERVICE DELIVERY AND PROMOTION 8 HOURS

Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle - Integrated Service marketing communication.

#### MODULE 3: SERVICE STRATEGIES 8 HOURS

Service Marketing Strategies for health – Hospitality – Tourism – Financial – Logistics - Educational – Entertainment & public utility Information technique Services.

#### MODULE 4: INTRODUCTION TO CRM & CRM STRUCTURES 12 HOURS

Definitions - Concepts and Context of relationship Management – Evolution - Transactional vs. Relationship Approach – Elements of CRM – CRM Process – Strategies for Customer acquisition – Retention and Prevention of defection – Models of CRM – CRM road map for business applications.

#### MODULE 5: CRM PLANNING AND IMPLEMENTATION 8 HOURS

Strategic CRM planning process – Implementation issues – CRM Tools- Analytical CRM – Operational CRM – Call center management – Role of CRM Managers.

#### MODULE 6: TRENDS IN CRM 8 HOURS

e- CRM Solutions – Data Warehousing – Data mining for CRM – an introduction to CRM software packages.

### 5.PEDAGOGY

Lectures

Case study discussion

Presentation

### 6.TEACHING/LEARNING RESOURCES

#### ESSENTIAL READINGS

1.Christopher H. Lovelock and Jochen Wirtz, Services Marketing: People, Technology, strategy Pearson Education, New Delhi,8th edition, 2016.

2.John.E.G.Bateson, K.Douglas Hoffman, Services Marketing, South Western Cengage learning, 4th Edition, 2011.

3.G.Shainesh, Jagdish, N.Sheth, Customer Relationship Management A Strategic Prespective, Macmillan 2010

4.Alok Kumar et al, Customer Relationship Management: Concepts and applications, Biztantra, 2008.

#### REFERENCE BOOKS :

1. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.
2. Valarie Zeithaml et al, Services Marketing, 5<sup>th</sup> International Edition, Tata McGraw Hill, 2007.
3. Christian Gronroos, Services Management and Marketing a CRM in Service Competition, 3<sup>rd</sup> Edition, Wiley, 2007.
4. R. Srinivasan, SERVICES MARKETING, Prentice Hall of India Private Limited, 4<sup>th</sup> Edition 2014, New Delhi.
5. Vinnie Jauhari & Kirti Dutta (2017), Services Marketing, Text and cases, 2<sup>nd</sup> edition.
6. H. Peeru Mohamed and A. Sahadevan, Customer Relation Management, Vikas Publishing 2005.
7. Jim Cathcart, The Eight Competencies of Relationship selling, Macmillan India, 2005.
8. Assel, Consumer Behavior, Cengage, 6<sup>th</sup> Edition.
9. Kumar, Customer Relationship Management - A Database Approach, Wiley India, 2007.
10. Francis Buttle, Customer Relationship Management: Concepts & Tools, Elsevier, 2004.
11. Zikmund. Customer Relationship Management, Wiley 2012.

### 4.3.3. INTEGRATED MARKETING COMMUNICATIONS AND DIGITAL MARKETING

#### 1. GENERAL INFORMATION

No: of Credits - 4

No: of Hours per week- 4

#### 2. PERSPECTIVE OF THE COURSE

This course is helpful to understand the various communication tools and their mix and how an advertising agency works to build brands. Essentially the integration of communication mix happens at the advertising agency and how they function to put together a communication campaign for the client to achieve their communication objectives. The second component of this course is about knowing how to leverage the internet to sell, build corporate image and nurture brands.

#### 3. COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

- To enumerate the role of advertising agency in bringing about coherence between the various communication mix and highlighting the importance of integrating the various components.
- To understand the scope of Indian Media, and guide the students to explore career opportunities in media selling.
- To guide the students to see how companies are leveraging the internet for marketing products and service and build positive image.

##### OUTCOME

- At the end of the course students will be infused with an interest to build their career in the area of advertisement and related field and will understand the importance of internet marketing and start building their portfolio to get themselves eligible at an entry level in this emerging field.

#### 4. COURSE CONTENT AND STRUCTURE

##### MODULE 1. INTEGRATED MARKETING COMMUNICATION COMPONENTS AND PROCESS: 8 HOURS

IMC- Need, Tools; Structure of Advertising Agency: Full service agency, Account service (client servicing), Creative department, media department and their functioning; Types of Advertising Agencies; Indian Advertising road map; Acquiring and losing clients, Agency evaluation, Ad agency revenue earning models.

##### MODULE 2: IMC PLANNING AND CREATIVE EXECUTION PROCESS: 6 HOURS

DAGMAR approach, Setting ad campaign budgets; Creative planning stages, Types of creative appeals, Types of message execution styles for Print Media, TV, Guidelines for evaluating creativity in advertising.

##### MODULE 3: MEDIA PLANNING, SCHEDULING, EVALUATION 12 HOURS

Vibrant Media spread in Indian- Publications, Television, Radio, outdoor media and Internet Entertainment and channels. Steps involved in media planning, selection of Media Type, Allocation of funds to various media. Media scheduling and related concepts; National Readership Survey, Broadcast Audience Research Council, Radio Audience Measurement, Audit Bureau of Circulation.

##### MODULE 4: FUNDAMENTALS OF DIGITAL MARKETING 12 HOURS

Significance of Digital Marketing Changing media consumption trends, Difference between traditional marketing communication and internet based marketing communication, Understanding different internet tools: E mail, Usenet newsgroups, Blogs, Pod casting, World Wide Web. Internet; Conceptual clarity on internet related tools: E- marketing, Digital marketing, Blogs, Multichannel Marketing, Social Media Marketing, Viral Marketing; Website planning, E-commerce: Basic Principles, Importance, trends, advantages & disadvantages. E commerce models- B to B, B to C, B to Government, C to C, C to B, C to G.

##### MODULE 5: SOCIAL MEDIA AND MARKETING 12 HOURS

Social Media in India, Role of Social Media in Politics, Business, Recruitment, Public Opinion. Face book/ LinkedIn, Twitter/ YouTube: In India, Services offered, advertising options. Blogs: Importance, types and advertising options. Tracking and monitoring social media. Viral Marketing

##### MODULE 6: SEARCH ENGINE MARKETING AND ONLINE REPUTATION MANAGEMENT: 6 HOURS

Google Ad words, Page ranking, Search engine optimization, Search Engine Marketing Paid V/S unpaid models, On-line reputation management, Importance strategies, Addressing Negative comments.

**5.PEDAGOGY:**

Conceptual inputs through class rooms. Cases studies to drive decision making based on business situations that evolve from time to time. Small project and simulations based on apps to develop working knowledge in the subject.

**TEACHING/ LEARNING RESOURCES:****Essential Reading**

- 1.Prescribed Text Books: Advertising and Promotion- An integrated marketing communication perspective- George E Belch & Michael A Belch, Mc Graw Hill
- 2.Foundations of Advertising – Theory and Practice- SA Chunawalla & K C Sethia- Himalayan Publication
- 3.Advertising & IMC: Principles and Practices, Moriarty, Mitchell, Woods, Wells and Wells, Pearson
- 4.Internet Marketing, Chaffey/ Ellis Chadwick, Johnston/Mayer- 3<sup>rd</sup> Edition- Pearson.
- 5.Digital Marketing- Raghavendra K, Shruthi Prabhakar, Himalayan Publication House.

**References**

- 1.Integrated Advertising, Promotion and Marketing Communications, Clow and Baack, Thompson
- 2.Digital Marketing, Seema Gupta, Tata McGraw Hill
- 3.Fundamentals of Digital Marketing, Puneeth Bhatia, Pearson

<b>ELECTIVE SUBJECTS</b>	
<b>4.4</b>	<b>HUMAN RESOURCES</b> <b>4.4.1. GLOBAL HRM</b> <b>4.4.2. STRATEGIC HRM</b> <b>4.4.3. INDUSTRIAL RELATIONS AND HR AUDIT</b>

#### **4.4.1 GLOBAL HRM**

##### **1.GENERAL INFORMATION:**

No. of Credits 4

No. of Hours per week: 4

##### **2.COURSE PERSPECTIVES**

With the advent of globalization, organizations - big or small has started incorporating in their policies Global HR practices. There is an interdependence between organizations in various areas of Human Resource Management. Today companies are emerged with workforce diversity and cultural integration to meet the growing demand for competent global workforce. This has led to the development of Global Human Resource Management.

##### **3.COURSE OBJECTIVES AND OUTCOME**

###### **OBJECTIVES**

- To be able to assess the extent to which multinational companies can have Global HRM strategies, policies and practices.
- To apply concepts, approaches, and models to enumerate global scenario

###### **OUTCOME**

- To sensitize the students to Global HRM policies and procedures and inculcate Global thinking in their learning process.

##### **4.COURSE CONTENT AND STRUCTURE**

###### **MODULE 1: GLOBAL HRM AN INTRODUCTION**

**8 HOURS**

Introduction to Globalization of HRM, Differences in Global HRM practices - Global Workforce Dynamics, Navigation and Importance of Cross-cultural and Multi-generational Workforce and Communication – Host Country Environment, MNC's Behavior in Host Country Environment- Cross Cultural implications of Merger and Acquisition, HRM Implications and Managing Cross Border Integration- Emergence of Global H R Manager.

###### **MODULE 2: GLOBAL ASSIGNMENTS**

**10 HOURS**

Staffing policies, Motives for international transfers, Global Outsourcing, Alternative forms of international assignments, The international assignment process, Dimensions of international assignment success, Women in Global Assignment - Review of GHRM approaches and their Implications, A 'Crossvergence' Approach, GHRM Models and their applications – Expatriation and repatriation, Selection methodology of expatriation, Process of repatriation, job related adjustments.

###### **MODULE 3:MANAGING GLOBAL HR IN VIRTUAL ORGANIZATION**

**10HOURS**

Training and development in the global environment - Concepts and Models, Development of global leaders, Expatriate development, Technology in Global Training Management – Key components of Performance Management Systems, Factors affecting Culture and Performance Management Systems, Performance Management Systems for Expatriates, Performance Measurement Issues -Strategic Career Management, Common Career Development interventions, career Counselling.

###### **MODULE 4: COMPENSATION MANAGEMENT IN GHRM CONTEXT**

**10 HOURS**

The Influence of Institutional and Cultural Factors on Compensation Practices Around the World, National Differences in Compensation, Incentive Application and Globalization, Contracting for Success in the Era of globalization, Incentives to stimulate innovation in a global context, Executive Compensation in an International Context- A Global Perspective on



Executive Compensation, Compensation and National Culture, Pay for Performance for Global Employees - Global Wages in Industries with Low Entry Barrier Occupations, Employee Benefits Around the World.

#### **MODULE 5: INDUSTRIAL RELATIONS IN GHRM**

**10HOURS**

Equal opportunities, Diversity management, Work–life balance: practices and discourses - Contemporary Developments in Global Industrial Relations, International Labour standards, International collective bargaining – Ethics and Corporate Responsibility, Sustainability through the integration of CSR and HR policy.

#### **MODULE 6: TRENDS IN GHRM**

**8HOURS**

Global Demographic Trends, The Growing Working-age Population in Developing Countries, Global Workforce Challenges, Global Workforce Opportunities, Changing trends in International Employment the Future of Global Careers.

#### **5.PEDAGOGY**

- Lectures
- Practical Exercises – Individual and Group
- Case Studies

#### **6.TEACHING/LEARNING RESOURCES**

##### **ESSENTIAL READINGS**

1.Aswathappa K, International Human Resource Management, TMH Publications

2.IndraniMutsuddi: Managing Human Resources in the Global Context, New Age international publishers, latest edition

3.Srinivas R Kandula, International Human Resource Management, SAGE Publications

##### **REFERENCES**

1. Anne-Wil Harzing and Ashly H. Pinnington, 4th Edition, International Human Resource Management, SAGE Publications

2.IndraniMutsuddi: Managing Human Resources in the Global Context, New Age international publishers, latest edition

3.Liza Castro Christiansen et al, 2nd Edition, The Global Human Resource Management Case Book, Routledge.

4.SonalMinocha and Dean Hristov, Global Talent Management, SAGEPublications

5.Tony Edwards, Chris Rees: International Human Resource Management, Pearson, latest edition.

6.Willy McCourt, Derek Eldridge, Global Human Resource Management: Managing People inDeveloping and Transitional Countries, Routledge Publications

##### **WEB RESOURCES**

- <https://www.coursera.org/lecture>
- <https://www.jhrm.eu>
- <https://think.taylorandfrancis.com/journal>

## 4.4.2 STRATEGIC HRM

### 1.GENERAL INFORMATION:

No. of Credits 4

No. of Hours per week: 4

### 2.COURSE PERSPECTIVES

Strategic management of people to enhance the organization's effectiveness. Human resource management principles, strategies, processes and practices such as planning, recruitment and selection, training and development, performance management, rewarding and maintaining an effective workforce.

### 3.COURSE OBJECTIVES AND OUTCOME

#### OBJECTIVES

To help students understand the factors of change in the political, social, environmental and the economic scenarios that has transformed the role of HR functions from being a support function to strategic function.

#### OUTCOME

Students will have a better understanding of the tools and techniques used by organizations to meet these challenges

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE 1: INTRODUCTION TO SHRM 08 HOURS

HR environment,HRM in knowledge economy, Concept of SHRM Investment.

Perspective of SHRM, Evolution of SHRM, Strategic HR vs. Traditional HR –Barriers to strategic HR, Role of HR in strategic planning.

#### MODULE 2 : STRATEGIC APPROACHES AND PERFORMANCE 12 HOURS

Strategy in the 21<sup>st</sup> Century, Understanding Organisational Disruption-VUCA Environment, Linking business strategy with HR strategy - HR bundles approach, best practice approach - Business strategy and human resource planning - HRM and firm performance linkages - Measures of HRM performance - Sustained competitive advantages through inimitable HR practices.

#### MODULE 3 : SHRM FRAMEWORK 06 HOURS

HR Systems - Staffing systems - Reward and compensation systems - Employee and career development systems - performance management systems - Strategic fit frameworks ,Various Strategic Management frameworks.

#### MODULE 4 : CONTEMPORARY HR ISSUES 10 HOURS

Strategic options and HR decisions – Downsizing and restructuring - Domestic and International labour market - Mergers and acquisitions - Outsourcing and off shoring. Different approaches to International Mergers and Acquisitions.

#### MODULE 5 : GLOBAL CONTEXT OF SHRM 10 HOURS

Strategic Responses of Organisations to Changing Environment – Portfolio process and structure related strategic responses. M & As and Strategic HR.Global perspective of SHRM.

#### MODULE 6 : HR ACTION PLAN 10 HOURS

Conduct an Interview with CEO or Authorised authority and data collection on Strategic responses of Organisations to changing environment (Ref. Srinivas R. Kandula PHI 2012)

Interview schedule for conducting case study.

- Interviewee's awareness / knowledge of strategic responses being planned / implemented / progressed in the organisation.(common)
- Compatibility between voluntary participative forums and collective bargaining forum (HR Managers)
- Reasons for strong / weak / no relationship (positive or negative) between strategic responses and SHRD system. ( HR Manager / Individual / Trade Unions)
- Unions perception on the commitment of employer, frontline officers and workers in SHRD system (Trade union leaders)
- **PEDAGOGY**

A variety of teaching methods will be employed which will include case analysis - self-assessment exercises - group projects - team-based projects – lectures - guest speakers - video

## **6.TEACHING/LEARNING RESOURCES**

### **ESSENTIAL READINGS**

1.Anuradha and Aradhana, “Strategic Human Resource Management, SAGE Publications”

2.Gary Rees and Paul E. Smith, Strategic Human Resource Management, SAGE Publications

### **REFERENCES**

1. Boxall P. and J Purcell. Strategy and Human Resource Management, Palgrave latest edition.
2. K. Aswathappa, “Human Resources & Personnel Management”, McGraw Hill Publication
3. Mello- Jeffrey A., “Strategic Human Resource Management”, Thomson Learning Inc,
4. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill. 2011
5. Srnivas and R.Kandula, “Strategic Human Resource Development”, PHI Publication.

### **4.4.3 INDUSTRIAL RELATIONS AND HR AUDIT**

#### **1.GENERAL INFORMATION**

No. of Credits 4

No. of Hours per week: 4

#### **2.COURSE PERSPECTIVES**

The legal aspects of HR and our legal system have a pervasive impact on business activities. IR executives frequently raise issues which should be carefully evaluated as to their legal consequences before they are implemented. HR Audit emerged as a significant exercise in the process of organizational evolution. The need of Human Resource (HR) Audit involves a scrutiny of all activities of HR Department that contribute to optional performance of the employees of the organization.

#### **3.COURSE OBJECTIVES AND OUTCOME**

##### **OBJECTIVES**

- To build awareness of certain important and critical issues in Industrial Relations
- To develop understanding of the Role and Process of HR Audit in Organisation at different levels.
- To Appreciate HR Audit in the context of changing forms of organisation.

##### **OUTCOME**

By the end of this course the student would learn basic knowledge of the Indian Industrial Relations System and its distinctive features. Also, students would learn the importance of HR Audit in Organisation.

#### **4.COURSE CONTENT AND STRUCTURE**

##### **MODULE 1: INDUSTRIAL RELATIONS POLICIES & TRADE UNIONS 12 HOURS**

Evolution of IR policies in India - Approaches to IR &HR Relations -the concept and nature of industrial relations, causes of poor industrial laws, handling of industrial relations, industrial unrest, Suggestions to improve industrial relations, Participative management and Employee empowerment , recent developments in industrial relations. Trade Union- Theories, Constitution, Development and issues. Trade Union as Collective Bargaining Agents.

##### **MODULE 2: LABOUR LEGISLATIONS AND WELFARE 12 HOURS**

Labour legislation in India - Social security and welfare legislations - Concept of social security , various aspects of labour legislations, objectives and activities of ILO, the impact of ILO on Indian labour organisations, the obstacles in adoptions of conventions and recommendations, Labour Welfare in India.

##### **MODULE 3: INTRODUCTION OF HR AUDIT, PROCESS AND METHODOLOGY 8 HOURS**

Emerging Good HR Practices, Concept of HR Audit, Objective, Need and Types of HR Audit, Approaches to HR Audit, Role and Functions of HR Auditor. Levels of HR Audit, Corporate Level HR Audit, Functional Level HR Audit, Steps and Process in HR Audit. Methodology of HR Audit- Individual Interview, Group Interview, Observation, Analyses of Secondary data, Principle of effective HR Audit.

##### **MODULE 4: COMPREHENSIVE HR AUDIT AND AUDIT OF EMPLOYEE SAFETY 8 HOURS**

Comprehensive HR Audit and Audit of Employee Safety and Health Environment, Audit of HR Planning, Recruitment, selection, Recruitment and Selection Audit Checklist, Induction/ Orientation Audit Checklist, Training and Development Audit Checklist, Health and Safety Audit Checklist.

##### **MODULE 5: PERFORMANCE MANAGEMENT AUDIT**

**8 HOURS**

Audit of Performance Management System and Audit of Compensation and Benefits Programs, Performance Management Audit- Performance Management Audit checklist, Documents required for Audit, Data Reliability Audit, Audit of Performance

Appraisal Techniques, HR Competence Audit. Employee Compensation and Benefits Audit Checklist, Documents Required for Checklist, Best Practices for compensation Audit, Audit of Reward and recognition.

#### **MODULE 6: HR SCORECARD AND HR AUDIT REPORT 8 HOURS**

How to Approach HR Scorecard, Constituents of scorecard, Balanced Scorecard. HR Audit Report- Purpose and Preparation of HR Audit Report, Process of Preparing an HR Audit Report, Use of HR Audit Report for Business Improvement.

#### **5.PEDAGOGY**

- Lectures
- Practical Exercise – Individual and Group
- Case Study

#### **6.TEACHING/LEARNING RESOURCES**

#### **ESSENTIAL READINGS**

1. Industrial Relations, Trade Unions, and Labour Legislation, PRN Sinha, Pearson's education 2000
2. Rao, T.V. (2014). HRD Audit - Evaluating the Human Resource Function for Business Improvement, 2/e; New Delhi: SAGE.

#### **REFERENCES**

1. Industrial relations- Arun Monappa-tata McGraw hill-2000
2. Monappa, Arun, Ranjeet Nambudiri, and Patturaja Selvaraj (2016). Industrial Relations and Labour Laws, 2/e; New Delhi: McGraw Hill Education
3. Rao, T.V. (2008). HRD Scorecard 2500, 1/e; New Delhi: Response Books 2
4. Sinha, P.R.N., InduBala Sinha, and Seema Priyadarshini Shekhar (2017). Industrial Relations, Trade Unions, and Labour Legislation, 3/e; New Delhi: Pearson Education
5. Udai Pareek and Rao, T.V., (2012). Designing and Managing Human Resource Systems, 3/e; New Delhi: Oxford & IBH Publishing Co.



<b>ELECTIVE SUBJECTS</b>	
<b>4.5</b>	<b>ENTRPRENEURSHIP AND START-UPS</b> <b>4.5.1. TECHNOLOGY FOR NEW VENTURES</b> <b>4.5.2. SCALING UP AND SUSTAINABILITY OF START-UPS</b> <b>4.5.3. ENTREPRENEURIAL FINANCE</b>

#### **4.5.1. TECHNOLOGY FOR ENTREPRENEURSHIP**

### **1. GENERAL INFORMATION**

No.of Credits	4
No.of Hours Per Week	4

### **2. COURSE PERSPECTIVES**

This subject is introduced keeping in mind the growing role of technology in the present dynamic world.

The VUCA world of today is heavily reliant on technology and anything and everything is driven by technology including business. The literacy paradigm has shifted from not just traditional education but has expanded to technical knowhow. Many of the businesses have shifted to virtual platform either partially or completely. Hence it is always wise for the budding entrepreneur to have a full hand understanding of the virtual platforms, business transactions and various related tools and techniques. The subject will dab a little bit of everything as it is the need for the hour in the uncertain environment.

### **3. COURSE OBJECTIVES AND OUTCOMES**

#### **OBJECTIVES**

1. To make the students aware of the importance and role of technology in entrepreneurship and the various uses, abuses, and opportunities available in present scenario.
2. To acquaint them with challenges of starting new ventures and enable them to investigate, understand and internalize the process of setting up a business with favourable usage of technology.

#### **OUTCOMES**

By the end of the course, the student should be able to

1. Acquire Hands on Knowledge of different technological tools for starting up their venture.
2. Develop and apply strategies for business competition with technological techniques.
3. Build a sustainable business venture through the effective usage of technology.

### **4. COURSE CONTENT AND STRUCTURE**

#### **MODULE 1: TECHNOLOGY FOR NEW AGE ENTREPRENEURS**

**8 HOURS**

Introduction – Importance of technology for an Entrepreneur, Role of Technology in starting a New Venture. Benefits of using technology for Startups. Technologies that drive Entrepreneurship – trends and success stories.

#### **MODULE 2: DIGITAL ECOSYSTEM FOR STARTUPS**

**10 HOURS**

Digital Ecosystem for Business – Digital Management of Core Business Functions, Evolution of Value Chains and Business Models. Digital Platforms – Website Development, SEO, Affiliate Marketing, Social Media Marketing, Email Marketing. Digital Promotion and Engagement– Optimizing Content, Social Media Engagement, Usage of various tools for tracking Digital Marketing initiatives.

#### **MODULE 3: DATA SCIENCE AND NEW VENTURE CREATION**

**12 HOURS**

Enterprise Big Data – Characteristics of Big Data, Four Forms of Pattern Identification, Types of Analytics and purpose, Data

Types. Business Intelligence for Decision Making - Data Pipeline, Properties of Data Pipeline, Evolution of Data Pipelines. Data Pipeline Process – Setting the Environment, Publishing Events, Storing Events. Data Flow through Google Cloud Platform. Data Metrics – tracking the health of start-ups through KPIs, Reporting with R, Base R, ETLs. Data Reporting – Google Data Studio, Tableau, Custom Tooling.

#### **MODULE 4: LEVERAGING AI, VR, AND AR FOR BUSINESS SUCCESS**

**8 HOURS**

Introduction to AI, VR and AR. How businesses use AI – Cross Referencing Data, Consumer Behaviour Tracking and forecasting, Fraud detection, Personalization of marketing Communication – Chatbots. VR/AR applications to Business – Managing Workforce, Customer Experience Management, Online Shopping. Scope and opportunities of using VR/AR in different sectors in India.

#### **MODULE 5: APPLICATION OF IOT FOR VENTURE DEVELOPMENT 10 HOURS**

Introduction to IOT - Computing Devices, Digital Machines, UIDs. Networks and Interactions – Human to Human, Human to Computer. Usage of Sensors & Processors, Automation Processes, Customer transactions, HR Costs, SCM, Logistics Operations. Business decisions using IOT, Contemporary Smart Business Models.

#### **MODULE 6: CYBER SECURITY STRATEGIES FOR ENTERPRISES**

**8 HOURS**

Approaches to Cybersecurity- Computer Security, Websites Security, Network Security, Large Data Breaches. Cyber Threats: Types of attacks, How attacks are carried out?, Attack Vectors. Firewalls and Mitigation Tools, Proactive Security Measures. Effectiveness and Safety of Payment Gateways, Use and Abuse of Crypto currency in Business practices.

### **5. PEDAGOGY**

A mix of lectures, Simulations, Dynamic Visualizations, Virtual Labs, Computational modelling, Mobile Learning, Project based learning, Online learning Platform and MOOC Courses.

1. Role Playing
2. E-COMMERCE Simulation Exercise

### **6. TEACHING/LEARNING RESOURCES**

#### **ESSENTIAL READINGS**

1. Ray Rothrock, Richard A. Clarke, Digital Resilience: Is Your Company Ready for the Next Cyber Threat, 2018,
2. Ajay Agrawal, Joshua Gans, Avi Goldfarb, Prediction Machines: The Simple Economics of Artificial Intelligence, Harvard Business Review Press.
3. George Gilder, “Life after Google: The Fall of Big Data and Rise of the Blockchain Economy, Financial Times Book, 2018
4. Thomas M Siebel, Digital Transformation: Survive and Thrive in an Era of Mass Extinction, RosettaBooks, 2019

#### **REFERENCES**

1. Kenneth C. Laudon and Jane P. Laudon, “Information Systems”, Pearson Publication. 2013. Dorling Kindersley (India) Pvt. Ltd.
2. O’Brien, Management, Info Systems, Tata McGrawhill, Latest
3. Giridhar Joshi, Management Information Systems, Oxford University Press, 2013.

## 4.5.2. SCALING UP AND SUSTAINABILITY OF START-UPS

### 1.GENERAL INFORMATION

No. of Credits	4
No.of Hours Per Week	4

### 2.COURSE PERSPECTIVE

The skill set required to manage a large firm largely differ from that required to manage a small firm. The lack of which will hold back an entrepreneur from scaling up. This course will acquaint the management students with those challenges and skills to equip them to face the challenges of scaling up.

### 3.COURSE OBJECTIVES AND OUTCOMES

#### OBJECTIVES

This course aims to acquaint the students with the challenges of scaling up and strategies of scaling up. Also, it will guide them to attain sustainable growth of the businesses.

#### OUTCOME

By the end of the course the students will possess knowledge required to assess and take decision on scaling up of a venture They will be well equipped to take care of issues associated with scaling up of a venture

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE 1 - OVERVIEW OF THE START-UP ENVIRONMENT 8 HOURS

Start-ups eco system – meaning, importance of a sound eco-system; Business environment and uncertainty; Environment scanning, adaptability and sustainability of business; Growth Vs Scaling.Start-up life cycle – Scaling phases; vision & mission.

#### MODULE 2 - ASSESSING AND IDENTIFYING THE NECESSITIES FOR SCALING UP 10 HOURS

Assess the readiness to scale-up – Assess robustness of current business – optimize core business functions - Developing new processes – Change over from Multifunctional teams to specific departments; Consequences of Premature and rapid scaling.

#### MODULE 3 - ENTREPRENEUR READINESS 10 HOURS

Difference in managing small firm to large enterprise; Transition from people to process - Goal setting for sustainability and value creation, Women entrepreneurs in India, Key characteristics – Managing complexities – Leadership - Delegation of power- Decentralization; Organization Structure and communication – Organization culture - Right people on right job; Deployment of right technology.

#### MODULE 4 – BUSINESS MODEL & STRATEGIC CONTROL SYSTEMS 10 HOURS

Identification of sustainable business models through value creation; Types of Business Models; Automate and Outsource; Business Model Innovation – Scalable Business Models - Scalability patterns in business models - business scalability matrix – Primary and secondary Archetypes, Online business models.

#### MODULE 5 – STRATEGIES TO SCALE UP 10HOURS

Leveraging of resources, Automate and digitize, invest in technology and information security policy. Cloud based tools - CRM, customer support, team communications, project management, Marketing & social media management- choose markets with growth potential and customer segments - Use appropriate tools - minimum viable product (MVP) development, ecosystem maps, IP portfolio, Crowd-funding, product road-map, ESOPs, term sheets, competition metrics, Forge strong strategic tie-ups. Methods of growing – Franchising, Licensing, Joint Ventures, Mergers & Acquisitions.

#### MODULE 6 – EFFECTIVE IMPLEMENTATION AND REALIGNMENT 8 HOURS

Set Goals and Time-lines – Monitor growth cycle – Measuring the effectiveness – Review – Re-align. Discuss scaling up case studies from different industries – e-commerce, Software, Services and Manufacturing.

## 5.PEDAGOGY

A Classroom Lecture, Case Studies, Group project and Individual assignments, Visit an entrepreneur and interview to understand various issues in scaling up

## 6.TEACHING/LEARNING RESOURCES

### ESSENTIAL READINGS

- 1.Robert I Sutton, Hayagreeva Rao (2014) Scaling Up Excellence: Getting to More Without Settling for Less – Crown Publishing Group
- 2.Frank Mattes (2019) – Lean Scaleup: Turn Innovation Concepts into Business Impact – Independently published

### REFERENCES

- 1.Peter Cohan (2019)Scaling Your Startup: Mastering Four Stages from Idea to \$ 10 Billion- Apress
- 2.Howard Love ( 2016); The Start-Up J Curve: The Six Steps to Entrepreneurial Success Greenleaf Book Group Press
- 3.Phadke Uday, Vyakarnam Shailendra (2018);The Start Up Manual : The Handbool for innovators, Entrepreneurs, Teams and Firms : World Scientific
- 4.Henry Chesbrough (2006); **Open Business Models: How To Thrive In The New Innovation Landscape** : Harvard Business Press
- 5.Sangeet Paul Choudary, Geoffrey G. Parker, Marshall Van Alystne (2015); Platform Scale: How an Emerging Business Model Helps Startups Build Large Empires with Minimum InvestmentPlatform - Publisher -Thinking Labs
- 6.Salim Ismail (2014) Exponential Organizations: Why new organizations are ten times better, faster, and cheaper than yours; Diversion Books
- 7.Charles Baden-Fuller, Vincent Mangematin (2015) Business Models and Modelling ; Emerald Group Publishing,
- 8.The Concept of Business Model Scalability Morten Lund 1 and Christian Nielsen - Journal of Business Models (2018), Vol. 6, No. 1, pp. 1-18

### 4.5.3.ENTREPRENEURIAL FINANCE

#### 1.GENERAL INFORMATION

No.of Credits	4
No.of Hours Per Week	4

#### 2.COURSE PERSPECTIVE

The Entrepreneurial Finance course prepares students to be competent in entrepreneurship and corporate finance management skills. The course focuses on specific financial planning and financial decision making needs of entrepreneurial ventures, including start up and development phase financial and management problems.

#### 3.COURSE OBJECTIVES AND OUTCOMES

##### OBJECTIVES

Entrepreneurial Finance examines the elements of entrepreneurial finance, focusing on technology-based start-up ventures and the early stages of company development.

The course addresses key questions which challenge all entrepreneurs: how much money can and should be raised; when should it be raised and from whom; what is a reasonable valuation of the company; and how funding, employment should contracts and exit decisions are structured.

##### OUTCOMES

It aims to prepare students for formulating decisions, both as entrepreneurs and venture capitalists.

In addition, the course includes an in-depth analysis of the structure of the private equity industry

#### 4.COURSE CONTENT AND STRUCTURE

##### MODULE 1: INTRODUCTION TO ENTREPRENEURIAL FINANCE

**08 HOURS**

Introduction; Meaning; Definitions; Concepts; Importance & Applications to the Entrepreneurial Finance; Corporate Finance VS. Entrepreneurship Finance; Sequence of New Venture financing; Regulatory considerations; financial distress affecting, financing choices.

##### MODULE 2: BUSINESS EVALUATION AND VALUATION

**10 HOURS**

Introduction; Business Plan Development; Checklist of Finance Information; Business Plan Development Sources, Government Schemes, Key factors of Valuation; Methods of Asset Valuation (Simple Problems)

##### MODULE 3: VENTURE CAPITAL FUNDS

**08 HOURS**

Introduction to Venture Capital Industry; Venture Capital Partnerships; Types of Funds; Investment Characteristics; Credible Finance Proposals; Amount and Staging of Investment; Financial Projections; Investment Expectations.

##### MODULE 4: ISSUES OF FINANCING START-UPS AND SMALL FIRMS

**08 HOURS**

Introduction and Changing Landscape of Small Firm Finance; Time Series Perspective on Credit Availability and Cost; Start-up Financing; On Going Financing of Small Firms; Bank Consolidation and Small Firm Finance

##### MODULE 5: EXIT AND TURNAROUND STRATEGY

**10 HOURS**

Components of Exit Strategy; Importance of Exit Strategy; Differing Perspectives; Valuation by Revenue Multiples; Compression of Return by Exit Type; Options for exit; Acquisition, Earn-Out; Debt-Equity Swaps; Merger; Management Buyout; Liquidation; Leveraged Buyout

##### MODULE 6: OPPORTUNITIES TO DO BUSINESS & RAISE CAPITAL – A GLOBAL PERSPECTIVE 12 HOURS

Introduction to Mind-set of Global Investors; International Collaborations; International Sources of Funds; Basic Considerations;



Angel & Venture Capitalists Concepts and Application.

## **5.PEDAGOGY**

The course will consist of a combination of lectures, case discussions and building / analysing Excel financial models. The course focus on practical managerial implications and considerations. Excel proficiency is essential to complete the course successfully.

## **6.TEACHING / LEARNING RESOURCES**

### **ESSENTIAL READINGS**

- 1.Rassoul Yazdipour: Advances in Entrepreneurial Finance, Springer Publication
- 2.Gary Gibbons: Entrepreneurial Finance: A Global Perspective, Sage Publication
- 3.Steven Rogers: Entrepreneurial Finance, McGraw Hill Publication

### **REFERENCES**

- 1.John B Vinturella & Suzanne Erikson; Raising Entrepreneurship Capital
- 2.Janet Kiholm Smith, Richard L. Smith, Richard T. Bliss: Entrepreneurial Finance, Stanford University Press
- 3.Luisa Alemany, Job J. Andreoli: Entrepreneurial Finance: The Art and Science of Growing Ventures, Cambridge University Press

<b>ELECTIVE SUBJECTS</b>	
<b>4.6</b>	<b>PRODUCTION AND OPERATIONS MANAGEMENT</b> <b>4.6.1. RESOURCE OPTIMIZATION AND PROJECT RISK MANAGEMENT.</b>  <b>4.6.2. SUPPLY CHAIN MANAGEMENT.</b>  <b>4.6.3. TOTAL QUALITY MANAGEMENT</b>

### 4.6.1 RESOURCE OPTIMIZATION AND PROJECT RISK MANAGEMENT

#### 1. GENERAL INFORMATION

No. of Credits	4
No. of Hours Per Week	4

#### 2. COURSE PERSPECTIVE

Risk management principles consistent with the Project Management Institute’s Project Management Body of Knowledge (PMBOK) © will be covered through topic notes, discussions, assigned readings and case study analyses. Applications to industry projects will be stressed, as students build a risk management toolkit over the course of the semester and uncover methods to implement risk management programs successfully.

#### 3. COURSE OBJECTIVES AND OUTCOME

##### OBJECTIVES

To Learn the modelling process and be able to apply it in a variety of different business situations.

To, understand Risk Management, in a systematic, iterative approach that is composed of the following processes:

##### OUTCOME

- At the completion of the course, students will attain a crisp understanding of resource optimization and risk management concepts and identify the relationship between them.
- They would be able to evaluate when to optimize resources for a better risk management and how risk management contributes to optimization of resources.

#### 4. COURSE CONTENT AND STRUCTURE

##### **MODULE: INTRODUCTION TO OPTIMIZATION 8 HOURS**

Resource – Concepts and Classification; Factors affecting utilization of resources; Resource Optimization – Time, Money, Product, Space, Human; Overview of Resource Allocation, Problems on Resource Allocation – Product Mix; Optimization approach of Resource Allocation; Continuous Service Improvement.

##### **MODULE 2: LINEAR OPTIMIZATION AND SENSITIVITY ANALYSIS 10 HOURS**

Introduction to Linear Programming; Simple Maximization and Minimization Problems based on LPP, Graphical Solution and Optimal Solution; Simplex Method in Linear Programming for solving an optimization problem – Maximization Problems with slack variables, Minimization Problems with surplus variables.

##### **MODULE 3: PROJECT MANAGEMENT 10 HOURS**

Introduction to Project Management; Ten Subsystems of Project Management; Introduction to Project Life Cycle; Work Breakdown Structure (WBS); Designing Network Diagrams (Activity on Nodes – AON & Activity on Arrows – AOA); Application of CPM/PERT/Gantt Chart with Real-life Problems and Business Cases.

**MODULE 4: RESOURCE OPTIMIZATION IN PROJECT MANAGEMENT****8 HOURS**

Resource planning, Resource levelling and Resource smoothing; Quality Function Deployment in Project Management (Industry Standard); Sensitivity Analysis – Overview, Methods and Techniques, Interpretation of solution.

**MODULE 5: PROJECT RISK MANAGEMENT****10 HOURS**

Risk Management Process – Risk Identification, Risk Assessment; Risk Response Development – Mitigating Risk, Avoiding Risk, Transferring Risk; Risk Management in organizations; Risk Management methodologies; Improvement methodologies.

**MODULE 6: CONTINGENCY PLANNING****10 HOURS**

Contingency Planning – Technical Risk, Schedule Risk, Cost Risk, Funding Risk, Environmental Risk, Business Continuity Plan, Disaster Recovery; Opportunity Management; Contingency Funding and Time Buffers – Budget Reserves, Management Reserves, Time Buffers; Risk Response Control; Change Control Management.

**5.PEDAGOGY:**

Emphasis have to be given on class room teaching, practices like problem solving should be the part of explanation and compulsory mini project assignments to be given to enhance the students understanding of the subject. Identification and development of self as a resource. Event planning, management and evaluation with reference to – Managerial Process, Resource Optimization. Case studies can be used to explain concepts wherever possible.

**6.TEACHING/LEARNING RESOURCES****ESSENTIAL READINGS**

1. Gerardus Blokdyk, “Resource Optimization A Complete Guide - 2020 Edition”, 5starcooks Publication.
2. Manoj Kumar, “Resource Optimisation Through Environmental Leadership”, K W Publishers Pvt Ltd.

**REFERENCES**

3. Barnali Roy Choudhury, “Resource optimization”, UNESCO 2015.
4. Anand J. Kulkarni, Suresh Chandra Satpathy, “Optimization in Machine Learning and Applications”, Springer.
5. Project Management Institute’s Project Management Body of Knowledge (PMBOK) ©
6. Clifford F. Grey, Erik W. Larson, Gautam V. Desai, “Project Management – The Managerial Process”, Tata McGraw Hill Publication.

## 4.6.2.SUPPLY CHAIN MANAGEMENT

### 1.GENERAL INFORMATION

No.of Credits 4

No.of Hours Per Week 4

### 2.COURSE PERSPECTIVES

Every business function needs supply chain from FMCG to Industrial products which involves raw materials to produce a finished product. This mean every stage of supply chain - involvement of suppliers, manufacturing, banking, insurance, and customers are critical. This helps senior management to take decisions. Supply Chain helps in decision making and helps to solve complex supply chain problems.

### 3.COURSE OBJECTIVES AND OUTCOME

#### OBJECTIVES

1. Demonstrate basic understanding of concepts about supply chain management
2. Understanding real-time supply chain data requirements through best practices adopted by organizations

#### OUTCOME

At the end of the course student can Exhibit critical thinking capabilities that are necessary to interpret them as requirement by the management andAcquire competency in the area of forecasting, creating reports for seamless decision making

### 3. COURSE CONTENT AND STRUCTURE

#### MODULE1: INTRODUCTION TO SUPPLY CHAIN MANAGEMENT 10 HOURS

Introduction and Concept of Supply Chain Management – Evolution of Supply Chain Management –Evolving Structure of Supply Chain (Old versus New) – Difference between Logistics versus Supply Chain Management –Partners in the Supply Chain Structure – Supply Chain Design

Supply Chain Visibility – Planning–Execution – Finance – Infrastructure – Operations – Supply Chain Facilities Layout – Lead Time – SafetyStock – Stock Keeping Units (SKUs) –Cross Docking – Difference between Replenishment and Fulfillment Replenishment order, Recorder Point Models – Multichannel Inventory systems –Inventory optimization – Inbound and Outbound Logistics, Reverse Logistics, Supply Chain Integration – Supply Chain Performance

#### MODULE 2 SUPPLY CHAIN MODELS 8 HOURS

Types of Supply Chain Models - The continuous flow models - The fast chain models - The efficient chain models - The custom configured model - The agile model - The flexible model - Supply Chain Operations Reference Model (SCOR Model) – SupplyChain Risks Modeling and Management

#### MODULE 3 PROCEDURES AND DOCUMENTATION 08 HOURS

International Trade Procedures & Documentation , IEC Codes or The Harmonized System, Inland Container Depots (ICD), Free on Board, Types of Warehouses –Customs Bonded Warehouses, Custom Broker, INCO Terms, Documents requirement for shipments – Automated Export Systems – UN convention on shipping information

#### MODULE 4 WMS AND MATERIAL HANDLING EQUIPMENTS 10 HOURS

Warehouse Management Systems – Location of the Ware house – Types of WMS – Warehouse Contracts –TheWarehousing (Development and Regulation) Act, 2007–Warehouse Safety and Security

IndustrialMaterial Handling Equipment, Types of Material Handling Equipment’s –Packaging and Labeling

#### MODULE 5: DISTRIBUTION MANAGEMENT 12 HOURS

Role of Transportation in Supply Chain – Challenges in Transportation – Transportation Strategies – Transport Management System – Route Management Planning - Dynamic Routing and Scheduling – Factors to be considered for Route Optimization – Route Analysis – Multimodal Transportation – Distribution Management– The Role of Distribution in Supply Chain Management - Role of intermediaries including freight booking, shipping agents, C&F agents

Characteristics – - Conference Chartering operation- Freight structure and practices – Chartering principles and practices

Air transportation – Carrier consignee liabilities – Cargo handling – Information Support System.

## **MODULE 6: IT DRIVEN AND GREEN SUPPLY CHAIN MANAGEMENT 08 HOURS**

Supply Chain Software - Supply Chain-Related IT Costs –Relation to ERP: E-procurement – E-Logistics – e- Auctions - – E-markets – E- Business Process.

Green Supply Chain Management – Corporate Initiatives in the area of green supply chain – Case Studies from Indian and Global supply chain companies

### **5.PEDAGOGY**

The supply chain management subject covers material movement, warehousing and inventory planning. Case studies must be used in all modules. Industry visit to Warehouses will give an insight to the material handling system. A mini project can be used for understanding procedures and documentation.

### **6.TEACHING/LEARNING RESOURCES ESSENTIAL READINGS**

1. Coyle, Langley, Novack, and Gibson, “Supply Chain Management A Logistics Perspective”, Cengage Publications 9 Edition
2. Rajat K Baisya, “Integrated Supply Chain and Logistics Management” Sage Publications, New Delhi

Sunil chopra, Meindl & Kalra, “Supply Chain Management”, Pearsons Education, India, 2009

### **REFERENCES**

1. Janet Shah, “Supply Chain Management Texts and Cases”, Pearsons Education
2. Edward G. Hinkelman, “International Trade Documentation the Documents of Exporting, Importing, Shipping and Banking”, World Trade Press
3. Langley, Coyle, Gibson, Novack, and Bardi “Managing Supply Chains – A Logistics Approach”, Cengage Publications
4. Shipping Documents and Reports, UNCTAD (<https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=2563>)
- “INCO Terms 2020”, International Chamber of Commerce (<https://iccwbo.org/resources-for-business/incoterms-rules/incoterms-2020/>)
5. Lambert, D, “Strategic Logistic Management”, Tata McGraw Hill, New Delhi
6. Asopa, V.N Shipping Management Cases and Concepts, Macmillan, New Delhi
7. Satish K. Kapoor & Purva Kansal, “Basica of Distribution Management - A Logistical Approach”, Prentice Hall India, 2003
8. Michael Hugos “Essentials of Supply Chain Management”, Wiley Fourth Edition
9. Nada R Sanders “Supply Chain Management – A Global Perspective”, Wiley Second Edition
10. John Mangan, Chandra Lalwani, “Global Logistics and Supply Chain Management, Wiley Third Edition



## 4.6.3. TOTAL QUALITY MANAGEMENT

### 1.GENERAL INFORMATION

No.of Credits 4

No.of Hours Per Week 4

### 2.COURSE PERSPECTIVES

The primary aim of training students in TQM is to give them in-depth knowledge of quality and quality control and TQM and prepare students to use and application of quality assurance tools. Give them in depth Knowledge of the management aspects of Total quality management development which prepare students to create satisfied customers which is essence of any business today .

### 3.COURSE OBJECTIVES AND OUTCOME

#### OBJECTIVEZ

To Develop Ability in students to apply the tools, techniques and principles of Total Quality Management

To create an understanding which enable the students to Appreciate and adopt the application of quality management principles in the development of organizations

#### OUT COMES

The students should realize the importance of significance of quality and be able to manage quality improvement teams in organization

The students should develop the Ability to apply the concepts of **total quality management** for investigation and synchronization of manufacturing processes service processes.

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE1: INTRODUCTION TO TOTAL QUALITY MANAGEMENT 8 HOURS

Introduction to Quality and Quality Control TQM, TQM framework, benefits, awareness and obstacles. Customer Focus – customer perception of quality, Translating needs into requirements, customer retention. Dimensions of product , service quality and Cost of quality.

#### MODULE2: PRINCIPLES OF QUALITY MANAGEMENT 8 HOURS

Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Taguchi techniques – introduction of loss function, parameter and tolerance design, signal to noise ratio. Japanese 5S of house keeping, and 8D methodology.

#### MODULE 3 : PROCESS CONTROL AND CAPABILITY 12 HOURS

Meaning and significance of statistical process control (SPC) – construction of control charts for variables and attributed. - problems

Process capability – meaning, significance and measurement – Six sigma concepts of process capability.

Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve.Total productive maintenance (TPM) – relevance to TQM, Terotechnology. Business process re-engineering (BPR) – principles, applications, reengineering process.

#### MODULE 4: TQM TOOLS AND TECHNIQUES 12 HOURS

Quality functions development (QFD) , Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) –Quality tools,Bench marking and POKA YOKE.

#### MODULE5: QUALITY MANAGEMENT SYSTEMS 8 HOURS

Scope and application of ISO9000- 2000. Design and implementation of Quality Systems. Auditing requirements of ISO9000-2000. QS- 9000.

#### MODULE 6: BEHAVIOURAL ASPECT OF TOTAL QUALITY MANAGEMENT 8 HOURS

Quality circles , kaizen , vendor management quality audits. TQM culture, leadership – quality council, employee involvement, motivation, empowerment, recognition and reward- introduction to software quality.

## **5.PEDAGOGY**

- The lectures should be supplemented by case studies in each module to which enhance students' analytical, problem solving and decision making skills.

## **6.TEACHING/LEARNING RESOURCES**

1. Dale H.Besterfield et al, Total Quality Management, Third edition, Pearson Education  
(First Indian Reprints 2002)
2. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 2017
3. S.D Bagde, Total Quality Management - Himalaya Publishing House, First Edition 2017
4. TQM A pictorial Guide for managers -John Oakland and Peter Morris 2011

<b>ELECTIVE SUBJECTS</b>	
<b>4.7</b>	<b>BUSINESS ANALYTICS</b> <b>4.7.1. BIG DATA ANALYTICS</b> <b>4.7.2. DATA VISUALIZATION AND BUSINESS REPORTING USING TABLEAU</b> <b>4.7.3. EMERGING TECHNOLOGIES AND FUTURE SKILLS FOR BUSINESS LEADERS</b>

### **4.7.1. BIG DATA ANALYTICS**

#### **1.GENERAL INFORMATION**

No.of Credits : 4

No. Hours Per Week : 4

#### **2.COURSE PERSPECTIVES**

This course will help students to take a data driven decision which are more effective and efficient than human generated decisions. Big Data Analytics allows to detect trends and spot patterns that can be used for future benefit. Big data analytics helps students harness data and use it to identify new opportunities.

This course will help students to learn the usage of Hadoop to store and process big data in more effective manner. Students will also get a practical exposure to Pig and Hive during the course which will help in their future career prospects.

#### **3.COURSE OBJECTIVES AND OUTCOME**

##### **OBJECTIVES**

1. To provide an overview of an exciting growing field of big data analytics.
2. To enable the students to use the tools required to manage and analyse big data like Hadoop, Pig, MapReduce.
3. To enable the students to use fundamental techniques and principles in achieving big data analytics (E Commerce, Social Media Analytics, Mobile analytics) with scalability and streaming capability.
4. To enable students to have skills that will help them to solve complex real-world problems in for decision support.

##### **COURSE OUTCOMES**

**By successfully completing the course the students will be able to:**

Develop Big Data Solutions using Hadoop Eco System , Store, Access and Process Big Data on Hadoop Distributed File System.Use Big Data for E-Commerce, Social media analytics and Mobile Analytics.Understand and Execute map reduce technique in processing of large data sets.

#### **4.COURSE CONTENT AND STRUCTURE**

##### **MODULE 1:INTRODUCTION TO BIG DATA**

**10 Hours**

Big Data – Characteristic, Evolution of big data, Four V’s of Big data, Big Data Applications and used cases, Big Data vs. Traditional Data, Challenges of Big Data, Structure of Big Data, Analytics tool- open source analytics tools.

##### **MODULE 2:APPLICATIONS OF BIG DATA ANALYTICS**

**10 Hours**

Introduction – Drivers for Big Data Analytics – Applications of Big data Analytics in: Marketing and Sales, Finance Analytics, Human Resource, Healthcare, Product Design, Service Design, Customer Service and Support, SCM, Government operations and functions, different industries and sectors, etc

### **MODULE 3: MAP REDUCE**

**6 Hours**

Introduction, Meaning, Map Reduce Types and Formats - Mapper, Reducer, Combiner, Partitioner, searching, sorting and compression.

### **MODULE 4: HADOOP FRAMEWORK**

**12 Hours**

Introduction to Hadoop, Why Hadoop, RDBMS versus Hadoop, history of Hadoop, Distributed computing challenges, Hadoop Components, Hadoop conceptual layer, Key aspects of Hadoop.

HDFS- special features and limitations.

### **MODULE 5:HADOOP ECOSYSTEM**

**12 Hours**

Major components of Hadoop ecosystem:

Pig: Introduction to PIG, Anatomy of Pig, Pig philosophy, Data types in Pig, Relational operators, Applications and limitations of Pig.

Hive: Meaning of Hive, features, Architecture, Data types, Hive file format, Hive Query language (HQL), User Defined Functions.

### **MODULE 6: E-commerce, Social Media and Mobile Analytics**

**6 Hours**

Inter organizational- Global information systems; Electronic Data Interchange (EDI); E-Commerce Overview, E-commerce applications and used cases, Mobile Commerce, E-Governance; Grid computing, Mobile Computing, Mobile Analytics – Applications and used cases, advantages & disadvantages; Social media analytics – Applications and used cases

### **5.PEDAGOGY**

- Lectures,- Use Case studies
- Practical Exercises - Individual & Group
- Demonstrations using Hadoop, Hive and Pig
- Talk by the industry experts and industry visits
- Live projects and assignments

### **6.TEACHING /LEARNING RESOURCES**

#### **ESSENTIAL READINGS**

1. Seema Acharya, Subhashini Chellappan, "Big Data and Analytics", Wiley, 2<sup>nd</sup> Edition.
2. Reza Zafarani, Mohammad Ali Abbasi, Huan Liu, "Social Media Mining", Cambridge University Press, 2014.
3. GuandongXu, Yanchun Zhang and Lin Li, "Web Mining and Social Networking Techniques and applications", Springer, 2011.

#### **REFERENCES**

- 1.Zikopoulos, P., Parasuraman, K., Deutsch, T., Giles, J., & Corrigan, D.V Harness the Power of Big Data The IBM Big Data Platform. McGraw Hill Professional, 2012
- 2.Prajapati, V, "Big Data Analytics with R and Hadoop", Packt Publishing Ltd, 2013
3. Gates, A. Programming Pig." O'Reilly Media, Inc.", 2011.
4. Capriolo, E., Wampler, D., & Rutherglen, J., "Programming Hive", O'Reilly Media, Inc.",2012
5. David Loshin, "Big Data Analytics: From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph", 2013.
6. Jay Liebowitz, "Big Data and Business Analytics" Auerbach Publications, CRC press (2013
7. Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, "Essentials of Business Analytics", Cengage Learning, second Edition, 2016

## 4.7.2. DATA VISUALIZATION AND BUSINESS REPORTING USING TABLEAU

### 1.GENERAL INFORMATION

No.of.Credits : 4

No.of Hours Per Week : 4

### 2.COURSE PERSPECTIVE

This course will help students to learn one of most user-friendly and straight forward visualization tool Tableau. Tableau is considered to be the market leader when it comes to Data Visualization. It allows users for the production of interactive data visualization in a very effective manner at fast speed. Complicated charts and graphs can be easily created in Tableau Software.

### 3.COURSE OBJECTIVES AND OUTCOMES

#### OBJECTIVES

1. To enable the students to be able to understand and describe the main concepts of data visualization.
2. To enable the students with best practices of data visualization and how to apply them to solve analytics problems
3. To enable them to Create ad-hoc reports, data visualizations, and dashboards in Tableau
4. To enable them to be able to apply business analytics using tableau that support the decision making in business operations

#### OUTCOMES

**By successfully completing the course the students will be able to:**

Understand and describe the main concepts of data visualization

Understand the best practices of data visualization and how to apply them to solve analytics problems.

Create ad-hoc reports, data visualizations, and dashboards in Tableau

Apply business analytics using tableau that support the decision making in business operations

### 4.COURSE CONTENT AND STRUCTURE

#### MODULE1:INTRODUCTION AND GETTING STARTED WITH TABLEAU

**10 HOURS**

The Advantages of a modern Analytics platform, Types of Tableau, The Tableau application suite, Installing Tableau Desktop, Data Preparation, the sample dataset, The Tableau workspace, working with measures and dimensions, Working with marks, Saving, Opening and sharing workbooks

#### MODULE 2 : CONNECTING TO DATA

**10 HOURS**

Setting up a data connector, selecting data tables, Data cleaning and formatting, Joins and Unions, data extracts and Live Connections, Editing the model's Meta data, Data Types, Adding hierarchies, Calculated Fields and table calculations and Data Collection, Checklist for increasing performance.

#### MODULE 3: BUILDING FIRST VISUALIZATION USING VARIOUS FEATURES OF TABLEAU

**10 HOURS**

Chart types, Ready, Set, Show Me, Bar charts, Legends, Sorting, Totals, Sub Totals, Data Spotighting, Sets, Groups, Bins Filters And Hierarchies Line Charts, Highlight Tables, Heat Maps, Sankey charts, Bullet Charts, Cumulative sums with waterfall charts, Market Basket Analysis and Pareto Analysis

#### MODULE 4: ANALYSIS USING TABLEAU

**10 HOURS**

Aggregate functions, aggregate in calculated fields, Text operators, Date fields, Logical functions in calculated fields Parameters, Searching text fields.

Symbol maps, Filled maps, Density maps, Map Layers, Maps with Pie charts Viz in Tooltip, Overview of the Tableau analytics Pane, Constant, Average, and reference lines, Trend lines, Forecasts, Cluster Analysis and R.

#### MODULE 5: CREATING DASHBOARDS

**8 HOURS**

Creating a new dashboard, the dashboard Pane, Placing charts on the Dashboard, Dashboard titles, Navigation buttons, Dashboard actions, Dashboard Best Practices and Inspiration.

#### MODULE 6: CONTEMPORARY DEVELOPMENTS IN VISUALIZATION AND BUSINESS REPORTING

**8 HOURS**

Introduction to other visualizations tools: Fusion charts, Highcharts, Datawrapper, and Power BI, etc. Creating story point, reporting in video format, Marketing reporting, Finance reporting, HR reporting, Supply chain reporting, Production and Operations reporting.

#### Data Visualization and Business Reporting using Tableau – Laboratory



## PART - A

1. Importing data set into Tableau, Data Cleaning and Tooltip option
2. Demonstration of types of joins and unions
3. Demonstration of Normal Distribution
4. Demonstration of Calculated Fields and Table calculations
5. Demonstration of Ratios and Blending of Data sources
6. Demonstration of Logical functions and Aggregate functions
7. Demonstration of Reference lines Forecasting and Trend lines
8. Demonstration of Heat Maps, Sankey charts
9. Demonstration of sorting, filtering and types of charts
10. Demonstration of Market Basket Analysis and Pareto analysis
11. Creating Dashboards in Tableau
12. Designing and engaging stories in Tableau

## PART - B

1. Demonstration of Sales and Marketing Analytics
2. Demonstration of Human Resource Analytics
3. Demonstration of Financial Analytics
4. Demonstration of Supply Chain Analytics
5. Demonstration of Production and Operations Analytics

**Examples of Data sets:** Purchase of office supplies, Bank Customers, Health and Hospitals Corporation (HHC) facilities, US Cities Population, Finance entities, online purchase, Airline revenue, Election result, PC, iPhone sales, Data for a Superstore, Financial data, Supply chain data, Human Resource data , Production and Operations data for any business firm.

### Note :

- For all the above Exercises Students can use their own datasets and Use Cases
- For all Exercises taking final print of the output and Writing Interpretation is compulsory in the Lab Journal
- In the practical Examination student are expected to execute and write Interpretation for one or more exercises from Part A out of 12 exercises using Tableau.
- In the practical Examination student are expected to execute and write Interpretation for one or more exercise from Part B out of 5 exercises using Tableau.
- Change of exercise is not permitted in the Practical Examination.

## PEDAGOGY

- Hands-On Demonstration using Tableau
- Lectures and discussions
- Group Assignments and presentations
- Use cases
- Talk by the industry experts and industrial visits
- Assignment and Projects

## SCHEME OF EXAMINATION - LABORATORY

The components of Laboratory 70 Marks are as follows:

Details	Marks
Execution of the program and drawing insights from any one exercise from Part A	20
Execution of the program and drawing insights from any one exercise from Part B	20
Viva Voice	10

Lab Journal	20
<b>Total</b>	<b>70</b>

**EXAMINER PROFILE**

A person should be proficient in Tableau and should have some experience in analytics using Tableau. BOE Chairperson will have discretion of selecting examiners.

**TEACHING/LEARNING RESOURCES**

1. Ryan Sleeper ,Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master 1st Edition, OREILLY publication
  2. Daniel G. Murray, Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software 2nd Edition, WILEY publication
  3. Joshua N. Milligan, Learning Tableau: Tools for Business Intelligence, data prep, and visual analytics, 3rd Edition, Packt publication
  4. Jane A Crofts, Tableau Desktop: A Practical Guide for Business Users [Print Replica] Kindle Edition
  5. Alexander Loth ,Visual Analytics with Tableau 1st Edition, Kindle Edition
  6. Learning Tableau by Joshua Milligan.
  7. Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software by Daniel G. Murray.
  8. Communicating Data with Tableau by Ben Jones.
  9. Tableau Dashboard Cookbook by Jennifer Jane Stirrup.
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## 4.7.3. EMERGING TECHNOLOGIES AND FUTURE SKILLS FOR BUSINESS LEADERS

### 1. GENERAL INFORMATION

No. Of Credits : 4

No. Of Hours Per Week : 4

### 2. COURSE PERSPECTIVE

This course is designed to impart the combination of skills, technologies, applications and processes used by organizations to gain data-driven insights. Today technology is involved in nearly all the conveniences we enjoy. Automation has radically changed the way personal and business affairs are conducted. This course will enable students to have better understanding of these emerging technologies which they will be learning in this course to enable organisation to perform better.

### 3. COURSE OBJECTIVES

#### OBJECTIVES

1. To enable students to be able to understand new emerging technologies and their potential for business functions.
2. To enable students to be able to understand the application of Artificial Intelligence, Machine Learning, Deep learning, IOT, Robotics, Block chain and cryptocurrency.
3. To enable students to be able to apply the data privacy tools and understand the cyber security.

#### OUTCOMES

**By successfully completing the course the students will be able to:**

- Develop the new emerging technologies and their potential for business functions.
- Understand the application of Artificial Intelligence, Machine learning and Deep Learning.
- Understand the application of Cloud computing, IoT and 3 D Printing, Robotics, Blockchain, Cryptocurrency
- Apply data privacy tools and understand cyber security.

### 4. COURSE CONTENT AND STRUCTURE

#### MODULE 1: ARTIFICIAL INTELLIGENCE (AI), MACHINE LEARNING (ML) AND DEEP LEARNING

##### 12 HOURS

Introduction, Concept of Data Science, AI and ML; Problem Spaces and Search Knowledge and Rationality; AI vs Machine Learning; Machine Learning - Types, Process and Applications; Introduction to Deep Learning / Neural Networks, Natural Language Processing; Modeling Concepts and Applications and Use Cases in Finance, Marketing, Human Resource, Health Care, Productions and Supply Chain Management.

#### MODULE 2: CLOUD COMPUTING

##### 8 HOURS

Introduction to Cloud Computing, Components of a Computing Cloud, Differentiating Types of Clouds: Public, Private, Hybrid, Delivering Services from the Cloud, Evaluating Barriers to Cloud Computing and Technical Considerations

#### MODULE 3: INTERNET OF THINGS (IOT) AND 3D PRINTING

##### 8 HOURS

**Introduction to IoT;** Introduction to IoT, Software Analysis and Tooling, Network, Linking & Loading, IoT Data and the Cloud.

**3D Printing** (Additive Manufacturing) - Introduction, Process, Classification, Advantages, Additive V/s Conventional Manufacturing processes, Applications and used cases.

#### MODULE 4: AUTOMATION USING ROBOTICS

##### 8 HOURS

Introduction to Robotics; Types and Components of a Robot, Classification of Robots, Robot Control Systems, Industrial Robot Applications, Robot Accuracy and Repeatability, Different Types of Robotics and Various Generations of Robots.

#### MODULE 5: BLOCK CHAIN AND CRYPTO CURRENCIES

##### 12 HOURS

**Blockchain:** Introduction, Blockchain Basics and the Role of Money, Blockchain Philosophy and Cryptonomics, Applications and Exchanges, Blockchain towards a Decentralized Society.

**Cryptocurrency:** Introduction to Cryptocurrencies, Legal Aspects of Virtual Currency, Applications of Cryptocurrencies and Blockchains in Traditional Finance.

#### MODULE 6: CYBER SECURITY AND DATA PRIVACY

##### 08 HOURS

Introduction to Cyber Security; Threats and Vulnerabilities; Cyber Security Breaches; Penetration Testing and Methodologies; Frameworks and Standards for Cyber Security; Cybersecurity practices; Privacy Meets Security – Data Protection; Privacy Policies and Security Claims Privacy Seal Programs.

### 5. PEDAGOGY

- Lectures

- Use Case studies

- Practical Exercises - Individual & Group
- Seminars and workshop on various technology
- Talk by the industry experts and industry visits
- Live projects and assignments

**TEACHING/LEARNING RESOURCES**

**ESSENTIAL READINGS**

1. Stuart Russell and Peter Norvig, “Artificial Intelligence: A Modern Approach”, 3rd Edition, Prentice Hall
2. Elaine Rich and Kevin Knight, “Artificial Intelligence”, Tata McGraw Hill
3. Vijay Madiseti, Arshdeep Bahga, Internet of Things, “A Hands on Approach”, University Press
4. Dr. SRN Reddy, Rachit Thukral and Manasi Mishra, “Introduction to Internet of Things: A practical Approach”, ETI Labs
5. Thomas Erl, Zaigham Mahood, Ricardo Puttini, “Cloud Computing, Concept, Technology & Architecture”, Prentice Hall, 2013.

**REFERENCES**

1. Trivedi, M.C., “A Classical Approach to Artificial Intelligence”, Khanna Publishing House, Delhi.
2. Saroj Kaushik, “Artificial Intelligence”, Cengage Learning India, 2011
3. Dr. SRN Reddy, Rachit Thukral and Manasi Mishra, “Introduction to Internet of Things: A practical Approach”, ETI Labs
4. Pethuru Raj and Anupama C. Raman, “The Internet of Things: Enabling Technologies, Platforms, and Use Cases”, CRC Press
5. Jyh-Shing Roger Jang, Chuen-Tsai Sun, Eiji Mizutani, “Neuro-Fuzzy and Soft Computing”, Prentice-Hall of India, 2002.
6. <http://nifm.ac.in/business-analytics-and-statistics>
7. [https://cloud.gov.in/services\\_da.php](https://cloud.gov.in/services_da.php)
8. <https://dst.gov.in/data-science-research-initiative>
9. Journal of Business Analytics – Taylor & Francis Online Journal

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