



## **REGULATIONS FOR 2 YEAR FULL TIME MBA (DAY & EVENING) PROGRAM**

### **1. TITLE**

These regulations shall be called as Academic Regulations of the MBA Degree course (Day & Evening) of Bengaluru City University, from academic year 2025- 26 onwards, under Choice Based Credit System (BCU-PG-CBCS, 2025) of Faculty of Commerce and Management under Bengaluru City University, Bengaluru and the Degree called as Master of Business Administration.

### **2. EXTENT OF APPLICATION**

These regulations will apply to Post Graduate Program in Management called MBA (Master Of Business Administration) being offered by the PG Department of Management Studies, Bengaluru City University and all the colleges affiliated to the Bengaluru City University having obtained the approval of this university and AICTE subject to complying with all the requirements and conditions laid down by these regulatory bodies.

### **MASTER OF BUSINESS ADMINISTRATION (CHOICE BASED CREDIT SYSTEM) (MBA-CBCS FROM ACADEMIC YEAR - 2025 - 26 ONWARDS)**

### **3. MINIMUM ELIGIBILITY FOR ADMISSION AND ADMISSION PROCEDURE FOR MBA (DAY & EVENING)**

#### **MBA DAY**

- A graduate degree under 10+2+3, 10+2+4 or 10+2+5 pattern under any discipline securing at least 50% marks in the aggregate including languages from a recognized University of UGC in India or abroad.
- Degrees from abroad should be accepted as equivalent to the Degree offered by any University in India by the UGC and as approved by AIU and Bengaluru City University.
- In case of SC/ST/Cat-I candidates, there will be a relaxation of 5% in the aggregate marks obtained in the under graduate Degree set as minimum eligible marks (50%) for admission into MBA Course.
- • All admissions to Post Graduate Department of Management and its affiliated colleges will be made through an entrance test conducted by appropriate body duly constituted and duly approved by Government of Karnataka and State Level Counselling board on the basis of Rank /Merit and the reservation rules based on seat matrix as announced by the Government of Karnataka shall be strictly adhered to.
- • In case of unfilled seats from KEA, the admission to the program will be effected through admission test conducted by Bengaluru City University

#### **MBA EVENING**

- A graduate degree under 10+2+3, 10+2+4 or 10+2+5 pattern under any discipline securing at least 50% marks in the aggregate including languages from a recognized University of UGC in India or abroad.
- Degrees from abroad should be accepted as equivalent to the Degree offered by any University in India by the UGC and as approved by AIU and Bengaluru City University.

- Candidates who pass bachelor/master degree in any university system in single sitting pattern are not eligible.
- In case of SC/ST/Cat-I candidates, there will be a relaxation of 5% in the aggregate marks obtained in the under graduate Degree set as minimum eligible marks (50%) for admission into MBA Course.
- All admissions to Post Graduate Department of Management and its affiliated colleges will be made through an entrance test conducted by appropriate body duly constituted and duly approved by Government of Karnataka and State Level Counselling board on the basis of Rank /Merit and the reservation rules based on seat matrix as announced by the Government of Karnataka shall be strictly adhered to.
- In case of unfilled seats from KEA, the admission to the program will be effected through admission test conducted by Bengaluru City University

#### **4. DURATION OF THE COURSE**

The duration of the MBA Day & Evening program shall extend to over 4 semesters spanning over a period of 2 years. Each year shall have two semesters of 16 weeks duration and shall have not less than 90 working days of classroom teaching, internship and master thesis. At the end of each semester there will be end semester university examination conducted by the university.

#### **5. MEDIUM OF INSTRUCTION**

The course being a professional course and having Global connotation the medium of instruction for MBA Course Day and Evening examination shall be in English medium only.

#### **6. MINIMUM CREDITS AND MAXIMUM CREDITS**

- 6.1 There shall be four categories of papers viz., Core and Compulsory paper, Soft Core paper, Specialization paper and Open Elective paper. The Open Electives are the University approved papers offered by other Departments of Bengaluru City University and the student is required to undergo one course from other Department.
- 6.2 The credits for each of Compulsory paper and specialization paper may vary from 2 to 4 credits. In case of open electives and Soft Core, each paper shall be of 2 credits. The list of papers available will be intimated from time to time.

**One credit is equivalent to 15 contact hours**

#### **7. ATTENDANCE**

- 7.1 The candidate who does not put in minimum stipulated attendance of 75% aggregate of all the subjects put together in a semester shall not be eligible to appear for the end exam in that semester and the candidate has to re attend the classes along with subsequent batch and satisfy the minimum requirement for appearing in that particular end semester examination.
- 7.2 The statement of attendance shall be displayed on the Notice Board by the Department/School/Institution at end of every month for information to students.
- 7.3 Five marks in Internal Assessment is earmarked for the attendance percentage as a motivation for the students to attend classes regularly.

#### **8. SEMESTER-WISE CREDIT DISTRIBUTION:**

**8.1** The table shows the semester wise credit with total credits

<b>Category</b>	<b>SEM 1</b>	<b>SEM 2</b>	<b>Total Credits</b>
Compulsory Core Papers	24	24	48
Soft Core Papers	2	2	4
Specialization Subjects	-	-	-
General Open Elective	-	-	-
Industry Internship Program	-	-	-
Master Thesis	-	-	-
<b>Total</b>	<b>26</b>	<b>26</b>	<b>52</b>

## **9. SCHEME OF EXAMINATION**

### **A) Internal Assessment Test**

**9.1** A 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.

**9.2** A 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.

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

<b>1<sup>st</sup> and 2<sup>nd</sup> Semester MBA ( Day &amp; Eve)</b>	<b>Marks</b>
Attendance	5
Two Internal test	10
Assignment	5
Mini Project Report	10
<b>Total</b>	<b>30</b>

  

<b>Marks for Attendance</b>	
<b>% of Attendance</b>	<b>Marks</b>
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**

**9.1** **B** 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 City 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 programme 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 P) 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.

No Candidate shall be declared to have passed the Semester Examination as the case may be under part I/ Part II /Part III unless he/she obtains not less than 35% marks in written examination/practical examination and 40% marks in the aggregate of written examination/practical examination and internal assessment put together in each of the subjects and 40% marks ( including IA ) in Project work and Viva wherever prescribed.

**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 (Alpha-Sign Grade B+).

**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.** There shall be no minimum in respect of internal assessment.

## 12. FOUNDATION COURSES AND ADD ON COURSES

**12.1** 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.

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

**12.3** 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 City University. Students are required to produce certification of completion of course during Viva Voce Exam.

## 13. CLASSIFICATION OF SUCCESSFUL CANDIDATES: SEMESTER WISE (

**Source: CBCS BCUSMS)**

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:

Final Results/Grade Description.

Semester/Program % of Marks	Semester GPA/Program CGPA	Alpha-Sign/Letter Grade	Results/Class Description
90.0-100	9.00 - 10.0	O ( Outstanding)	Outstanding
80.0 -< 90.0	8.00 - < 9.00	A+ ( Excellent)	First Class Exemplary
70.0 - < 80.0	7.00 - < 8.00	A ( Very Good)	First Class Distinction
60.0 - < 70.0	6.00 - < 7.00	B+ ( Good)	First Class
55.0 -< 60.0	5.50 - < 6.00	B ( Above Average)	High Second Class
50.0 - < 55.0	5.00 - < 5.50	C ( Average)	Second Class
40. 0 - < 50.0	4.00 - < 5.00	P ( Pass)	Pass class
Below 40.0	Below 4.00	F ( Fail)	Fail/Reappear
Absent	0	Ab ( Absent)	

**13.1****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)**

<b>PAPERS</b>	PI	P2	P3	P4	P5	P6	P7	<b>TOTAL</b>
<b>MAX. MARKS</b>	100	100	100	100	100	100	100	700
<b>% MARKS OBTAINED</b>	77	73	58	78	64	67	83	500
<b>GRADE POINTS EARNED (G.P.)</b>	8.0	7.5	6.0	8.0	6.5	7.0	8.5	-
<b>CREDITS FOR THE COURSE (C)</b>	4	4	4	4	4	4	2	<b>26</b>
<b>TOTAL GPW = GP X C</b>	32.0	30.0	24.0	32.0	26.0	28.0	17.0	189

**Semester Aggregate Marks:  $500 / 700 = 71.43\%$**

**Classification of Result: First Class Distinction.**

**The SGPA + Total CP/Total Credits =  $189/26 = 7.269$  Semester Alpha Sign Grade:A**

**13.2****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**

<b>SEMESTER</b>	<b>I</b>	<b>II</b>	
<b>TOTAL MARKS PER SEMESTER</b>	700	700	1400
<b>TOTAL MARKS SECURED</b>	555	560	1115
<b>SEMESTER ALPHA SIGN GRADE</b>	A	A	-
<b>SEMESTER GPA</b>	7.9	8.0	-
<b>SEMESTER CREDITS</b>	26	26	52
<b>SEMESTER GPW</b>	205.4	208	413

Aggregate Percentage of Marks =  $2361 / 2900 = 81.41\%$

**13.3 Classification of Result:** First Class with Distinction Cumulative Grade Point Average (CGPA) = Total of Semester GPW / Total Credits for the programme = $861.6/106= 8.1$   
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 QUESTIONPAPER

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 City 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	<b>25</b>
B	4	3	10	<b>30</b>
C	1(Compulsory Case Study)	1	15	<b>15</b>
<b>Total</b>				<b>70</b>

## 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.

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

Paper Code	Subject	Credit	Contact Hours L-P*		I.A	U.E	Total Marks
1.1	Organizational Behavior	4.0	45	15	30	70	100
1.2	Managerial Accounting	4.0	45	15	30	70	100
1.3	Business Environment and Public Policy	4.0	45	15	30	70	100
1.4	Economics for Managers	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>

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

Paper Code	Subject	Credit	Contact Hours L-P*		I.A	U.E	Total Marks
1.1	Organizational Behavior	4.0	45	15	30	70	100
1.2	Managerial Accounting	4.0	45	15	30	70	100
1.3	Business Environment and Public Policy	4.0	45	15	30	70	100
1.4	Economics for Managers	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	Mini Project Report	2	30 Hours, 30 marks Viva-Voce and 70 marks Project Report			100	
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>180</b>	<b>420</b>	<b>700</b>

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

Paper Code	Subject	Credit	Contact Hours L-P*		I.A	U.E (T-P)**	Total Marks
2.1	Entrepreneurship and Start-ups Management	4.0	45	15	30	70	100
2.2	Business Research Methods	4.0	45	15	30	70	100
2.3	Human Capital Management	4.0	45	15	30	70	100
2.4	Business Analytics	4.0	45	15	30	70	100
2.5	Corporate Finance	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> Fintech Management	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>

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

Paper Code	Subject	Credit	Contact Hours L-P*		I.A	U.E (T-P)**	Total Marks
2.1	Entrepreneurship and Start-ups Management	4.0	45	15	30	70	100
2.2	Business Research Methods	4.0	45	15	30	70	100
2.3	Human Capital Management	4.0	45	15	30	70	100
2.4	Business Analytics	4.0	45	15	30	70	100
2.5	Corporate Finance	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> Fintech Management	2.0					100
<b>Total</b>		<b>26.0</b>	<b>285</b>	<b>105</b>	<b>210</b>	<b>490</b>	<b>700</b>

## **1.1 ORGANIZATIONAL BEHAVIOUR**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

1. To provide comprehensive coverage of management theory, human behaviour, organizational behaviour, and practical applications. The objective is to help students understand the fundamental concepts and principles of management, including key roles, skills, and functions. It also aims to offer an overview of the historical development, theoretical foundations, and practical applications of the managerial process.
2. To enable students to engage with application-oriented case studies related to the functions of management and behavioural processes in organizations.

### **COURSE OUTCOMES**

1. Demonstrate conceptual understanding, skills, and the ability to apply principles and functions of management, particularly in planning and decision-making processes.
2. Apply managerial and behavioural concepts to real-world organizational scenarios and challenges.

#### **MODULE 1: INTRODUCTION TO ORGANIZATIONAL BEHAVIOR (10 Hours)**

History of Organizational Behaviour, Taylor's Scientific Management, George Elton Mayo Human Relations Movement, Importance of Management and Organizational Behaviour, Organization Structure-Design and environment, Organization Culture and transformation, Fields contributing to Organisation Behaviour.

#### **MODULE 2: FOUNDATION OF INDIVIDUAL BEHAVIOUR (08 Hours)**

Individual Behaviour and Learning, Factors influencing Individual Behavior, Components and Determinants of learning, Principles of Reinforcement, Attitudes: Integration of Individual to Organizational Values, ABC Model. Transactional Analysis, Emotions, Perception and its application in organization, Factors influencing individual decision making – Personality, Trait Theories, Implications in the organizational Context.

**MODULE 3: LEADERSHIP AND MOTIVATION****(12 Hours)**

Introduction to Leadership, Types of Leadership, Leadership Skills, Leadership Styles - in Indian Organizations, Transition in Leadership theories, Expectancy and the Path-goal theory of leadership, Situational Leadership Theory, Contingency theories of leadership, Exchange theories of leadership, Transformational Leadership Theory, Contemporary Leadership Theories.

Importance of Motivation, Nature and Characteristics of Motivation, Motivation in work settings, Types of Motivation, Theories - Maslow's Need theory, McGregor XY Theory, Herzberg's Two Factor Theory, Vroom's Valence and Instrumentality.

**MODULE 4: GROUP DYNAMICS AND TEAM BUILDING****(10 Hours)**

**Group Dynamics:** Overview of Groups, Group Cohesion-Formal vs Informal Groups, Group Formation and Development – The five-stage model, Factors that influence Group Effectiveness, Group Diversity, Johari Window.

**Team Building:** Working teams and Team effectiveness, Intra team dynamics, Team Decision Making, Negotiation Skills, Collaboration and Conflict, Conflict Management Styles – Avoiding, Accommodating, Competing, Compromising and Collaborating

**MODULE 5: ORGANIZATIONAL CHANGE: DEVELOPMENT AND TRANSFORMATION****(10 Hours)**

Introduction to organisational change, forces of change, reinventing Kurt Levin Model, organisational routines and mental models, change need analysis, types and styles of change, building capability for change, providing leadership for 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.

**MODULE 6: PRACTICAL SESSION / CASE STUDIES****(10 Hours)**

Hands-on learning through the Johari Window for self-awareness and interpersonal understanding. Students should conduct interviews with HR or business leaders during industrial visits and submit a reflective report on leadership practices. Role plays and simulations on OB concepts in real-world scenarios.

**PEDAGOGY**

1. Module six can be guided with related case studies industrial visits and mini projects.

2. Lectures, Case Study, Assignments, Seminar, Discussion, Role plays, Group Activity, Simulation, Business Games, Industrial and Field Visit etc.
3. 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.

## **REFERENCES**

1. Stephen P. Robbins & Timothy A. Judge – Organizational Behavior, Pearson Education.
2. Fred Luthans – Organizational Behavior, McGraw-Hill International.
3. Dipak Kumar Bhattacharyya – Organizational Behaviour: Text and Cases, Oxford University Press, India.
4. Ray French, Charlotte Rayner, Gary Rees, Sally Rumbles – Organizational Behaviour, John Wiley & Sons.
5. K. Aswathappa – Organizational Behaviour, Himalaya Publishing House.
6. Williams & Nelson – Management and ORGB, Cengage Learning.
7. Griffin – Management: Principles and Practices, Cengage Learning.
8. Waddell, Creed, Cummings & Worley – Organizational Change: Development & Transformation, Cengage Learning.
9. Nelson, Quick & Khandelwal – ORGB: A South-Asian Perspective, Cengage Learning.
10. Stephen P. Robbins, David A. DeCenzo, Sanghmitra Bhattacharya, Madhushree Nanda Agarwal – Fundamentals of Management, Pearson Education.
11. Stephen P. Robbins & Mary A. Coulter – Management, Pearson Education.
12. Harold Koontz, Heinz Weihrich, Cyril O'Donnell – Essentials of Management, Tata McGraw-Hill.
13. P. C. Tripathi & P. N. Reddy – Principles of Management, McGraw-Hill Education.
14. Richard L. Daft – Principles of Management, Cengage Learning.
- 15. Kreitner – Management: Theory and Applications, Cengage Learning.**

## **1.2 MANAGERIAL ACCOUNTING**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

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 and skill enhancement.

### **COURSE 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-subsidiary books, Trial Balance (Theory and Problems), An overview of Accounting Standards in India – Preparation of Final accounts – Income Statement and Balance sheet (Problems on Vertical method) as per Companies Act 2013.

#### **MODULE 3: FINANCIAL STATEMENT ANALYSIS AND REPORTING (14 Hours)**

Accounting for Tangible & Intangible Assets: Fixed Assets (AS-10) and Depreciation (AS-6), Techniques of financial statement analysis, analyzing financial statements using ratio analysis, cash

flow statement, understanding annual reports and earnings relations.

**MODULE 4: COSTING FOR MANGERIAL DECISIONS (08 Hours)**

Conceptual issues in cost accounting, classification of costs, and preparation of cost sheets, Cost control and cost reduction techniques including standard costing, Understanding marginal costing, CVP, break-even analysis and ABC in decision-making with practical problems, Overview of budget and budgetary control, types of budgets, and Problems on flexible budget.

**MODULE 5: EMERGING TRENDS IN ACCOUNTING (04 Hours)**

Introduction to IFRS and its global significance in financial reporting. Overview of Inflation Accounting, Human Resource Accounting, and Responsibility Accounting. Understanding Forensic Accounting and Cloud Accounting practices. Concept of Carbon Credits and their accounting implications in sustainability reporting.

**MODULE 6: PRACTICAL IMPLICATIONS OF MANAGERIAL DECISIONS MAKING (10 Hours)**

Analyse and Draw inference by taking any listed company's latest published financial statements. Prepare a Project Report for Business Loan including project plan, timeline, Budget and projected cash flow.

Application of MS Excel in accounting analysis, Financial Statement Analysis – Ratio Analysis, Variance Analysis, Data visualization, Forecasting and Modelling.

**PEDAGOGY**

- Conceptual Lectures: Foundational understanding through theory and illustrations
- Problem-Solving Sessions: Numerical questions and accounting records
- Case Studies: Interpretation of real-world financial statements and cost data
- Excel-Based Labs: Application of financial functions, dashboards, and forecasting
- Mini Projects: Business plan with financial projections and funding structure
- Interactive Workshops: Sessions on IFRS, forensic accounting, and emerging practices
- Assessment Tools: Quizzes, assignments, project presentations, and case analysis.

## REFERENCE BOOKS

1. **Narayanaswamy, R.** – *Financial Accounting: A Managerial Perspective*, PHI Learning.
2. **Ramachandran, N. & Kakani, R. K.** – *Financial Accounting for Management*, Tata McGraw Hill.
3. **Horngren, C. T., Sundem, G. L., Elliott, J. A., & Philbrick, D.** – *Introduction to Financial Accounting*, Pearson Education.
4. **Anthony, R. N., Hawkins, D. F., & Merchant, K. A.** – *Accounting: Text and Cases*, Tata McGraw Hill.
5. **Godwin, N., Alderman, W., & Sanyal, S.** – *Financial ACCT: A South-Asian Perspective*, Cengage Learning.
6. **Bhattacharya, S. K.** – *Accounting for Management: Text and Cases*, Vikas Publishing House.
7. **Gupta, A.** – *Financial Accounting for Management: An Analytical Perspective*, Pearson Education.
8. **Hanif, M. & Mukherjee, A.** – *Financial Accounting*, McGraw Hill Education.
9. **Arora, M. N.** – *Accounting for Managers*, Himalaya Publishing.
10. **Tulsian, P. C. & Tulsian, B.** – *Financial Reporting*, S. Chand Publishing.

### **1.3 BUSINESS ENVIRONMENT AND PUBLIC POLICY**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

#### **COURSE OBJECTIVES**

1. To help students understand the internal and external environmental forces that influence business decisions and policy outcomes in India and globally.
2. To enable students to critically evaluate public policy processes, sectoral policies, and their impact on business practices, ethics, and strategy.

#### **COURSE OUTCOMES**

1. To analyze how various business environmental factors, economic reforms, and public policies impact managerial decisions and strategic planning.
2. To evaluate and respond to real-time policy challenges through applied learning such as audits, debates, and regulatory simulations.

#### **MODULE 1: INTRODUCTION TO BUSINESS ENVIRONMENT (10 Hours)**

Introduction, Business Environmental factors – Internal and external, Stakeholders management in business, role of government in economic activity and its impact on business in India, Key economic policies, reforms, GNP trends, and market structures influencing decisions. Impact of globalization, liberalization, and privatization (LPG) on Indian and global business.

#### **MODULE 2: INDUSTIRAL, LEGAL AND SOCIO – CULTURAL ENVIRONMENT**

**(12 Hours)**

Evolution of industrial policies; pre-1991 to post-reform and sector classifications-public, private, joint, cooperative, privatisation through disinvestment, role of rural and small industries, and causes of industrial sickness. Competition Act 2000, patents, and trademarks. Government intervention and its impact on industry and innovation. Socio-cultural problems of business in India and its impact.

#### **MODULE 3: INTRODUCTION TO PUBLIC POLICY (08 Hours)**

Definition, types, and importance of public policy, Public policy process: Formulation,

implementation, evaluation; Role of government institutions in policy making, Regulatory bodies and business governance (e.g., SEBI, RBI, CCI), Relationship between business and public policy in a market economy.

**MODULE 4: SECTORAL AND FUNCTIONAL PUBLIC POLICIES (06 Hours)**

Industrial policy and sector-specific regulations; Monetary and Fiscal policy; Trade policy and FDI regulations; Infrastructure and environmental policies; Technology and innovation policies

**MODULE 5: POLICY CHALLENGES AND BUSINESS RESPONSES (14 Hours)**

Managing compliance and regulatory risk, Policy impact - GST, Digital India, Atmanirbhar Bharat, ESG (Environmental, Social, and Governance): Importance of ESG in modern business practices, Corporate social responsibility (CSR) and its integration with ESG; E-Governance and Digital Policy Interface: Concept and importance of e-governance in public policy, Government initiatives - Digital India, e-procurement, CSCs, UMANG, Digilocker, E-district project and Ethical considerations in public-private partnerships.

**MODULE 6: EXPERIENTIAL LEARNING / APPLIED PROJECTS (10 Hours)**

Business Environment Action Plan: Visit to any MSMEs to get the real time information on business environment and prepare and submit the project report.

Regulatory simulation: Stakeholder negotiation role-play; Business environment audit of a firm or industry

Debate/panel discussions on recent government policies affecting business.

## **PEDAGOGY**

Lectures and Interactive Discussions for conceptual clarity.

Case Studies and Policy Analyses to link theory with practice.

Experiential Learning through projects, MSME visits, and environment audits.

Role Plays / Simulations to understand regulatory and stakeholder perspectives.

Debates, Panel Discussions, and Guest Lectures on contemporary policy issues.

Continuous Assessments through quizzes, assignments, presentations, and project work.

## **REFERENCES**

1. **Francis Cherunilam** – *Business Environment: Text and Cases*, Himalaya Publishing House
2. **Shaikh Saleem** – *Business Environment*, Pearson Education
3. **Justin Paul** – *Business Environment: Text and Cases*, McGraw Hill Education
4. **Adhikary M.** – *Economic Environment of Business*, Sultan Chand & Sons
5. **K. Aswathappa** – *Essentials of Business Environment*, Himalaya Publishing House

6. **Ruddar Datt & K.P.M. Sundharam** – *Indian Economy*, S. Chand Publishing

**T. N. Chhabra** – *Business Environment*, Sun India Publications

## **1.4 ECONOMICS FOR MANAGERS**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

1. To equip students with economic principles and analytical tools for effective managerial decision-making.
2. To enable critical understanding of micro and macroeconomic concepts in the context of the digital economy, sustainability, and global competitiveness.

### **COURSE OUTCOMES**

1. To apply microeconomic and macroeconomic concepts to analyse business problems and strategic decisions.
2. To evaluate the impact of digital transformation, sustainability, and global economic policies on business strategy.

#### **MODULE 1: DEMAND ANALYSIS AND CONSUMER BEHAVIOUR (12 Hours)**

Introduction - Role of economics in business decision-making - Economic principles: increments, margin, discounting principle. Production possibility curve, opportunity cost - Digital economy and data-driven decision making.

Demand theory, Elasticity, and demand forecasting - Advanced demand forecasting techniques: Time Series Analysis, Big data, AI, and machine learning applications - Consumer equilibrium: Cardinal utility, indifference curve, revealed preference - Behavioral Economics: Bounded rationality, nudges, and consumer biases in decision-making.

#### **MODULE 2: PRODUCTION AND OPERATIONS ECONOMICS (08 Hours)**

Production function returns to scale, isoquants, iso-costs - Economies and diseconomies of scale - Optimum input combination & elasticity of substitution - Industry 4.0 Implications: Automation, AI, sustainability in production - Circular economy and green production strategies.

**MODULE 3: COST, REVENUE AND PROFIT STRATEGIES****(10 Hours)**

Types of cost, revenue concepts, cost control and reduction - Short-run and long-run cost functions, economies of scale - Relationship between cost and revenue curves - Pricing decisions in competitive and digital markets (freemium, dynamic pricing, platform pricing) - Sustainability and carbon pricing.

**MODULE 4: MARKET STRUCTURES AND STRATEGY****(12 Hours)**

Perfect competition, monopoly, oligopoly, monopolistic competition - Price discrimination, dumping, and global trade implications - Competition in digital markets: network effects, platform monopolies, antitrust issues - Labor economics: gig economy, remote work, and future of employment.

**MODULE 5: MACROECONOMICS AND POLICY ANALYSIS****(12 Hours)**

National Income accounting and challenges in digital economy - Business cycles, inflation, monetary and fiscal policy - Global shocks: pandemics, climate change, supply chain disruptions, geopolitics - Indian and global economic environment: start-up ecosystem, digital payments, FDI, sustainability - SDGs and ESG in economic decision-making.

**MODULE 6: PRACTICAL APPLICATIONS****(06 Hours)**

Data-based demand forecasting using Excel/Power BI.

Analyze consumer behavior using behavioral economics caselets.

Evaluate sustainability cost-benefit for a firm.

Simulate market equilibrium with changing policies.

Debate: "Should firms prioritize profit or sustainability?"

**PEDAGOGY**

- Lectures and discussions
- Case studies (global & Indian businesses)
- Simulation games and role plays
- Guest lectures from industry experts
- Hands-on analysis using AI and data tools

## **REFERNECES**

1. Sinha, Ritika, Economics for Managers, SBPD Publishing House.
2. N. Gregory Mankiw, *Principles of Microeconomics*, Cengage Learning.
3. Pindyck, Rubinfeld & Mehta, Microeconomics, Pearson.
4. D.N. Dwivedi, Managerial Economics, Vikas Publications.
5. Varian, H., Intermediate Microeconomics, W.W. Norton.
6. Thaler, R., *Nudge: Improving Decisions about Health, Wealth, and Happiness*.

## **1.5 BUSINESS STATISTICS**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

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.

### **COURSE 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)**

Importance and uses of statistics; sources and types of statistical data – primary and secondary; classification and tabulation of data; types of classification – qualitative, quantitative, chronological, and geographical; frequency distribution; diagrammatic and graphical representation – bar diagrams, pie charts, histograms, frequency polygons, and cumulative frequency curves (ogives); descriptive statistical techniques – measures of central tendency (mean, median, mode); measures of dispersion (range, variance, standard deviation, and coefficient of variation); measures of position (quartiles, deciles, percentiles); skewness – Karl Pearson and Bowley's coefficients of skewness; kurtosis and its interpretation.

### **MODULE 2: PROBABILITY THEORY AND DISTRIBUTIONS**

**(08 Hours)**

Concept and definition of probability; relevance to managerial decision-making; laws of probability including the law of independence; sample space and events; union, intersection, and complement of events; relevance of permutations and combinations in probability; rules of probability – addition and multiplication rules; conditional probability and Bayes' theorem with applications in business analytics and decision-making; introduction to random variables – discrete and continuous; concept of probability distributions. Theoretical distributions – binomial distribution, Poisson distribution, and normal distribution – properties, applications, and relevance in real-world business problems.

**MODULE 3: CORRELATION AND REGRESSION ANALYSIS (10 Hours)**

Introduction and significance of correlation and regression analysis; graphical representation using scatter diagrams; Karl Pearson's coefficient of correlation for univariate and bivariate data; Spearman's rank correlation for qualitative or ordinal data; concept of causality and distinction between correlation and regression; regression analysis – construction and interpretation of regression equations; estimation and prediction using regression lines; relationship between correlation coefficient and regression coefficients.

**MODULE 4: HYPOTHESIS TESTING AND INFERRENTIAL STATISTICS (14 Hours)**

Population and sample; concept and formulation of hypotheses; types of hypotheses – null and alternative; Type I and Type II errors; levels of significance; one-tailed and two-tailed tests. Tests of significance: parametric tests – z-test, t-test (one-sample, independent, and paired samples), and Analysis of Variance (ANOVA) – one-way and two-way classification. Non-parametric tests – Chi-square test for independence and goodness of fit, Mann-Whitney U test for comparing two independent samples, and Kruskal-Wallis test for comparing more than two independent groups.

**MODULE 5: STATISTICAL DECISION THEORY (06 Hours)**

Role of quantitative techniques in managerial decision-making; types of decision-making environments – decision under certainty, risk, and uncertainty; decision-making under risk using Expected Monetary Value (EMV) criterion, Expected Opportunity Loss (EOL), decision trees, and payoff tables; decision-making under uncertainty using criteria such as Maximax, Maximin, and Minimax regret; application of statistical decision theory in evaluating alternatives and making optimal choices in business scenarios.

## **MODULE 6: PRACTICAL APPLICATIONS OF DESCRIPTIVE AND INFERENCEAL STATISTICS BY USING REAL TIME DATA** **(10 Hours)**

Practical applications of descriptive and inferential statistics using real-time data; analysis of data using Excel functions – calculation of mean, median, mode, standard deviation, variance, skewness, and kurtosis; creation of frequency distributions and histograms using chart functions; correlation and regression analysis using Excel's Data Analysis Toolpak; hypothesis testing using z-test, t-test, and ANOVA, and drawing inferences from results through the Data Analysis Toolpak

### **PEDAGOGY**

Lectures and Interactive Discussions for conceptual clarity.

Problem-Solving and Numerical Exercises using real-life data.

Case Studies on business decision-making through statistics.

Practical Labs (Excel/Software) for data analysis and interpretation.

Assignments and Projects applying descriptive and inferential statistics.

Quizzes, Presentations, and Class Participation for continuous learning.

### **REFERENCES**

1. Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi '*Statistics for Management*', Pearson India
2. T. N. Srivastava & Shailaja Rego '*Statistics for Management*', Tata McGraw Hill
3. J. K. Sharma, '*Fundamentals of Business Statistics*', Vikas Publishing
4. Amir D. Aczel, Jayavel Sounderpandian, et al. '*Complete Business Statistics*', McGraw Hill Education
5. SP Gupta '*Statistical Methods*', Sultan Chand & Sons
6. Keller/Arora '*BSTAT: A South-Asian Perspective*', Cengage Learning
7. N. D. Vohra '*Business Statistics*', Tata McGraw Hill
8. Glynn Davis & Branko Pecar '*Business Statistics Using Excel*', Oxford University Press

S. C. Gupta '*Fundamentals of Statistics*', Himalaya Publishing

## **1.6 MARKETING MANAGEMENT**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

1. To equip students with a comprehensive understanding of core marketing principles, tools, and techniques for strategic business decisions.
2. To enable students to critically analyse market environments and consumer behaviour, and to develop effective, customer-centric marketing strategies.

### **COURSE OUTCOMES**

1. To apply marketing frameworks and analytical tools to segment markets, target customers, and position products effectively.
2. To design and evaluate strategic marketing plans incorporating digital tools, CRM systems, and buyer behaviour insights.

#### **MODULE 1: INTRODUCTION TO MARKETING AND MARKET ENVIRONMENT (08 Hours)**

Core Marketing Concepts, Evolution of Marketing & Contemporary Orientations, Marketing Environment: Micro & Macro Factors. Market Opportunity Identification, Basics of Service Marketing. Trends: Sustainable Marketing, Purpose-Driven Brands, Green & Ethical Marketing

#### **MODULE 2: MARKETING STRATEGIES AND MARKETING MIX (12 Hours)**

Segmentation, Targeting & Positioning (STP), Product Strategy & Lifecycle, Pricing Strategies, Distribution & Channel Management. Promotion: IMC, Advertising, PR, Personal Selling, Sales Promotion. Branding Strategies, Experiential Marketing

#### **MODULE 3: UNDERSTANDING CONSUMER AND BUYER BEHAVIOUR (10 Hours)**

Factors Influencing Consumer Behaviour (Psychological, Cultural, Social, Personal), Buyer Decision Process, Consumer vs. Business Buying. Global vs. Indian Consumer Behaviour. Buyer Behaviour Models (e.g., Maslow, Engel-Kollat-Blackwell). Behavioural Economics in Marketing

## **MODULE 4: SALES MANAGEMENT, FORECASTING AND CRM (08 Hours)**

Sales Forecasting Techniques (Quantitative & Qualitative). Introduction to Marketing Analytics and Dashboards. Sales Process, B2C & B2B Sales Strategies. Customer Relationship Management (CRM): CRM Cycle, Implementation. Data-Driven CRM, Customer Segmentation, Retention. CRM in Omni-channel Marketing Environments

## **MODULE 5: DIGITAL AND EMERGING MARKETING PRACTICES (12 Hours)**

Introduction to Digital Marketing: SEO, SEM, Content, Influencer Marketing. Social Media Strategies, social media tools – blogs, microblogs, social networks, media sharing sites, social news sites, review sites, virtual worlds and online gaming, Social media and mobile marketing. Mobile Marketing & Apps. AI & Marketing Automation Tools.

## **MODULE 6: PRACTICAL APPLICATION OF MARKETING CONCEPTS (10 Hours)**

Develop a Go-to-Market Strategy for a Startup. Social Media Campaign Design and Performance Analysis. Sales Forecasting Exercise using Excel/Analytics Tools. Consumer Behaviour Field Interviews (B2B & B2C). Create a CRM Campaign Plan. Repositioning Strategy for a declining product (using STP + 4Ps)

## **PEDAGOGY**

Lectures & Interactive Discussions to explain key marketing concepts.

Case Studies from Indian and global markets to illustrate practical applications.

Practical Projects & Simulations (social media campaign, GTM strategy, CRM planning).

Experiential Learning through field surveys, consumer interviews, and sales forecasting exercises.

Guest Lectures / Industry Experts to share insights on marketing trends.

Assessments through quizzes, assignments, project presentations, and participation in debates/discussions.

## **REFERENCES**

- 1. Philip Kotler, Kevin Lane Keller, Abraham Koshy, Mithileshwar Jha – *Marketing Management*, Pearson Education**

2. **Lamb, Hair, Sharma, McDaniel** – *MKTG: A South-Asian Perspective*, Cengage Learning
3. **Philip Kotler, Gary Armstrong, Prafulla Agnihotri** – *Principles of Marketing*, Pearson India
4. **Etzel, Walker, Stanton & Pandit** – *Marketing*, Tata McGraw-Hill
5. **Paul Baines, Chris Hill, Kelly Page** – *Marketing Management*, Cengage Learning
6. **William D. Perreault, Jerome McCarthy** – *Basic Marketing: A Global Managerial Approach*, Tata McGraw-Hill
7. **Gary L. Lilien, Philip Kotler, K. Sridhar Moorthy** – *Marketing*, Prentice-Hall
8. **Rama Bijapurkar** – *Winning in the Indian Market*, Wiley India

## **1.7 EMPLOYABILITY SKILL DEVELOPMENT**

**COURSE DURATION: 30 HOURS**

**NO OF CREDITS: 2**

### **COURSE OBJECTIVES**

1. To foster self-awareness and professional development through self-assessment, communication, and interpersonal training.
2. To equip students with industry-relevant skills including resume building, interview preparedness, networking, digital competency, and time management for improved employability.

### **COURSE OUTCOMES**

1. To apply essential communication, networking, and time management skills to build a strong personal and professional brand.
2. To demonstrate job readiness by creating impactful resumes, showcasing workplace etiquette, and participating effectively in interviews, group discussions, and digital environments.

#### **MODULE 1: CREATING BRAND SELF (04 Hours)**

Self-Assessment, SWOC Analysis, Identifying Gaps using self-appraisal, peer-appraisal and teacher/mentor appraisal. Art of Projecting Oneself to cater to HR/Industry Perception. High Level Pitching - Art of introducing oneself in 30 Seconds.

#### **MODULE 2: COMMUNICATION SKILL DEVELOPMENT (06 Hours)**

Understanding the basics of verbal communication, Types of verbal communication, Effective interaction skills, Professional telephone etiquettes.

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: NETWORKING 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.

Using digital skills in Professional Networking sites like LinkedIn and leveraging them to Network with Industry Professionals

**MODULE 4: TIME AND STRESS MANAGEMENT (05 Hours)**

Time Management – Creating and using a to-do list using mobile phone apps ; identifying time wasters—day to day time management techniques— time management tools- using time management apps.

Stress Management – types of stress, managing stress, coping mechanism and resilience building.

**MODULE 5: RESUME WRITING AND INTERVIEW HANDLING SKILLS**

**(05 Hours)**

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

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

**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**

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 and Interviews, Creating a Linkedin Profile

**RECORD BOOKS TO BE MAINTAINED BY STUDENTS**

1. Record of APP/ Diary – To maintain To Do List
2. Record book for Business News – develop understanding of the business environment by recording the latest business news stories in brief.

**REFERENCES**

1. Barun K. Mitra – *Personality Development and Soft Skills*, Oxford University Press
2. Jeffrey H. Greenhaus, Gerard A. Callanan, Veronica M. Godshalk – *Career Management*, SAGE Publications

3. Peggy Klaus – *The Hard Truth about Soft Skills*, Harper Business

4. Shiv Khera – *You Can Win*, Bloomsbury India

5. Arun Monappa – *Interviewing Skills for Managers*, Tata McGraw Hill

## **2.1 ENTREPRENEURSHIP AND START-UP MANAGEMENT**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

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

### **COURSE OUTCOMES**

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**

**(08 Hours)**

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

#### **MODULE 2: ENTREPRENEURSHIP PROCESSES**

**(12 Hours)**

**Pre-startup-** Idea generation and evaluation. **Startup-** Evaluating the opportunity, developing the business model Canvas, writing the business plan, assessing the required resources, acquiring the required resources, Managing the venture. **Growth-** Various growth strategies that entrepreneur can pursue. **Formalities for setting up of new venture.** **Legal aspects involved in setting up new ventures.** **Exit-** Various exit cum harvesting strategies.

#### **MODULE 3: BUSINESS PLAN AND FEASIBILITY ANALYSIS**

**(12 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.

#### **MODULE 4: ECO- SYSTEM SUPPORTING GROWTH OF ENTREPRENEURSHIP (08 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: CONTEMPORARY DEVELOPMENT IN ENTREPRENEURSHIP (10Hours)**

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.

## **MODULE 6: PRACTICAL APPROACH TO ENTREPRENEURSHIP (10 Hours)**

Students should actively participate in practical activities such as designing a Business Model Canvas, simulating a Minimum Viable Product (MVP), and preparing financial and pitch presentations. They should also conduct interviews with entrepreneurs and visit incubation centres or startups. All these experiences must be documented in a project report, highlighting the integration of theoretical knowledge with real-world entrepreneurial practice.

### **PEDAGOGY**

Lectures & Interactive Discussions for conceptual clarity.

Case Studies & Success Stories of entrepreneurs and start-ups.

Experiential Learning through field visits, interviews, and incubation centre exposure.

Practical Exercises such as BMC design, MVP simulation, and pitch presentations.

Guest Lectures / Workshops by entrepreneurs, venture capitalists, and incubators.

Continuous Assessments via assignments, projects, presentations, and participation in entrepreneurial activities.

### **REFERENCES**

1. Hisrich, R., Peters, M., Shepherd, D. – *Entrepreneurship*, McGraw Hill
2. Timmons, J.A., Spinelli, S. – *New Venture Creation: Entrepreneurship for the 21st Century*, McGraw Hill
3. Poornima M. Charantimath – *Entrepreneurship Development and Small Business Enterprises*, Pearson
4. Stevenson, Roberts & Grousbeck – *New Business Ventures and the Entrepreneur*, McGraw Hill

5. Saras D. Sarasvathy – *Effectuation: Elements of Entrepreneurial Expertise*, Edward Elgar
6. Rishikesha T. Krishnan & Vinay Dabholkar – *8 Steps to Innovation*, Harper Business
7. David H. Holt – *Entrepreneurship: New Venture Creation*, Prentice-Hall of India
8. K. Ramachandran – *Entrepreneurship Development: Indian Cases on Change Agents*, Tata McGraw Hill
9. Vasant Desai – *Entrepreneurial Development and Management*, Himalaya Publishing
10. Reddy – *Entrepreneurship: Text & Cases*, Cengage Learning
11. Thomas Zimmerer & Norman Scarborough – *Essentials of Entrepreneurship and Small Business Management*, Pearson
12. Brigitte Berger – *The Culture of Entrepreneurship*, ICS P

## **2.2 BUSINESS RESEARCH METHODS**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

1. To enable students to acquire a structured thought process in research.
2. To imprint the paradigm of research in business and encourage the use of research as a foundation for decision-making.

### **COURSE OUTCOMES**

1. Define research problems, frame hypotheses, and select appropriate research designs.
2. Apply statistical methods and tools to conduct data analysis and develop research reports for decision-making.

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

**(06 Hours)**

Nature and role of Business Research, Types of Research: Purpose, Process, Outcome, Nature, Action and Logic. Theory Building: Constructs, Propositions, Variables, Hypotheses, Features of a Good Research Study. Role of the Internet in Research

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

**(10 Hours)**

Identification, Selection & Definition of the Research Problem, Criteria and Sources for Identifying the Problem, Characteristics of a Good Hypothesis, Types of Hypotheses and Testing, Research Design: Meaning, Need, Dimensions of Research Design - Types of Research Design: Inductive, Deductive, Exploratory, Descriptive, Causal, and Experimental

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

**(12 Hours)**

**Primary Data:** Survey Methods, Observations, Focus Groups, Personal Interviews, Projective Techniques.

**Secondary Data:** Sources, Evaluation, Benefits, and Drawbacks

**Measurement Scales:** Nominal, Ordinal, Interval, and Ratio. Comparative vs. Non-Comparative, Single vs. Multi-item Scales,

**Questionnaire Design:** Process, Pilot Test, Reliability (Cronbach's Alpha), Validity. Interview

## Schedule & Measurement Criteria

### **MODULE 4: SAMPLING & DATA PREPARATION (10 Hours)**

Concept of Population, Sampling Frame, Sample Unit, Sample Size, Probability vs. Non-Probability Sampling, Characteristics of a Good Sample, Sampling vs. Non-Sampling Errors, Data Preparation: Editing, Coding, Classification, Tabulation, Field Validation and Data Transformation & Content Analysis

### **MODULE 5: DATA ANALYSIS & RESEARCH REPORTING (12 Hours)**

**Data Analysis:** One-Tailed vs. Two-Tailed Tests, Standard Error. Hypothesis Testing: Null & Alternative Hypothesis, Type I and Type II Error, Critical Region and Degrees of Freedom. Practical applications and interpretations of descriptive and inferential Statistics.

**Report Writing:** Types of Research Reports, Report Format, Communication Models & Data Visualisation Presentation, Report Documentation and Referencing - APA Style, Chicago / Turabian Style. Research Briefing and Oral Presentation and Reports on the Internet & Digital Submission.

### **MODULE 6: PRACTICAL APPLICATIONS IN BUSINESS RESEARCH (10 Hours)**

Identify a practical business problem, framing hypothesis for the same, design a questionnaire, and draft the same by using Google Form.

Simulate Primary and secondary data collection and apply **descriptive and inferential Statistics** by using Excel data analysis function / SPSS / Jamovi Software

Management of AI driven research tools for both qualitative and quantitative analysis. Practical Activity: A research report should be prepared in APA format and findings should be presented. A viva-voce should be conducted by the faculty on research concepts.

## **PEDAGOGY**

Lectures & Discussions for conceptual clarity.

Case Studies on research applications in business.

Hands-on Training in Excel/SPSS and AI-driven research tools.

Workshops on questionnaire design, hypothesis testing, and report writing.

Practical Research Project including field data collection and analysis.

Guest Lectures by researchers and industry experts.

Assessments through quizzes, assignments, research reports, viva, and presentations.

## **REFERENCES**

1. *Donald R. Cooper, Pamela S. Schindler & J.K. Sharma* – Business Research Methods, McGraw Hill Education
2. Zikmund, W.G. & Adhikari, A. – Business Research Methods: A South-Asian Perspective, Cengage Learning
3. Deepak Chawla & Neena Sondhi – Research Methodology: Concepts & Cases, Vikas Publishing House.
4. Naval Bajpai – Business Research Methods, Pearson India
5. C.R. Kothari – Research Methodology: Methods and Techniques, New Age International Publishers
6. R. Panneerselvam – Research Methodology, Prentice-Hall of India
7. Rummel & Ballaine – Research Methodology in Business, Harper & Row Publishers
8. Uma Sekaran & Roger Bougie – Research Methods for Business: A Skill-Building Approach, Wiley
9. Mark Saunders, Philip Lewis & Adrian Thornhill – Research Methods for Business Students, Pearson
10. Alan Bryman & Emma Bell – Business Research Methods, Oxford University Press

## **2.3 HUMAN CAPITAL MANAGEMENT**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

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.

### **COURSE OUTCOMES**

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 Environment -Evolution of HRM –HR Metrics - Human Resource Outsourcing- HR Audit – Human Resource Information System (HRIS), Understanding the cultural, political and legal environment of HR.

#### **MODULE 2: HUMAN RESOURCE PLANNING: RECRUITMENT, SELECTION AND INDUCTION (10 Hours)**

**Human Resource Planning:** Meaning, Objectives - Importance of HR planning-Job Analysis-Job Design- Job rotation-Job Specification-Job Description-Job Evaluation.

**Recruitment:** Purpose and Importance of Recruitment – Sources of Recruitment.

**Selection:** Selection Process – Selection Techniques –Interview Process – Identifying Right Candidate.

**Induction:** Orientation-On boarding and Placement.

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

**Training and Development** – Training need analysis, designing a training program, evaluating a training program- Training process-Methods of Training: Job Instructed Training, Coaching, Mentoring, Job Rotation, Apprenticeship Training-Training Evaluation-Role of Training & Development Managers- Learning Theories –Social Learning theory, Kolb’s model on Learning style of individuals

**Career Management** – Need for career planning – Career Development (CD) – Steps 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, Components of compensation- Determinants of Compensation Strategy- Skill Based Pay- Wage and Salary Administration- Incentives and Rewards.

**Performance Management** - Performance Management- Different elements of Performance Management- Managing Performance - Role, Responsibilities and Challenges of Managers- Pay for Performance – Performance Management Process and Evaluation techniques- Performance related issues and concerns- Performance Improvement Process

#### **MODULE 5: MANAGING EMPLOYEE RELATIONS (07 Hours)**

Employee Relations: Meaning & Characteristics –Theoretical Perspectives on Industrial Relations – Nature of Trade Unions – Causes for Industrial Disputes – Grievance Procedures – Redressal of Grievances through Collective Bargaining – Worker’s participation in management – Laws relating to Employee Relations-Employee Health and Safety-Compliance and Business Ethics.

#### **MODULE 6: HR ACTION PLAN (09 Hours)**

Students should engage in practical learning by conducting structured interviews with HR Heads or senior HR professionals to understand real-world human resource strategies, challenges, and success stories. The focus must be on exploring leadership in HR, conflict resolution, change management, employee engagement, and initiatives fostering a positive workplace culture. Students must submit an **action report** summarizing key takeaways and HR best practices, supplemented with observations from company visits or virtual HR panels (if feasible).

#### **PEDAGOGY**

Lectures; Discussions for conceptual clarity.

Case Study Analysis to link theory with practice.

Exercises & Role Plays to practice HR processes.

Guest Lectures / Industry Talks by HR leaders.

Videos & Company Tours to understand practical applications.

Practical Projects like HR Action Plan reports and HR audits.

Continuous Assessments through assignments, presentations, and viva.

## **REFERENCE BOOKS**

1. Gary Dessler & Biju Varkey – Human Resource Management, Pearson
2. DeNisi, Griffin, Sarkar – HRM: A South-Asian Perspective, Cengage Learning
3. K. Aswathappa – Human Resource Management: Text & Cases, McGraw Hill
4. Biswajeet Pattanayak – Human Resource Management, PHI
5. P. Jyothi & D. N. Venkatesh – Human Resource Management, Oxford
6. C.B. Gupta – Human Resource Management, Sultan Chand & Sons
7. P. Subba Rao – Personnel & HRM, Himalaya Publishing House
8. C.S. Venkata Ratnam & B.K. Srivastava – Personnel Management & HR, Tata McGraw Hill
9. Dr. C.B. Mamoria, Satish Mamoria & S.V. Gankar – Dynamics of Industrial Relations, Himalaya
10. Sinha – Human Resource Management, Cengage

## **2.4 BUSINESS ANALYTICS**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

1. To introduce business intelligence processes that support data-driven decision-making in business operations.
2. To expose students to current analytics practices across various sectors and empower them to develop actionable analytical skills.

### **COURSE OUTCOMES**

1. Understand how data analytics drives digital transformation, innovation, and entrepreneurship.
2. Demonstrate applied knowledge in data-driven decision-making and business process optimization using analytics.

#### **MODULE 1: INTRODUCTION TO BUSINESS ANALYTICS (12 Hours)**

Business Analytics Concepts: Descriptive, Predictive, and Prescriptive Analytics, Business Analytics vs. Business Intelligence, Business Analytics Lifecycle, Role of a Business Analyst, Data Analyst, and Data Scientist, Introduction to Data Warehousing, OLAP, OLTP, Real-world applications: Banking, E-commerce, Healthcare. Ethics and legal aspects of data analytics

#### **MODULE 2: DATA MINING & DATA PREPARATION (10 Hours)**

Meaning and Evolution of Data Mining, Knowledge Discovery in Databases (KDD), CRISP-DM Methodology. Data Mining Techniques: Classification, Clustering, Association, Data Cleaning, Integration, Transformation, Reduction. Challenges of Data Mining. Case studies from modern data mining applications - fraud detection, churn prediction.

#### **MODULE 3: PREDICTIVE MODELING TECHNIQUES (13 Hours)**

Introduction to Supervised and Unsupervised Learning. Simple and Multiple Linear Regression, Logistic Regression, Time Series Forecasting Techniques. Decision Trees, Introduction to Neural Networks and Model Evaluation. Introduction to Model Deployment (basics of MLOps)

#### **MODULE 4: BIG DATA AND EMERGING TECHNOLOGIES (10 Hours)**

Introduction to Big Data and its Characteristics (3Vs & 5Vs), Structured, Semi-Structured, and Unstructured Data. Big Data Tools: Hadoop, Spark – Basic Concepts. Mobile and Sensor Data Analytics. Social Media Analytics - Sentiment Analysis Basics. Overview of AI, Machine Learning, Deep Learning, IoT.

#### **MODULE 5: FUNCTIONAL APPLICATIONS OF BUSINESS ANALYTICS**

**(10 Hours)**

Financial Analytics - Risk Analytics, Credit Scoring. Marketing Analytics - Customer Segmentation, Campaign Analysis. HR Analytics - Attrition Prediction, Performance Evaluation. Supply Chain Analytics - Demand Forecasting, Route Optimization. Operations Analytics - Process Optimization, Quality Analytics. Retail and Healthcare Analytics

## **MODULE 6: PRACTICAL LAB – BUSINESS ANALYTICS TOOLKIT (5 Hours)**

Excel for Data Analytics - Pivot Tables, What-if Analysis. Introduction to Power BI/Tableau: Dashboard creation. Basic Predictive Modeling using Python/R - scikit-learn, statsmodels. Exploratory Data Analysis (EDA). Group Mini Project: Solving a real-world problem using datasets

## **PEDAGOGY**

Lectures & Discussions for conceptual understanding  
Case Studies based on sector-specific analytics practices  
Hands-on Labs using Excel, Power BI/Tableau, Python/R  
Group Mini Projects solving real-world problems with data  
Guest Lectures / Industry Sessions from analytics professionals  
Assessments through quizzes, lab work, presentations, and projects

## **REFERENCES**

1. **Shmueli, G., Bruce, P. C., Gedeck, P., Patel, N. R., & Wali, O. P.** ‘*Data Mining for Business Analytics: Concepts, Techniques, and Applications in Python*’ (Indian Adaptation) – Wiley.
2. **Kumar, U. D.** *Business Analytics: The Science of Data-Driven Decision Making* – Wiley India.
3. **Albright, S. C., & Winston, W. L.** *Business Analytics: Data Analysis and Decision Making* – Cengage Learning.
4. **Provost, F., & Fawcett, T.** *Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking* – O’Reilly Media.
5. **Haider, M.** *Getting Started with Data Science: Making Sense of Data with Analytics* – Pearson Education.

**Pochiraju, B., & Seshadri, S. (2019).** *Essentials of Business Analytics* – Springer.

**Knafllic, C. N.** *Storytelling with Data: A Data Visualization Guide for Business Professionals* – Wiley.

6. **Howson, C.** *Successful Business Intelligence: Unlock the Value of BI & Big Data* – McGraw-Hill Education.
7. **McKinney, W.** *Python for Data Analysis: Data Wrangling with pandas, NumPy, and Jupyter* – O'Reilly Media.
8. **Acharya, S., & Subhashini, C.** *Big Data and Analytics* – Wiley India.

## **2.5 CORPORATE FINANCE**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVES**

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

### **COURSE 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 ENVIRONMENT AND TIME VALUE OF MONEY** **(10 Hours)**

Indian Financial System Overview, Role and Importance of Finance in Business, Corporate Financial Strategy, Functions, and Financial Goals

#### **Time Value of Money**

Time Lines, Future Value, Present Value – Solving for Interest rate and Time, Annuity – Future Value, Present Value, Present Value and Future Value of Growing Annuity – Solving for Interest Rate, Number of Periods and Perpetuities. Uneven Cash Flows Streams.

### **MODULE 2: 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).

### **MODULE 3: RISK AND RETURN ANALYSIS OF SECURITIES** **(12 Hours)**

Valuation of Equity and Bonds (Only Theory), Risk and Return Concepts, Return Calculations for Stocks and Portfolios. Capital Asset Pricing Model (CAPM Only Theory)

Methods of computing cost of capital: Cost of Equity, Cost of Preference Shares, Cost of Debt, Cost of Retained Earnings and Cost of Term Loans, Weighted Average Cost of Capital.

**MODULE 4: CAPITAL STRUCTURE AND DIVIDEND DECISIONS (08 Hours)**

Introduction to capital structure- optimal capital structure, Factors influencing capital structure. Approaches to Capital Structure - NI, NOI, and MM Hypothesis (with and without taxes) Leverages – Financial, Operating, and Combined Leverage.

Dividend Decisions and Theories: Walter's, Gordon's, and MM Hypothesis, Relevance vs. Irrelevance Theories and Applications, Corporate Actions – Stock Split, Bonus Shares - Determinants of Corporate Dividend Policy.

**MODULE 5: WORKING CAPITAL MANAGEMENT (08 Hours)**

Conceptual issues, and Types, Factors Affecting Working Capital, Sources of Working Capital, Estimating Working Capital Needs, Overview of Cash, Inventory, and Receivables Management with Problems. Short-Term Financing Options.

**MODULE 6: PRACTICAL APPLICATION IN CORPORATE FINANCE (10 Hours)**

This module integrates tools and techniques through **Excel-Based Financial Modelling** – Time value of money functions - FV, PV, Rate, NPER and PMT, Preparation of Loan Amortization Schedule. Capital budgeting models (NPV, IRR, Payback), and WACC computation using Excel.

Project Work: Preparation of mini-projects involving the analysis of capital structure, working capital needs, and dividend decisions of selected companies.

**PEDAGOGY**

Lectures & Discussions for conceptual clarity

Problem-Solving Sessions with numerical applications

Excel-Based Lab Work for financial modelling

Case Studies on corporate financing and investment decisions

Mini Projects analysing company financial strategies

Guest Lectures from finance professionals and analysts

**REFERENCES**

1. Michael C. Ehrhardt, Eugene F. Brigham – Corporate Finance – A Focused Approach – Thomson Southwestern.
2. Prasanna Chandra – Financial Management – McGraw Hill Education
3. I.M. Pandey – Financial Management – Vikas Publishing House

4. Brigham & Ehrhardt / Brigham & Houston – Fundamentals of Financial Management – Cengage Learning
5. Rajiv Srivastava & Anil Misra – Financial Management – Oxford Higher Education
6. M. Ravi Kishore – Financial Management: Problems and Solutions – Taxmann Parasuraman
7. Financial Management: A Step by Step Approach – Cengage Learning
8. Besley, Brigham & Parasuraman – CFIN: A South-Asian Perspective – Cengage Learning
9. J. Ruzbeh Bodhanwala – Financial Management using Excel Spreadsheet – Taxmann  
Shashi K. Gupta & R.K. Sharma – Financial Management: Theory and Practice – Kalyani Publishers
10. Bahal, Mohit – Practical Aspects of Financial Management – Suchita Prakashan
11. Sharma, Dhiraj – Working Capital Management: A Conceptual Approach – Himalaya Publishing House
12. Bhalla, V.K. – Financial Markets and Institutions – S. Chand & Co
13. Hampton, John – Financial Decision Making: Concepts, Problems and Cases – Prentice Hall of India
14. M.Y. Khan – Indian Financial System – McGraw Hill Education

## **2.6 PRODUCTION AND OPERATIONS MANAGEMENT**

**COURSE DURATION: 60 HOURS**

**NO OF CREDITS: 4**

### **COURSE OBJECTIVE**

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.

### **COURSE 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 FACILITY MANAGEMENT (08 Hours)**

Production Systems: Functions of production and material management; types of production systems.

Forecasting & Facility Planning: Basic forecasting methods; facility location and types of layouts.

Quality & Lean Tools: Six Sigma, Lean operations, 7 wastes (Muda), JIT, and KANBAN.

Productivity & Materials Management: Productivity types; purchasing process; vendor selection and ethics.

Inventory & Maintenance: Inventory methods (ABC, VED, FSN, EOQ); safety stock, reorder point; types of maintenance (TPM, breakdown, continuous).

#### **MODULE 2: INTRODUCTION TO LINEAR PROGRAMMING TECHNIQUES**

**(12 Hours)**

Fundamentals of decision-making using Operations Research (OR), Scientific methods and

modeling in OR, Applications of OR in business and management, Linear Programming:

Formulation of LPP, Duality of LLP, Graphical and Simplex methods, Maximization and

Minimization problems and Degeneracy in LPP

#### **MODULE 3: TRANSPORTATION MODELS**

**(10 Hours)**

Structure and formulation of transportation problems, Methods to find initial solutions: Northwest Corner, Least Cost, Vogel's Approximation Method (VAM), Optimality test: MODI method. Variations: Balanced vs. Unbalanced, Maximization, Degeneracy

**MODULE 4: ASSIGNMENT PROBLEMS** **(10 Hours)**

Assignment Problems: Mathematical formulation, Hungarian method for solution, Balanced and unbalanced cases and Travelling Salesman Problem (TSP)

Sequencing Problems: n Jobs through 2 Machines and n Jobs through n Machines

**MODULE 5: NETWORK ANALYSIS** **(10 Hours)**

Project management techniques: Network diagrams, CPM: Critical Path, Floats. PERT: Probabilistic time estimates and Project Crashing

Replacement Models: Replacement for deteriorating items and Replacement of items that fail suddenly

**MODULE 6: PRACTICAL APPLICATIONS IN PRODUCTION AND OPERATIONS**

**RESEARCH** **(10 Hours)**

Provide hands-on practice with production layouts, inventory control (ABC, EOQ), and forecasting using Excel.

Students will solve linear programming, transportation, and assignment problems using Solver and TORA.

PERT/CPM network diagrams and project crashing techniques will be practiced through real-life scenarios.

A group mini-project will integrate all concepts, focusing on process optimization or machine replacement decisions.

Assessment includes exercises, project work, and a practical viva for skill demonstration.

**PEDAGOGY**

Lectures and interactive problem-solving sessions

Case studies linking OR techniques with real business scenarios

Hands-on training with Excel Solver, TORA and other tools

Practical assignments and mini-projects for applied learning

Guest lectures from industry experts in operations and supply chain

## **REFERENCES**

1. Hamdy A. Taha – Operations Research: An Introduction (Pearson)
2. Hillier, Lieberman, Nag & Basu – Introduction to Operations Research (McGraw Hill India)
3. Ravindran, Phillips & Solberg – Operations Research: Principles & Practice (Wiley India)
4. J.K. Sharma – Operations Research: Theory and Applications (Macmillan India)
5. H.M. Wagner – Principles of Operations Research with Application to Managerial Decisions (PHI)
6. V.K. Kapoor – Operations Research: Techniques for Management (Sultan Chand & Sons)
7. Srinivas Reddy – Operations Research (Cengage Learning)
8. Gupta & Hira – Operations Research (S. Chand & Co.)
9. Hiller & Lieberman – Introduction to Operations Research: Concepts & Cases (Tata McGraw Hill)
10. Chawla – Operations Research (Kalyani Publishers)

Mahadevan B. – Production and Operations Management (Pearson Education)

## **2.7 FINTECH MANAGEMENT**

**COURSE DURATION: 30 HOURS**

**NO OF CREDITS: 2**

### **COURSE OBJECTIVES**

1. Understand the evolution, ecosystem, and key innovations in Fintech at both Indian and global levels.
2. Analyze the structure and functioning of digital payment systems and credit evaluation models, including the role of credit bureaus.
3. Evaluate regulatory frameworks, technological developments, and practical applications of Fintech in finance, lending, and investment domains.

### **COURSE OUTCOMES**

1. Explain key Fintech concepts and the roles of various stakeholders including regulators, startups, and technology firms.
2. Apply digital finance tools, credit scoring techniques, and regulatory standards to assess borrower profiles and app-based financial solutions.
3. Demonstrate hands-on competency in Fintech tools and simulate financial decisions using real-world credit and payment data.

#### **MODULE 1: INTRODICTION TO FINTECH**

**(4 Hours)**

Definition, evolution, and importance of Fintech, Fintech ecosystem in India and globally, Key stakeholders: Start-ups, banks, regulators, technology firms, Emerging trends in Fintech and Global and Indian Fintech innovation hubs

#### **MODULE 2: DIGITAL PAYMENT**

**(5 Hours)**

Overview and structure of digital payments in India, UPI, IMPS, NEFT, RTGS – architecture and functioning, Mobile wallets and payment applications: Paytm, PhonePe, Google Pay, Point-of-Sale (POS) systems, QR Code-based payments, Cross-border payment systems and the role of blockchain technology

**MODULE 3: DIGITAL FINANCE AND ALTERNATIVE FINANCE****(4 Hours)**

Digital lending and borrowing ecosystems, Peer-to-Peer (P2P) lending platforms – models and risks, Crowdfunding: types, regulations, and SEBI guidelines, Robo-advisory platforms and WealthTech and Digital insurance products and InsurTech evolution in India

**MODULE 4: TECHNOLOGY - ENABLED CREDIT SCORING****(5 Hours)**

Traditional vs. alternative credit scoring methods, Credit bureaus in India: **TransUnion CIBIL**, **Equifax**, **Experian** and **CRIF High Mark**, Credit report structure, score calculation, and key influencing factors, RBI guidelines on Credit Information Companies (CICs), Use of AI/ML and alternative data in credit scoring

**MODULE 5: FINTECH REGULATIONS****(4 Hours)**

Role of RBI, SEBI, and IRDAI in regulating Fintech, Regulatory framework for: NBFCs, P2P platforms, Payment banks; Key compliance areas: KYC, AML, data privacy and cybersecurity. Recent developments: Account Aggregator framework, Digital Personal Data Protection Act

**MODULE 6: PRACTICAL APPLICATIONS IN FINTECH****(8 Hours)****Hands-on Fintech Applications**

App demonstrations: UPI, mobile wallets, robo-advisory tools

Blockchain platform: Impact of Blockchain across industries.

**Credit Score Simulation Analysis**

Use of mock credit reports from CIBIL, Equifax, Experian, and CRIF

Analysis of borrower profiles for lending decisions

Strategies for credit score improvement and credit repair

Ethics and privacy concerns in credit data usage

**PEDAGOGY**

1. Interactive lectures and concept-based learning
2. Case studies from real-life Fintech applications
3. Hands-on demonstrations of Fintech apps and simulations

4. Industry expert talks and regulatory review sessions
5. Credit score simulations and practical assessments

## REFERENCES

1. Chishti, S., & Barberis, J. (2016). *The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*. Wiley.
2. Gupta, P. (2018). *Fintech: The New DNA of Financial Services*. SAGE Publications.
3. Reserve Bank of India. Publications and Circulars. <https://rbi.org.in>
4. TransUnion CIBIL. <https://www.cibil.com>
5. Equifax India. <https://www.equifax.co.in>
6. Experian India. <https://www.experian.in>
7. CRIF High Mark. <https://www.crifhighmark.com>
8. NPCI. (n.d.). Reports and Insights. <https://www.npci.org.in>
9. NITI Aayog. (n.d.). Reports on Digital Finance and Fintech. <https://niti.gov.in>
10. PwC. (2020). Fintech Trends Report. <https://www.pwc.in>
11. Rubini, A. (2017). *Fintech in a Flash: Financial Technology Made Easy*. CreateSpace Independent Publishing Platform.
12. Hill, J. (2018). *Fintech and the Remaking of Financial Institutions*. Elsevier.
13. Nicoletti, B. (2017). *The Rise of FinTech: A Global Overview of FinTech in Banking and Financial Services*. Palgrave Macmillan.
14. Vinay, S., & Sajna, P. M. (2025). Deciphering the dominance: Exploring supremacy of CIBIL score over other credit scores. *International Journal of Research in Finance and Management*, 8(1), 700–706. <https://doi.org/10.33545/26175754.2025.v8.i1g.496>