Nirmala Memorial Foundation College of Commerce and Science

(Autonomous)

Re-accredited by NAAC with B++, ISO 9001-2015 Certified, Recognised under section 2(f) & 12(B) of the UGC Act 1956

Permanently Affiliated to the University of Mumbai,

Syllabus

Bachelor of Commerce (Management Studies)

Specialization- Finance

(B.COM. MS)

(Programme Code: UGMS03)

As Per New Education Policy (NEP) 2020

(To be implemented from the Academic Year 2026-2027)

Approved in the Academic Council Meeting held on 7th October, 2025

INTRODUCTION OF THE PROGRAMME

Introduction

Management is not only essential in all domains, but it is also a common technique used by governments and corporations. The most important aspects of daily living are all managerial components, from budgeting to reporting, from planning to managing. The students must thus be knowledgeable about every facet, from developing artificial intelligence to rural development. The development of India, one of the world's five most powerful economies, would be clear to them. It is anticipated that the students would get knowledge of these managerial aspects and understand how to build our economy and management for the next generation.

Aims and Objectives

1. To introduce the students to the foundations of idea testing in management studies.
2. To introduce the students to the areas of specialty in management studies using a learner- centric approach.
3. To provide students the tools they need to comprehend the global views of economic management through a bottom-up strategy.
4. To increase students' employability by investigating the several facets of management courses.

PROGRAM OUTCOME

PO1: Foundational Management Knowledge

Demonstrate a comprehensive understanding of principles and practices in marketing, finance, human resources, operations, and general management.

PO2: Problem Solving and Decision-Making

Apply analytical tools and critical thinking to identify, evaluate, and solve business problems.

PO3: Communication and Interpersonal Skills

Communicate effectively in business contexts using verbal, non-verbal, and digital platforms; collaborate efficiently in teams.

PO4: Ethical and Sustainable Practices

Recognize and apply ethical standards, corporate governance, and sustainability principles in business decisions.

PO5: Digital Literacy and Technological Application

Use modern digital tools and information technologies relevant to business functions and decision-making.

PO6: Entrepreneurial and Leadership Abilities

Exhibit innovation, initiative, and leadership to manage and develop business ventures or contribute to organizational growth.

PO7: Lifelong Learning and Industry Readiness

Engage in continuous learning to adapt to changing business environments and emerging industry trends.

PROGRAM SPECIFIC OUTCOME

PSO1: Marketing Competence

Develop marketing strategies using consumer insights, digital tools, and branding techniques to drive customer engagement and market competitiveness.

PSO2: Financial Proficiency

Analyze and interpret financial data, manage budgets and investments, and apply financial regulations to ensure organizational financial health.

PSO3: HRM Expertise

Plan and execute effective HR strategies related to recruitment, performance management, talent development, and employee engagement.

PSO4: Integrated Business Understanding

Synthesize concepts from marketing, finance, and HR to formulate holistic business strategies.

PSO5: Applied Technology and Innovation

Utilize software and data analytics for marketing automation, financial forecasting, and human resource planning.

SEMESTER V
COURSE STRUCTURE

VERTICAL		COURSE CODE	SUBJECT	CREDITS
Vertical 1	**Major**	NUMS501	Strategic Cost Management	**4**
		NUMS502	Investment Analysis Portfolio Management	**4**
		NUMS503	Financial Inclusion and Microfinance in Indian Context	**2**
		NUMS504	Taxation -I (Direct Tax) **(Major Elective)**	**4**
Vertical 2 (Any one based on major)	**Minor**	NUMS516	Operations Management - Logistics and Supply Chain Management	**4**
Vertical 3	**Open Elective**		**********	**
Vertical 4 (Any one based on major)	**VSC/ SEC**	NUMS505	Risk Management **(VSC)**	**2**
Vertical 5	**AEC**		*******	**
Vertical 6	**CEP / OJT**	NUCP501	CEP	**2**
Vertical 6	**CC**		*******	**
			TOTAL	**22**

SEMESTER VI
COURSE STRUCTURE

VERTICAL		COURSE CODE	SUBJECT	CREDITS
Vertical 1	**Major**		Strategic Financial Management	**4**
			International Finance	**4**
			Project Management	**2**
			Taxation - II (Indirect Tax) **(Major Elective)**	**4**
Vertical 2 (Any one based on major)	**Minor**		Operations Management - Operations Research	**4**
Vertical 3	**Open Elective**		**********	**
Vertical 4 (Any one based on major)	**VSC/ SEC**		**********	**
Vertical 5	**AEC**		********	**
Vertical 6	**CEP / OJT**		OJT	**4**
Vertical 6	**CC**		********	**
			TOTAL	**22**

Semester V


VERTICAL-1

Name of the Course: STRATEGIC COST MANAGEMENT

Sr. No.	Heading	Particulars
1	**Description the course:**	**Introduction:** This course introduces the philosophy, concepts, and practices of Strategic Cost Management (SCM). It builds upon traditional cost accounting and management accounting techniques, extending them into the strategic domain to support decision-making, control, and long-term competitiveness. **Relevance:** In today's business environment, cost is not merely an accounting number but a strategic tool. SCM enables organizations to achieve cost leadership, improve efficiency, and create value. **Usefulness:** Students gain insights into cost strategies, performance improvement, and advanced methods such as ABC, Kaizen, Life Cycle Costing, and Responsibility Accounting. **Application:** Concepts apply to manufacturing, services, consulting, and global businesses. **Interest:** Ideal for students aiming for finance, consulting, or strategy careers. **Connection with Other Courses:** Links with Financial Management, Business Strategy, and Operations. **Demand in the Industry:** Organizations seek professionals with cost and strategic vision. **Job Prospects:** Cost & Management Accountant, Business Analyst, Strategic Consultant, Performance Auditor.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**

	Marks Allotted:	**100 marks**
7	**Course Objectives:** ● To develop analytical and evaluative skills in cost and management accounting. • To understand the philosophy of SCM and its role in decision-making. • To train students in advanced costing methods (ABC, Kaizen, Life Cycle Costing, Transfer Pricing). • To evaluate performance through cost-benefit analysis, audits, and responsibility accounting. • To prepare students for professional careers in finance, strategy, and consultancy.	
8	**Course Outcomes (CO):** ● **CO1:** Define and recall SCM concepts and techniques. **CO2:** Explain philosophy, elements, and influences of SCM. **CO3:** Apply advanced costing methods for decision-making. **CO4:** Analyze cost information using variance analysis & responsibility accounting. **CO5:** Evaluate strategies for restructuring, sustainability, and competitiveness.	
9	**Modules:-** **Module 1 (20 Hours): Introduction to SCM (Theory)** 1. - Concept, Philosophy, Objectives, Environmental influences - Value Analysis, TQM, TPM, BPR, Energy Audits, Cost Reduction, Life Cycle Costing **Module 2 (20 Hours): Activity-Based Costing & Strategic Applications** 1. - ABC, ABM, ABB, Kaizen, Back Flush, Life Cycle Costing - Transfer Pricing, Divisional Performance, Marginal Costing (Practical Problems)	
	Module 3 (8 Hours): SCM Performance Assessment (Theory) - Cost Audit, Management Audit, Restructuring Analysis, Six Sigma, Learning Curve	
	Module 4 (12 Hours): Variance Analysis & Responsibility Accounting (Practical) ● - Standard Costing Variances (Material, Labour, Overhead, Sales, Profit) - Responsibility Accounting: Types, Profit & Investment Centres	
10	**Text Books** 1. Sheth Publication 2. Vipul Publications	
11	**Reference Books:** ● **M.N. Arora** – *Cost and Management Accounting*, Vikas Publishing House. ● **S.P. Jain & K.L. Narang** – *Advanced Cost Accounting*, Kalyani Publishers. ● **Ravi M. Kishore** – *Strategic Cost Management*, Taxmann Publications. ● **N.K. Prasad** – *Principles and Practices of Cost Accounting*, Book Syndicate Pvt. Ltd. ● **M. Hanif** – *Modern Cost and Management Accounting*, McGraw Hill Education.	

12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:40 marks** Class test of 20 marks Assignments/Certificate Course: 10 marks Class participant: 10 marks Total: 40 marks	**Format of Question Paper: External Examination (60 Marks)– 2 hr duration**
14	**Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)**	

Question no.	Particulars	Marks
Q1	Objectives (MCQs/True or False)	15
Q2	Practical question	15
Q3	Practical question	15
Q4	Practical question OR Short notes	15
	Total	**60**

Name of the Course: Investment Analysis and Portfolio Management

Sr. No.	Heading	Particulars
1	**Description the course:**	This course provides a comprehensive understanding of the investment environment, capital markets, and portfolio management practices. It introduces students to different investment avenues, risk-return dynamics, portfolio theories, and security analysis techniques. Emphasis is placed on both fundamental and technical analysis, capital market mechanisms in India, and modern tools for risk assessment. Students will also explore behavioral finance, regulatory aspects, and contemporary investment strategies that help in making informed financial decisions in a dynamic global market.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 Marks**
7	**Course Objectives:** 1. Understand the fundamentals of the investment environment, including investment processes, avenues, and investor behavior. 2. Analyze the structure, functioning, and regulation of Indian capital markets. 3. Evaluate different types of risk and apply quantitative methods for risk-return analysis. 4. Develop skills in portfolio construction, security analysis, and performance measurement using theoretical and practical approaches.	
8	**Course Outcomes (CO):** After completion of the course, learners would be able to: **CO1:** Differentiate between investment, speculation, and gambling, and select appropriate investment avenues. **CO2:** Apply knowledge of capital market instruments, indices, and regulatory mechanisms in making investment decisions. **CO3:** Use statistical tools such as Beta, Variance, and Standard Deviation to measure and	

	manage investment risk. **CO4:** Construct and evaluate investment portfolios using fundamental, technical, and modern portfolio theories.
9	**Modules:-** **Module 1 (15 hours): Introduction to Investment Environment**
	Introduction, Investment Process, Criteria for Investment, Types of Investors, Investment vs. Speculation vs. Gambling, Investment Avenues (including Emerging Avenues: REITs, ETFs, Sovereign Gold Bonds), Factors Influencing Selection of Investment Alternatives and Impact of Behavioral Finance on Investment Decisions.
	Module 2 (15 hours): Capital Market in India
	Introduction, Concepts of Investment Banks, Role and Functions, Stock Market Index (BSE Sensex, NSE Nifty, International Indices), The NASDAQ, SDL, NSDL, Benefits of Depository Settlement, Online Share Trading and its Advantages, Concepts of Small-cap, Large-cap, Midcap, and Penny Stocks, Risk - Return Relationship **Risk and Return Analysis** - Meaning, Types of Risk – Systematic and Unsystematic Risk, Measurement of Beta, Standard Deviation, Variance, Reduction of Risk through Diversification, Practical Problems on Calculation of Standard Deviation, Variance, and Beta
	Module 3 (15 hours): Portfolio Management and Security Analysis
	Portfolio Management - Meaning and Concept, Portfolio Management Process, Objectives,
	Basic Principles, Factors Affecting Investment Decisions in Portfolio Management, Portfolio Strategy Mix (Active, Passive, and Hybrid Strategies) **Security Analysis** - Fundamental Analysis: Economic, Industry, and Company Analysis, Technical Analysis: Basic Principles, Uses of Charts (Line, Bar, Candlestick), Mathematical Indicators: Moving Averages, Oscillators, Theories, Capital Asset Pricing Model, and Portfolio Performance Measurement, Introduction to Modern Portfolio Theory (MPT) and Arbitrage Pricing Theory (APT)
	Module 4 (15 hours): Theories and Portfolio Evaluation
	Theories - Dow Jones Theory, Elliott Wave Theory, Efficient Market Hypothesis (EMH), Random Walk Theory, Capital Asset Pricing Model (CAPM), Assumptions of CAPM, CAPM Equation, Capital Market Line, Security Market Line **Portfolio Performance Measurement** - Meaning of Portfolio Evaluation, Sharpe's Ratio (Basic Problems), Treynor's Ratio (Basic Problems), Jensen's Differential Returns (Basic Problems)
10	**Text Books** IAPM – Vipul publication IAPM – Rishabh publication
11	**Reference Books** 1. Sharpe, William F., Alexander, Gordon J., & Bailey, Jeffery V. – Investments (McGraw-Hill). 2. Bodie, Zvi, Kane, Alex, & Marcus, Alan J. – Investments (McGraw-Hill). 3. Prasanna Chandra – Investment Analysis and Portfolio Management (Tata

<table>
<tr><td></td><td>McGraw-Hill).
4. Kevin, S. – Security Analysis and Portfolio Management (PHI Learning).
5. Frank K. Reilly & Keith C. Brown – Investment Analysis and Portfolio Management (Cengage).
6. Graham, Benjamin – The Intelligent Investor (Harper Business).
7. Elton, Edwin J., Gruber, Martin J., Brown, Stephen J., & Goetzmann, William N. – Modern Portfolio Theory and Investment Analysis (Wiley).
8. Pandian, Punithavathy – Security Analysis and Portfolio Management (Vikas Publishing).</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>Semester End Examination: 60%</td></tr>
<tr><td>13</td><td>Continuous Evaluation through:
<table>
<tr><th>Sr. No</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>1.</td><td>Class test</td><td>20</td></tr>
<tr><td>2.</td><td>Assignment/ Certificate course</td><td>10</td></tr>
<tr><td>3.</td><td>Class Participation</td><td>10</td></tr>
<tr><td></td><td>Total</td><td>40</td></tr>
</table></td><td>Format of Question Paper: External Examination (60 Marks)– 2 hr duration</td></tr>
<tr><td>14</td><td colspan="2">Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)
Note: 1. All questions are compulsory
2. Figures to the right indicate full marks.
<table>
<tr><th>Question no.</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>Q1</td><td>Objectives (MCQs/True or False)</td><td>15</td></tr>
<tr><td>Q2</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q3</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q4</td><td>Practical question
OR
Short notes</td><td>15</td></tr>
<tr><td></td><td>Total</td><td>60</td></tr>
</table></td></tr>
</table>

Name of the Course: Financial Inclusion and Microfinance in Indian Context

Sr. No.	Heading	Particulars
1	**Description the course:**	The *Financial Inclusion and Microfinance in Indian Context* course introduces learners to the concept, scope, and significance of financial inclusion in India, focusing on rural credit systems, community-based finance, and inclusive

		economic development. It covers the structure of rural financial markets, formal and informal sources of finance, and the role of institutions such as cooperative banks and regional rural banks. The course emphasizes Self-Help Groups (SHGs), cooperative movements, and Gandhian economic principles in promoting decentralized and inclusive finance. Learners will also study microfinance concepts, models, and the functioning of Microfinance Institutions (MFIs), along with case studies of successful Indian MFIs.
2	**Vertical:**	**Major**
3	**Type:**	**Theory**
4	**Credits:**	**2 credits**
5	**Hours Allotted:**	**30 Hours**
6	**Marks Allotted:**	**50 marks**
7	**Course Objective**s: PO1- To develop an understanding of financial inclusion and its role in economic development PO2- To analyze rural credit systems and community-based financial models in India PO3- To examine the structure and performance of microfinance institutions PO4- To evaluate government initiatives and digital innovations in inclusive finance PO5- To enable learners to apply financial inclusion principles in real-world scenarios	
8	**Course Outcomes (CO):** ● **CO1** – Understand and explain the concept, importance, and pillars of financial inclusion in India ● **CO2** – Analyze rural credit systems, SHGs, cooperative movements, and community-based finance models ● **CO3** – Evaluate the role, structure, and performance of microfinance institutions in India ● **CO4** – Assess challenges, government initiatives, and technological developments in financial inclusion	
9	**Modules-1** **Foundations of Financial Inclusion and Community-Based Finance**	
	1.1 Concept of Financial Inclusion Meaning, importance, and scope Objectives and pillars of financial inclusion in India Role of financial literacy and digital inclusion 1.2 Rural Credit Systems in India Structure of rural financial markets Formal vs informal sources of finance Role of cooperative banks, regional rural banks, and moneylenders Challenges in rural credit delivery 1.3 Self-Help Groups (SHGs) and Cooperative Movements Concept, formation, and functioning of SHGs SHG–Bank linkage programme Role of NGOs and government in promoting SHGs Cooperative movement in India: principles and significance 1.4 Gandhian Economic Model and Inclusive Finance Trusteeship concept of Mahatma Gandhi Village self-reliance and decentralized economy Relevance of Gandhian philosophy in modern financial inclusion	

	Module II: Microfinance Institutions and Contemporary Developments	
	2.1 Microfinance: Concept and Models Meaning, features, and objectives of microfinance Microcredit vs microfinance Models: SHG model, Grameen model, Joint Liability Groups (JLGs) 2.2 Microfinance Institutions (MFIs) in India Structure and types of MFIs Regulatory framework (Role of RBI, NABARD) Functions and performance of MFIs 2.3 Case Studies of Indian Microfinance Institutions SEWA SKS Microfinance (now Bharat Financial Inclusion Ltd.) Bandhan Bank Lessons from success stories and challenges 2.4 Issues, Challenges, and Future of Financial Inclusion Over-indebtedness and ethical concerns Financial exclusion and regional disparities Role of fintech and digital payments Government initiatives (PMJDY, MUDRA, DBT)	
10	**Text Books** Financial Inclusion & Microfinance – Indian Institute of Banking & Finance (IIBF) Microfinance in India – Himalaya Publishing House	
11	**Reference Books:** ● Muhammad Yunus – *Banker to the Poor* ● Vasant Desai – *Rural Development in India* ● NABARD Reports on Financial Inclusion ● RBI Publications on Financial Inclusion and Microfinance ● Karmakar, K.G. – *Microfinance in India*	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** Class test of 10 marks Assignments: 10 marks Total: 20 marks	**Format of Question Paper: External Examination (30 Marks)– 1 hr duration**
14	**Format of Question Paper: (Semester End Examination: 30 Marks. Duration:1 hour)** **PAPER PATTERN (EXTERNAL) -THEORY SUBJECTS** Marks-30 Time-1 Hour Note: 1. All questions are compulsory	

2. Figures to the right indicate full marks.

Question no.	Particulars	Marks
Q1 (A) (B)	Case study Objectives (MCQs)	05 05
Q2	A	10
	O **R** B	
Q3	A	10
	O **R** B	
	Total	**30**

PAPER PATTERN (INTERNAL) -THEORY SUBJECTS

Marks-20

Particulars	Marks
Class test	10
Assignment	10
Total	**20**

Name of the Course: Taxation-I (Direct Tax)

Sr. No.	Heading	Particulars
1	**Description the course:**	**Introduction**: This course provides students with a comprehensive understanding of the principles, concepts, and provisions of the Indian Income-tax Act relating to individuals. It covers the fundamental definitions, determination of residential status, computation of total income under different heads, permissible deductions, exemptions, and the procedure for calculating tax liability. The course emphasizes both theoretical aspects and practical computations to enable learners to apply tax laws in real-life scenarios.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 marks**
7	**Course Objectives:** PO1: Knowledge of Business and Commerce – Acquire conceptual and practical knowledge of direct taxation relevant for individuals. PO2: Critical Thinking & Problem Solving – Develop analytical ability to interpret tax provisions and solve numerical problems relating to taxable income. PO3: Legal and Ethical Awareness – Understand the significance of tax compliance, ethical reporting, and avoidance of tax evasion. PO4: Application of Theory to Practice – Apply taxation concepts to compute income and tax liability in practical business and personal scenarios. PO5: Employability Skills – Equip learners with taxation knowledge useful for careers in accounting, taxation, and financial consultancy. PO6: Lifelong Learning – Foster the ability to adapt to changes in tax laws and regulations for continuous professional development.	

8	**Course Outcomes (CO):** CO1: Define and explain key terms, concepts, and provisions under the Income-tax Act, 1961. CO2: Determine the residential status of an assessee and apply provisions to ascertain the scope of total income. CO3: Compute taxable income under various heads – Salary, House Property, Profits & Gains of Business or Profession, Capital Gains, and Other Sources. CO4: Identify and apply relevant exemptions (S.10) and deductions (Chapter VI-A) available to individuals. CO5: Prepare a comprehensive statement of total income and compute the tax liability of individuals accurately. CO6: Analyze practical cases and apply statutory provisions for tax planning and compliance.
9	**Modules**
	Module 1:Definitions and Residential Status (10 Hrs) Basic Terms (S. 2,3,4) Assessee, Assessment, Assessment Year, Annual Value, Business, Capital Assets, Income, Previous Year, Person, Transfer. Determination of Residential Status of Individual, Scope of Total Income (S.5)

	Module 2:Heads of Income -I (20 Hrs) Salary (S.15-17) Income from House Property (S. 22-27) Profit & Gain from Business and Profession(S. 28, 30,31,32, 35, 35D,36,37, 40, 40A and 43B)
	Module 3: Heads of Income - Il. (10 Hrs) Capital Gain (S. 45, 48, 49, 50 and 54) Income from other sources (S.56- 59) Exclusions from Total Income (S.10) (Exclusions related to specified heads to be covered with relevant heads of income)
	Module 4: Deductions under Chapter VI A (10 Hrs) Deductions from Total Income S. 80C, 80CCC, 80D, 80DD, 80E, 80U, 80TTA Computation of Taxable Income of Individuals.
	Module 5: Computation of Total Income and Taxable Income of Individuals (10 hrs)
10	**Textbook**

	Manan Prakashan Sheth Publications	
11	**Reference Book** 1. Singhania, V. K. & Monica Singhania – Students' Guide to Income Tax (University Edition), Taxmann Publications. 2. Mehrotra, H.C. & Goyal, S.P. – Income Tax Law and Accounts, Sahitya Bhawan Publications. 3. Ahuja, Girish & Gupta, Ravi – Systematic Approach to Income Tax, Bharat Law House. 4. Girish Ahuja & Dr. Ravi Gupta – Direct Taxes Law and Practice, Bharat Law House. 5. Dr. Vinod K. Singhania – Direct Taxes Law & Practice, Taxmann Publications. 6. Gaur & Narang – Income Tax Law and Practice, Kalyani Publishers. 7. Income-tax Act, 1961 (Bare Act with Rules) – Government of India Publication.	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** Class test of 20 marks Assignments: 10 marks Class participation: 10 marks Total: 40 marks	**Format of Question Paper: External Examination (60 Marks)– 2 hr duration**

14	**Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)**

Question no.	Particulars	Marks
Q1	Objectives (MCQs/True or False)	15
Q2	Practical question	15
Q3	Practical question	15
Q4	Practical question OR Short notes	15
	Total	**60**

VERTICAL-2



Name of the Course: Logistics & Supply Chain Management

Sr. No.	Heading	Particulars
1	**Description the course:**	The *Logistics & Supply Chain Management* course provides students with a comprehensive understanding of logistics concepts, supply chain structures, and their integration in

		business operations. It covers logistics activities such as transportation, warehousing, inventory management, and packaging, along with supply chain functions and systems. The course also focuses on demand forecasting, performance measurement, and logistics costing. Emphasis is given to modern developments including information technology in logistics, global supply chain trends, and sustainable logistics practices such as green supply chains and environmental impact management..
2	**Vertical:**	**Major**
3	**Type:**	**Theory**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 Marks**
7	· To provide students with basic understanding of logistics and supply chain management concepts. · To introduce key activities performed in logistics functions. · To develop understanding of supply chain structure, functions, and systems. · To analyze global trends and developments in logistics and supply chain management.	
8	**Course Outcomes (CO):** After completion of the course, learners would be able to: **CO1:** Upon completion, students will be able to explain the fundamental concepts of logistics and supply chain management. **CO2:** Upon completion, students will be able to identify and describe the key activities of the logistics function. **CO3:** Upon completion, students will be able to analyze the nature, functions, and systems of a supply chain. **CO4:** Upon completion, students will be able to evaluate and discuss current global treands in logistics and supply chain management.	
9	**Modules:-** **Module 1 (15 hours): Overview of Logistics and Supply Chain Management**	
	a) Introduction to Logistics Management • Meaning, Basic Concepts of Logistics- Logistical Performance Cycle, Inbound Logistics, Inprocess Logistics, Outbound Logistics, Logistical Competency, Integrated Logistics , Reverse Logistics and Green Logistics • Objectives of Logistics, Importance of Logistics, Scope of Logistics, Logistical Functions/Logistic Mix, Changing Logistics Environment **b) Introduction to Supply Chain Management** Meaning, Objectives, Functions, Participants of Supply Chain, Role of Logistics in Supply	

	Chain, Comparison between Logistics and Supply Chain Management, Channel Management and Channel Integration **c) Customer Service: Key Element of Logistics** Meaning of Customer Service, Objectives, Elements, Levels of customer service, Rights of Customers **d) Demand Forecasting** Meaning, Objectives ,Approaches to Forecasting, Forecasting Methods, Forecasting Techniques, (Numerical on Simple Moving Average, Weighted Moving Average)
	Module 2 (15 hours): Elements of Logistics Mix
	a) Transportation Introduction, Principles and Participants in Transportation, Transport Functionality, Factors Influencing Transportation Decisions, Modes of Transportation- Railways, Roadways, Airways, Waterways, Ropeways, Pipeline, Transportation Infrastructure, Intermodal Transportation **b) Warehousing** Introduction, Warehouse Functionality, Benefits of Warehousing, Warehouse Operating Principles, Types of Warehouses, Warehousing Strategies, Factors affecting Warehousing **c) Materials Handling** Meaning, Objectives, Principles of Materials Handling, Systems of Materials Handling, Equipments used for Materials Handling, Factors affecting Materials Handling Equipments **d) Packaging** Introduction, Objectives of Packaging, Functions/Benefits of Packaging, Design Considerations in Packaging, Types of Packaging Material, Packaging Costs
	Module 3 (15 hours): Inventory Management, Logistics Costing, Performance Management and Logistical Network Analysis
	a) Inventory Management Meaning, Objectives, Functions, Importance, Techniques of Inventory Management (Numericals - EOQ and Reorder levels) **b) Logistics Costing** Meaning, Total Cost Approach, Activity Based Costing, Mission Based Costing **c) Performance Measurement in Supply Chain** Meaning, Objectives of Performance Measurement, Types of Performance Measurement, Dimensions of Performance Measurement, Characteristics of Ideal Measurement System **d) Logistical Network Analysis** Meaning, Objectives, Importance, Scope, RORO/LASH
	Module 4 (15 hours): Recent Trends in Logistics and Supply Chain Management
	a) Information Technology in Logistics Introduction, Objectives, Role of Information Technology in Logistics and Supply Chain Management, Logistical Information System, Principles of Logistical Information System, Types of Logistical Information System, Logistical Information Functionality, Information Technology Infrastructure **b) Modern Logistics Infrastructure**

<table>
<tr><td></td><td>Golden Quadrilateral, Logistics Parks, Deep Water Ports, Dedicated Freight Corridor, Inland Container Depots/Container Freight Stations, Maritime Logistics, Double Stack Containers/Unit Trains
c) Logistics Global Environment
Managing the Global Supply Chain, Impact of Globalization on Logistics and Supply Chain Management, Global Logistics Trends, Global Issues and Challenges in Logistics and Supply Chain Management
d) Sustainable Logistics and Green-Supply Chains
Meaning and importance of sustainable logistics. Environmental impact of logistics (e.g. carbon emissions, waste management)
Strategies for “green” supply chain management (e.g. eco-friendly transportation, reverse logistics. Circular economy concepts and their application in logistics.</td></tr>
<tr><td>10</td><td>Text Books
Vipul’s Logistics & Supply Chain Management
Logistics and Supply Chain Management – Nirali Prakashan</td></tr>
<tr><td>11</td><td>Reference Books
1. Logistics and Supply Chain Management – Martin Christopher
A widely used textbook that explains logistics concepts with a strong focus on integration and real-world applications.
2. Supply Chain Management: Strategy, Planning and Operation – Sunil Chopra & Peter Meindl
Considered one of the most recommended academic books for understanding supply chain strategy and decision-making.
3. Designing and Managing the Supply Chain – David Simchi-Levi
Focuses on concepts, strategies, and case studies for effective supply chain design.
4. The Handbook of Logistics and Distribution Management – Alan Rushton
Provides a complete practical overview of logistics, distribution systems, and modern technologies.</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>Semester End Examination: 60%</td></tr>
<tr><td>13</td><td>Continuous Evaluation through:
<table>
<tr><th>Particulars</th><th>Marks</th></tr>
<tr><td>Class test</td><td>20</td></tr>
<tr><td>Assignment / Presentation / Certificate Course</td><td>10</td></tr>
<tr><td>Class</td><td>10</td></tr>
</table></td><td>Format of Question Paper: External Examination (60 Marks)– 2 hr duration</td></tr>
</table>

participation		
Total	**40**	

14 **Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)**

1. All questions are compulsory
2. Figures to the right indicate full marks.

Question no.	**Particulars**	**Marks**
Q1	Objectives (MCQs/True or False/Match the column)	15
Q2	A B **OR** P Q	15
Q3	A B **OR** P Q	15
Q4	Case Study	15
	TOTAL	**60**

VERTICAL-4

Name of the Course: Risk Management

Sr. No.	Heading	Particulars
1	**Description the course:**	**Introduction** This elective provides a practical introduction to risk management. It focuses on identifying, measuring, and mitigating risks faced by businesses, individuals, and financial institutions. Emphasis is placed on **basic concepts, applied tools, and real-world examples**, making it suitable for students of all commerce and management streams. **Relevance** All organizations and individuals face various risks, including financial, operational, and strategic. Having a basic awareness of these risks aids in making informed personal and professional decisions. **Usefulness** The course enhances **decision-making and analytical ability** under conditions of uncertainty. It provides students with tools to assess, measure, and manage risks, which are critical skills in both business and personal finance. **Application** Risk management principles apply across **banking, insurance, investment management, corporate governance, fintech, and entrepreneurship**. Practical applications include evaluating investment portfolios, designing insurance products, conducting risk audits, and complying with regulatory requirements. **Interest** The course is intellectually stimulating as it combines theory with practical tools such as hypothesis testing, regression analysis, and use of software for data interpretation. It engages students by allowing them to investigate real-world accounting and business problems. **Connection with Other Courses** This course builds directly on concepts from **Financial Management, Investments, and Cost Accounting** by linking decision-making with uncertainty. It also complements courses like **Strategic Management, Corporate Finance, and Auditing**, thereby integrating finance, compliance, and governance perspectives.

		Demand in the Industry Risk management has become integral to **banking, insurance, fintech, consulting, and corporate governance**. With growing focus on **ESG reporting, cyber security, and regulatory compliance**, there is a rising demand for risk professionals across industries. **Job Prospects** Graduates can pursue careers as **risk analysts, insurance underwriters, compliance officers, treasury executives, credit risk managers, and ESG analysts**. Entry-level roles in **banks, NBFCs, insurance companies, Big 4 firms, and corporates** actively recruit for risk management profiles.
2	**Vertical:**	**Minor**
3	**Type:**	**Theory**
4	**Credits:**	**2 credits**
5	**Hours Allotted:**	**30 Hours**
6	**Marks Allotted:**	**50 marks**
7	**Course Objectives:** 1. To introduce the fundamental concepts of risk and uncertainty in business and personal contexts. 2. To develop analytical skills for identifying and assessing different types of risks. 3. To familiarize students with basic tools and techniques of risk measurement and mitigation. 4. To provide exposure to enterprise risk management frameworks and emerging risk domains. 5. To apply theoretical knowledge to practical case studies in banking, insurance, and corporate sectors.	
8	**Course Outcomes (CO):** After completing the course, students will be able to: **CO 1:** Understand the concepts of risk, uncertainty, and their role in decision-making. **CO 2:** Identify and categorise different types of risks affecting individuals and organisations. **CO 3:** Apply simple quantitative techniques for risk measurement. **CO 4:** Demonstrate knowledge of insurance as a risk mitigation tool and calculate basic premiums. **CO 5:** Evaluate contemporary risks like cyber, climate, and ESG through real-world case studies.	
9	**Modules:**	

	Module 1 (15 hours): Fundamentals of Risk Management and Risk Mitigation Tools
	Unit 1.1: Meaning of Risk and Uncertainty & Types of Risk Concept of risk, uncertainty, and exposure Difference between pure and speculative risk Sources of risk in business and personal life **Types of Risks:** Business risks: market, competition, regulatory Financial risks: credit risk, liquidity risk, interest rate risk, exchange rate risk Operational risks: system failures, frauds, human errors Strategic risks: reputation, leadership, mergers & acquisitions Personal risks: health, retirement, mortality **Unit 1.2: Risk–Return Trade-off** Concept and significance in investment and corporate finance Practical illustrations of high-risk vs. low-risk investments Relationship between expected returns, risk premiums, and uncertainty **Unit 1.3: The Risk Management Process** Stages: identification, analysis, evaluation, treatment, monitoring Tools for risk identification (risk registers, brainstorming, checklists) **Unit 1.4: Basic Risk Measurement (Introductory Level)** Probability and its application in risk assessment Standard deviation and variance as measures of risk **Unit 1.5: Risk Mitigation Techniques** Insurance as a transfer mechanism Diversification in investment and business models Internal controls and standard operating procedures (SOPs) **Module 2 (15 Hours): Contemporary and Regulatory Aspects of Risk Management** **Unit 2.1: Enterprise Risk Management (ERM)** Evolution of ERM and its importance Basic ERM framework (COSO, ISO 31000) Risk culture, risk appetite, and integration with corporate strategy **Unit 2.2: Emerging Risks** Cybersecurity risks: hacking, phishing, ransomware, data breaches Climate change risks: environmental hazards, carbon credit risks, sustainability issues ESG risks: environmental, social, and governance compliance, reputational impact
10	**Text Books** 1. **Gupta, P.K.** – Insurance and Risk Management (Himalaya Publishing House) 2. **Mishra, M.N. & Mishra, S.B.** – Insurance Principles and Practice (S. Chand & Co.) 3. **Ghosh, P.K. & Gupta, S.K.** – Risk Management and Insurance (Education Publishing House)
11	References: ● Crouhy, M., Galai, D., & Mark, R. – Risk Management (McGraw Hill) Covers fundamentals, measurement tools, and enterprise risk management. ● Hull, John C. – Risk Management and Financial Institutions (Wiley) Comprehensive text on ERM, financial risks, hedging, and regulatory aspects.

	● Rejda, George E. & McNamara, Michael J. – Principles of Risk Management and Insurance (Pearson) Excellent for insurance fundamentals, claim management, and premium calculations. ● Gupta, P.K. – Insurance and Risk Management (Himalaya Publishing House) Popular Indian text for insurance applications and practical case studies. ● Khan, M.Y. & Jain, P.K. – Financial Management: Text, Problems and Cases (McGraw Hill) Provides insights into the risk–return trade-off and financial decision-making. ● Jorion, Philippe – Value at Risk: The New Benchmark for Managing Financial Risk (McGraw Hill) Advanced but useful for understanding quantitative approaches in risk. ● Kapoor, N.D. – Elements of Mercantile Law (Sultan Chand & Sons) Helpful for legal aspects of insurance contracts and risk transfer mechanisms. ● Reports and Guidelines: ● IRDAI (Insurance Regulatory and Development Authority of India) Annual Reports ● RBI guidelines on Risk Management and Basel Framework ● SEBI regulations on ESG and risk disclosures
12	**Internal Continuous Assessment: 40%** | **Semester End Examination: 60%**

PAPER PATTERN (EXTERNAL) -THEORY SUBJECTS

Marks-30 Time-1 Hour

Note: 1. All questions are compulsory
2. Figures to the right indicate full marks.

Question no.	Particulars	Marks
Q1 (A) (B)	Case study Objectives (MCQs)	05 05
Q2	A **O** **R** B	10
Q3	A **O** **R** B	10
	Total	**30**

PAPER PATTERN (INTERNAL) -THEORY SUBJECTS

Marks-20

Particulars	Marks
Class test	10
Assignment	10
Total	**20**





Semester VI

VERTICAL-1

Name of the Course: STRATEGIC FINANCIAL MANAGEMENT

Sr. No.	Heading	Particulars
1	**Description the course:**	This course focuses on integrating financial decisions with business strategy to maximize shareholder value and ensure sustainable growth. It covers areas like investment decisions, risk management, capital structure, mergers & acquisitions, and global financial strategies. The course is highly relevant in today's competitive business environment, linking theory with practical applications through case studies and analysis. It connects with subjects like Corporate Finance, Accounting, Business Strategy, and International Finance. Graduates gain skills for careers in investment banking, consulting, corporate finance, portfolio management, and strategic planning, meeting strong industry demand for financial strategists and decision-makers.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 Marks**
7	**Course Objectives:** **1.** To develop an understanding of financial strategies that align with business objectives.	

	2. To equip students with tools for investment, financing, and dividend decisions. **3.** To analyze and manage financial risks in a dynamic business environment. **4.** To prepare students for strategic roles in financial planning and corporate decision-making.
8	**Course Outcomes (CO):** After completion of the course, learners would be able to: CO1: Students will be able to apply strategic financial concepts in real-world business scenarios. CO2: Students will gain skills to evaluate investment and financing alternatives effectively. CO3: Students will learn to design strategies for risk management and value creation. CO4Students will be prepared for careers in corporate finance, consulting, and financial strategy.
9	**Modules:-** **Module 1:** Dividend Decision and XBRL (15 Hours))
	(a) Dividend Decision : Meaning and Forms of Dividend, Dividend – Modigliani and Miller's Approach, Walter Model, Gordon Model, Factors Determining Dividend Policy, Types of Dividend Policy (b) XBRL : Introduction, Advantages and Disadvantages, Features and Users
	Module 2: Capital Budgeting and Capital Rationing (15 Hours)
	(a) Capital Budgeting : Risk and Uncertainty in Capital Budgeting, Risk Adjusted Cut-off Rate, Certainty Equivalent Method, Sensitivity Technique, Probability Technique, Standard Deviation Method, Co-efficient of Variation Method, Decision Tree Analysis, Construction of Decision Tree (b) Capital Rationing : Meaning, Advantages, Disadvantages, Practical Problems
	Module 3: Shareholder Value and Corporate Governance / Corporate Restructuring (15 Hours)
	(a) Shareholder Value and Corporate Governance : Financial Goals and Strategy, Shareholder Value Creation : EVA and MVA Approach, Theories of Corporate Governance, Practices of Corporate Governance in India (b) Corporate Restructuring : Meaning, Types, Limitations of Merger, Amalgamation, Acquisition, Takeover, Determination of Firm's Value, Effect of Merger on EPS and MPS, Pre-Merger and Post-Merger Impact.
	Module 4 : Financial Management in Banking Sector and Working Capital Financing (15 hours)
	(a) Financial Management in Banking Sector : An Introduction, Classification of Investments, NPA and Their Provisioning, Classes of Advances, Capital Adequacy Norms, Rebate on Bill Discounting, Treatment of Interest on Advances (b) Working Capital Financing : Maximum Permissible Bank Finance (Tandon Committee), Cost of Issuing Commercial Paper and Trade Credit, Matching Approach, Aggressive Approach, Conservative Approach
10	**Text Books** – Vipul publication

– Rishabh publication

_ Manan Publication

11 Reference Books

1. Introduction to Accountancy by T.S. Grewal, S. Chand and Company (P) Ltd., New Delhi
2. Advance Accounts by Shukla and Grewal, S. Chand and Company (P) Ltd., New Delhi
3. Advanced Accountancy by R.L Gupta and M. Radhaswamy, S. Chand and Company (P) Ltd.,New Delhi
4. Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill and Co. Ltd., Mumbai
5. Financial Accounting by LesileChandwichk, Pentice Hall of India Adin Bakley (P) Ltd., New Delhi
6. Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech. Publishing Co.Ltd., Mumbai

12 **Internal Continuous Assessment: 40%** | **Semester End Examination: 60%**

13 **Continuous Evaluation through:**

Sr. No	Particulars	Marks
1.	Class test	20
2.	Assignment	10
3.	Certificate course	10
	Total	40

Format of Question Paper: External Examination (60 Marks)– 2 hr duration

14 **Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)**

Note: 1. All questions are compulsory
2. Figures to the right indicate full marks.

Question no.	Particulars	Marks
Q1	Objectives (MCQs/True or False)	15
Q2	Practical question	15
Q3	Practical question	15
Q4	Practical question OR Short notes	15
	Total	**60**

Name of the Course: International finance

Sr. No.	Heading	Particulars
1	**Description the course:**	This course of International Finance introduces learners to the principles and practices of global financial management. The course covers international monetary systems, balance of payments, exchange rate mechanisms, parity conditions, and the structure of global financial markets. Learners will gain insights into foreign exchange risk management, international capital budgeting, taxation, and cross-border investment strategies. Emphasis is placed on developing analytical and decision-making skills to evaluate global financial opportunities, manage risks, and apply ethical practices in an increasingly integrated world economy.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 Marks**
7	**Course Objectives:** 1. To provide a comprehensive understanding of international finance, its scope, significance, and the functioning of monetary systems and financial institutions 2. To develop analytical skills to interpret balance of payments, exchange rate dynamics, and global financial flows. 3. To enable learners to apply tools and techniques for managing foreign exchange risks, international investments, and cross-border financing decisions. 4. To equip learners to assess the impact of international taxation, regulations, and ethical practices on global business and financial decision-making.	

8	**Course Outcomes (CO):** After completion of the course, learners would be able to: **CO1 –** Explain the principles of international finance, monetary systems, and global integration of financial markets. **CO2 -** Interpret and Analyze balance of payments data, exchange rate mechanisms, and parity conditions for effective decision-making. **CO3 -**Apply derivative instruments, hedging strategies, and international capital budgeting techniques to manage risks and investments **CO4 -** Evaluate global financial markets, tax structures, and project appraisals to make informed and ethical cross-border financial decisions
9	**Modules:-** **Module 1 (15 hours): Introduction to International Finance** Meaning & Significance of International Finance, Scope and Dimensions of International Finance, Globalization of World Economy and Integration of Markets, Goals of International Financial Management, Emerging Issues and Challenges in Global Finance (e.g., digital currencies, fintech, geopolitical risks) **Module 2 (15 hours): Balance of Payments & International Business Heritage -** Introduction and Structure of Balance of Payments (BoP), Accounting Principles in BoP and Balance of Payment Identity, Components of BoP (Current, Capital, and Financial Accounts), India's Historical Contributions to Trade, Commerce, and Global Business Practices, Impact of BoP on Macroeconomic Stability **International Monetary Systems -** Evolution of International Monetary Systems, Gold Standard System and Bretton Woods System, Flexible Exchange Rate Regimes – 1973 to Present, Current Exchange Rate Arrangements and IMF's Classification, European Monetary System & Development of the Euro, Comparison of Fixed vs. Flexible Exchange Rate Systems **Module 3 (15 hours): Exchange Rates & Currency Derivatives -** Foreign Bank Note and Spot Foreign Exchange Market, Exchange Rate Quotations: Direct & Indirect Rates, Cross Currency Rates, Bid–Ask Spread and Calculation of Spread %, Factors Affecting Exchange Rates, Exchange Rate Determination Models (Demand-Supply, Monetary, Portfolio Balance) **Introduction to Currency Derivatives – Futures, Options, and Swaps** **Foreign Exchange Markets & Parity Conditions -** Structure and Participants of the Foreign Exchange Market, Types of Transactions (Spot, Forward, Swap) and Settlement Dates, Forward Quotations & Annualized Forward Margin, Arbitrage in Foreign Exchange Markets, International Parity Relationships: Interest Rate Parity, Purchasing Power Parity, Fisher Effect, Forecasting Exchange Rates (Fundamental, Technical, and Efficient Market Approaches) **Module 4 (15 hours): Currency & Interest Rate Futures -** Introduction to Futures Contracts and Trading Mechanisms, Hedging and Speculation using Currency & Interest Rate Futures, Eurocurrency and Eurobond Markets: Origin, Structure, and Innovations,

	International Equity Markets: Benchmarks, Depository Receipts (ADR, GDR, IDR), and Cross-Border Investments, International Foreign Exchange Markets – FERA vs FEMA, Role of FEDAI, FDI vs FPI **International Capital Budgeting -** Meaning and Importance of Capital Budgeting in Multinational Context, Incremental Cash Flows & Consolidated Cash Flows (Parent vs Subsidiary), Capital Budgeting Techniques: NPV, IRR, and Real Options Approach, Foreign Exchange Risk: Transaction, Translation, and Economic Exposure, International Taxation: Objectives, Double Taxation, Tax Havens, and BEPS	
10	**Text Books** 1. International Finance – Manan prakashan publications 2. International Finance – Vipul publications	
11	**Reference Books** 1. Madura, J. (2020). International Financial Management. Cengage Learning 2. Eun, C.S. & Resnick, B.G. (2021). International Financial Management. McGraw-Hill Education. 3. Levi, M.D. (2018). International Finance. Routledge. 4. Eiteman, D.K., Stonehill, A.I., & Moffett, M.H. (2019). Multinational Business Finance. Pearson Education 5. Bhalla, V.K. (2021). International Financial Management. Anmol Publications	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**

<table>
<tr><td>13</td><td>Continuous Evaluation through:
<table>
<tr><th>Sr. No</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>1.</td><td>Class test</td><td>20</td></tr>
<tr><td>2.</td><td>Assignment</td><td>10</td></tr>
<tr><td>3.</td><td>Certificate course</td><td>10</td></tr>
<tr><td></td><td>Total</td><td>40</td></tr>
</table></td><td>Format of Question Paper: External Examination (60 Marks)– 2 hr duration</td></tr>
<tr><td>14</td><td colspan="2">Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)
Note: 1. All questions are compulsory
2. Figures to the right indicate full marks.
<table>
<tr><td>Question no.</td><td>Particulars</td><td>Marks</td></tr>
<tr><td>Q1</td><td>Objectives (MCQs/True or False)</td><td>15</td></tr>
<tr><td>Q2</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q3</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q4</td><td>Practical question
OR
Short notes</td><td>15</td></tr>
<tr><td></td><td>Total</td><td>60</td></tr>
</table></td></tr>
</table>

Name of the Course: Project management

Sr. No.	Heading	Particulars
1	**Description the course:**	The Project Management module introduces the meaning, scope, and significance of projects and project management, including project classification, life cycle, and system integration. Learners will study project planning techniques, conflict resolution, negotiation strategies, and feasibility analysis, with emphasis on operational, financial, and strategic evaluations. Key areas such as funds estimation, financing sources, government support for startups, cost control, and cost–benefit analysis are covered, enabling

		students to make informed capital allocation and investment decisions. Modern developments like the Project Management Maturity Model (PMMM) and project termination processes are also included to provide insights into evolving practices.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**2 credits**
5	**Hours Allotted:**	**30 Hours**
6	**Marks Allotted:**	**50 Marks**
7	**Course Objectives:** 1. To provide learners with a comprehensive knowledge of project management principles, life cycle, feasibility analysis, cost–benefit evaluation, and modern developments in project management. 2. To equip learners with the ability to estimate funds, analyze financing options, manage costs, prepare cash-flow projections, and make strategic investment and capital allocation decisions. 3. To enable learners to design effective operations strategies, production planning systems and material management practices for efficient project execution and long-term organizational success	
8	**Course Outcomes (CO):** After completion of the course, learners would be able to: **CO1 -** Learners will be able to analyze project feasibility, plan project life cycles, and apply appropriate tools for scheduling, cost control, and conflict resolution. **CO2 -** Learners will be able to estimate project funding needs, compare financing alternatives, conduct cost–benefit analysis, and recommend efficient capital allocation strategies. **CO3 -** Learners will be able to formulate production planning, control systems, and material management approaches that align with organizational goals and enhance operational efficiency**.**	
9	**Modules:-** **Module 1 (15 hours): Introduction to Project Management:** Meaning/Definition of Project & Project Management, Classification of Projects, Why Project Management, Characteristics/Importance of Project Management **Project Planning-**Importance of Project Planning, Functions of Project Planning, System Integration, Project Management Life Cycle, Conflicts & Negotiation Handling in Project Management, **Project Feasibility Analysis:** Meaning/Definition of Project Feasibility, Importance of Project Feasibility, Scope of Project Feasibility Types of Project Feasibility	

Operational Analysis: Meaning of Operation Management, Importance of Operation Management, Operation Strategy - Levels of Decisions, Production Planning & Control, Material Management - Work Study & Method Study.

Module 2 (15 hours): Funds Estimation in Project:

Means of Financing, Types of Financing, Sources of Finance, Government Assistance towards Project Management for Start ups, Cost Control (Operating Cycle, Budgets & Allocations), Determining Financial Needs for Projects, Impact of Leveraging on Cost of Finance

Cost Benefit Analysis in Projects - Introduction to Cost Benefit Analysis, Efficient Investment Analysis, Cash – Flow Projections, Financial Criteria for Capital Allocation, Strategic Investment Decisions

Modern Development in Project Management:

Introduction to Modern Development in Project Management, Project Management Maturity Model (PMMM), Project Termination & Solving Project Management Problems: Meaning of Project Termination, Reasons for Termination of Projects, Process for Terminating Projects, Strategy/ Ways to Solve Project Management Problems

10 **Text Books**

1. Project Management – Rishabh publications
2. Project management – Vipul publications

11 **Reference Books**

1. Harold Kerzner (2017).Project Management: A Systems Approach to Planning, Scheduling, and Controlling. Wiley
2. Gray, C.F. & Larson, E.W. (2020).Project Management: The Managerial Process*. McGraw-Hill Education
3. Pinto, J.K. (2019).Project Management: Achieving Competitive Advantage. Pearson
4. Prasanna Chandra (2021).Projects: Planning, Analysis, Selection, Financing, Implementation, and Review. McGraw-Hill Education
5. Bhavesh M. Patel (2015).Project Management. Vikas Publishing

12 **Internal Continuous Assessment: 40%** | **Semester End Examination: 60%**

13 **Continuous Evaluation through:**

Particulars	Marks
Class test	10
Assignment	10
Total	**20**

Format of Question Paper: External Examination (30 Marks)– 1 hr duration

14 **Format of Question Paper: (Semester End Examination: 30 Marks. Duration: 1 hour)**

1. Q1. is compulsory
2. Attempt any two questions from Q2 to Q4.

Question no.	Particulars	Marks
Q1	Objectives (MCQs/True or False/Match the column)	10
Q2	Practical question	10
Q3	Practical question	10
Q4	Practical question	10
	TOTAL	**30**

Name of the Course: Taxation- II

Sr. No.	Heading	Particulars
1	**Description the course:**	This course provides a comprehensive understanding of Indirect Taxation in India with a focus on the Goods and Services Tax (GST). It introduces the conceptual framework of GST, including constitutional provisions, levy, collection, and exemptions. The course covers taxable events, supply, place and time of supply, valuation, and Input Tax Credit. It also emphasizes compliance aspects such as registration, payment of taxes, filing of returns, and documentation. Through a combination of theoretical knowledge and practical application, students will gain the skills required to compute GST liability, maintain statutory records, and ensure compliance with GST law.
2	**Vertical:**	**Major**
3	**Type:**	**Practical**
4	**Credits:**	**4 credits**
5	**Hours**	**60 Hours**

	Allotted:	
6	**Marks Allotted:**	**100 marks**
7	**Course Objectives:** PO1: Knowledge of Commerce and Taxation – Gain conceptual clarity and practical knowledge of indirect taxation, especially GST. PO2: Critical Thinking & Problem Solving – Develop the ability to analyze tax provisions and solve practical GST computation problems. PO3: Legal and Ethical Awareness – Understand compliance requirements, ethical tax practices, and the implications of non-compliance. PO4: Application of Theory to Practice – Apply GST provisions to real-life business transactions, invoices, returns, and tax payments. PO5: Employability Skills – Enhance career prospects in accounting, taxation, auditing, and consultancy through hands-on GST knowledge. PO6: Lifelong Learning – Build adaptability to stay updated with dynamic GST amendments, rules, and procedures.	
8	**Course Outcomes (CO):** CO1: Differentiate between direct and indirect taxes and explain the genesis, need, and framework of GST in India. CO2: Interpret key definitions under the CGST and IGST Acts and apply them to practical tax situations. CO3: Analyze the concept of supply, including composite and mixed supplies, and determine place, time, and value of supply. CO4: Apply provisions related to Input Tax Credit (ITC), capital goods, and eligibility conditions to compute net tax liability. CO5: Understand registration requirements, procedures, and compliance obligations under GST law. CO6: Compute GST liability for intra-state and inter-state transactions and explain provisions relating to payment, TDS, and TCS. CO7: Prepare and file GST returns, invoices, and supporting documents in compliance with statutory requirements.	
9	**Module:1 Introduction to Indirect Taxation and GST (10 Hrs)** **A. Basics for Taxation**	

	- Direct Taxes and Indirect Taxes - Difference, Advantages and Disadvantages, Sources and Authority of Taxes in India (Art 246 of the Indian Constitution) **B. Introduction to GST - Genesis of GST in India, Power to tax GST** (Constitutional Provisions), Extent and Commencement, Meaning and Definition of GST, Benefits of GST, Conceptual Framework - CGST, IGST,SGST,UTGST, Imports of goods or services or both, Export of goods or services or both, Taxes subsumed and not subsumed under GST. **C. Definitions -** Goods (2(52) of CGST Act), Services (2(102) of CGST Act), Money (2(75) of CGST Act), Securities (2(101) of SCRA Act, 1956), India (2(56) of CGST Act), Persons (2(84) of CGST Act), Taxable Person (2(107) of CGST Act), Business (2(17) of CGST Act), Consideration 2(31) of CGST Act), E- Commerce Operator (2(45) of CGST Act), Supplier(2(105) of CGST Act),Recipient(2(93) of CGST Act) **D. Levy and Collection of GST -** Levy and Collection of CGST, IGST, SGST,UTGST (Sec 9 of CGST Act), Composition Scheme under GST (Sec 10 of CGST Act), Power to Grant Exemption (Sec 11 of CGST Act)GST Rate Schedule for Goods and Services.
	Module:2 Concept of Supply (20 Hrs) **A. Taxable Event Supply-** Meaning and Scope of Supply (Section 7 Subsection 1, 2 and 3 of Act) Schedule I, Schedule II, Schedule Ill, Composite and Mixed Supplies (Sec 8 of CGST Act) **B. Place of Supply -** Location of Supplier of Goods and Services, Place of Supply of Goods (Sec 10, 11,12 and 13 of IGST Act), Special Provision for Payment of Tax by a Supplier of Online Information Database Access Retrieval. **C. Time of Supply-** Time of Supply (Sec 31 of CGST Act), Issue of Invoice by the Supplier (Sec 31 (1) and Sec 31(2)of CGST Act), Continuous Supply of Goods and Services, Goods Sent on Approval (Sec 31(7) of CGST Act) **D. Value of Supply -** Determination of Value of Supply (Sec 15 of CGST Act and CGST Rules

	2017), Input Tax Credit (Sec 2(62) of CGST Act) Capital Goods (Sec 2(19) of CGST Act), Input Sec 2(59) of CGST Act), Input Service (Sec 2(60) of CGST Act). Eligibility and Conditions for taking Input Tax Credit (Sec 16 of CGST Act)
	Module:3 Registration and Computation of GST (15 Hrs) **A. Registration -** Persons liable for Registration (Sec 22 of the Act), Persons not liable for Registration, Procedure for Registration (Sec 25 of the Act), Deemed Registration(Sec 26 of the Act), Special Provisions (Sec 27 of the Act), Amendment, Cancellation and Revocation of Registration(Sec 28,Sec29and Sec 31 of the Act) **B. Computation of GST -** Computation of GST under Inter State and Intra State Supplies. **C. Payment of Tax-** Payment of Tax, Interest and other Amounts(Sec 49 of the Act), Interest on delayed Payment (Sec 50 of the Act), TDS (Sec 51 of the Act), TCS (Sec 52 of the Act)
	Module:4 Filing of Returns (10 Hrs) **A. Documentation-** Tax Invoices (Sec 31 and 32 of the Act), Credit and Debit notes (Sec 34 of the Act), Electronic Way Bill **B. Returns -** Types of Returns and Provisions relating to filing of Returns (Sec 37 to Sec 48 of the Act)
10	**Textbook** Manan Prakashan Sheth Publications
11	**Reference book** 1. Mehrotra, H.C. & Agarwal, V.P. – Goods and Services Tax (GST) and Customs Law, Sahitya Bhawan Publications. 2. Bangar, V. & Bangar, Y. – Comprehensive Guide to GST, Aadhya

<table>
<tr><td></td><td colspan="2">Prakashan.

3. Singhania, V.K. & Monica Singhania – Students' Guide to Indirect Taxes, Taxmann Publications.

4. Ahuja, Girish & Gupta, Ravi – GST and Customs Law, Bharat Law House.

5. Datey, V.S. – GST Law and Practice, Taxmann Publications.

6. Bare Act of CGST, SGST, IGST & UTGST Acts, 2017 – Government of India Publication.

7. Dr. Sanjeev Kumar – Systematic Approach to Indirect Taxes and GST, Bharat Law House.</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>Semester End Examination: 60%</td></tr>
<tr><td>13</td><td>Continuous Evaluation through:
Class test of 20 marks
Assignments: 10 marks
Class participation: 10 marks
Total: 40 marks</td><td>Format of Question Paper: External Examination (60 Marks)– 2 hr duration</td></tr>
<tr><td>14</td><td colspan="2">Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)
<table>
<tr><th>Question no.</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>Q1</td><td>Objectives (MCQs/True or False)</td><td>15</td></tr>
<tr><td>Q2</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q3</td><td>Practical question</td><td>15</td></tr>
<tr><td>Q4</td><td>Practical question OR Short notes</td><td>15</td></tr>
<tr><td></td><td>Total</td><td>60</td></tr>
</table></td></tr>
</table>

VERTICAL-2

Name of the Course: Operations Management (Operations Research)

Sr. No.	Heading	Particulars
1	**Description the course:**	The *Operations Research* course focuses on the application of scientific and mathematical techniques to decision-making and problem-solving in business. It introduces students to methodologies such as linear programming, transportation and assignment models, network analysis (CPM, PERT), and game theory. The course emphasizes practical applications, enabling students to analyze real-world problems, optimize resources, and make effective managerial decisions. It also incorporates case studies and project-based learning to enhance analytical and interpretative skills.
2	**Vertical:**	**Major**
3	**Type:**	**Theory**
4	**Credits:**	**4 credits**
5	**Hours Allotted:**	**60 Hours**
6	**Marks Allotted:**	**100 Marks**
7	**Course Objectives:** ● To help students understand operations research methodologies. ● To enable students to solve various problems using practical approaches. ● To develop proficiency in case analysis and interpretation.	
8	**Course Outcomes (CO):** After completion of the course, learners would be able to: **CO1**-Students will be able to apply operations research methodologies to solve problems. **CO2**- Students will be able to analyze and solve real-world business problems. **CO3**-Students will be able to interpret results and support decision-making**.**	

9	**Modules:-** **Module 1 (15 hours): Introduction to Operations Research and Linear Programming**

a) Introduction To Operations Research

- Operations Research - Definition, Characteristics of OR, OR Techniques, Areas of Application, Limitations of OR.

b) Linear Programming Problems: Introduction and Formulation

- Introduction to Linear Programming
- Applications of LP
- Components of LP
- Requirements for Formulation of LP Problem
- Assumptions Underlying Linear Programming
- Steps in Solving LP Problems
- LPP Formulation (Decision Variables, Objective Function, Constraints, Non Negativity Constraints)
- **c) Linear Programming Problems: Graphical Method**
- Maximization & Minimization Type Problems. (Max. Z & Min. Z)
- Two Decision Variables and Maximum Three Constraints Problem
- Constraints can be “less than or equal to”, “greater than or equal to” or a combination of both the types i.e. mixed constraints.
- Concepts: Feasible Region of Solution, Unbounded Solution, Redundant Constraint, Infeasible Solution, Alternative Optima.

d) Linear Programming Problems: Simplex Method

- Only Maximization Type Problems. (Only Max. Z). No Minimization problems. (No Min. Z) Numericals on Degeneracy in Maximization Simplex Problems.
- Two or Three Decision Variables and Maximum Three Constraints Problem. (Up to Maximum Two Iterations)
- All Constraints to be “less than or equal to” Constraints. (“Greater than or Equal to” Constraints not included.)
- Concepts : Slack Variables, Surplus Variables, Artificial Variables, Duality, Product Mix and Profit, Feasible and Infeasible Solution, Unique or Alternate Optimal Solution, Degeneracy, Non Degenerate, Shadow Prices of Resources, Scarce and Abundant Resources, Utilized and Unutilized Capacity of Resources, Percentage Utilization of Resources, Decision for Introduction of a New Product.

Module 2 (15 hours): Assignment and Transportation Models

a) Assignment Problem – Hungarian Method

- Maximization & Minimization Type Problems.

- Balanced and Unbalanced Problems.
- Prohibited Assignment Problems, Unique or Multiple Optimal Solutions.
- Simple Formulation of Assignment Problems.
- Maximum 5 x 5 Matrix. Up to Maximum Two Iterations after Row and Column Minimization.

Note:
1. Travelling Salesman Assignment Problem is not included.

b) Transportation Problems

- Maximization & Minimization Type Problems.
- Balanced and Unbalanced problems.
- Prohibited Transportation Problems, Unique or Multiple Optimal Solutions.
- Simple Formulation of Transportation Problems.
- Initial Feasible Solution (IFS) by:

a. North West Corner Rule (NWCR)
b. Least Cost Method (LCM)
c. Vogel's Approximation Method (VAM)

- Maximum 5 x 5 Transportation Matrix.
- Finding Optimal Solution by Modified Distribution (MODI) Method. (u, v and Δ)
- Maximum Two Iterations (i.e. Maximum Two Loops) after IFS.

Module 3 (15 hours): Network Analysis

a) Critical Path Method (CPM)

- Concepts: Activity, Event, Network Diagram, Merge Event, Burst Event, Concurrent and Burst Activity,
- Construction of a Network Diagram. Node Relationship and Precedence Relationship.
- Principles of Constructing Network Diagram.
- Use of Dummy Activity
- Numerical Consisting of Maximum Ten (10) Activities.
- Critical Path, Sub-critical Path, Critical and Non-critical Activities, Project Completion Time.
- Forward Pass and Backward Pass Methods.
- Calculation of EST, EFT, LST, LFT, Head Event Slack, Tail Event Slack, Total Float, Free Float, Independent Float and Interfering Float

b) Project Crashing

- Meaning of Project Crashing.
- Concepts: Normal Time, Normal Cost, Crash Time, Crash Cost of Activities. Cost Slope of an Activity.
- Costs involved in Project Crashing: Numericals with Direct, Indirect, Penalty, crash cost and Total Costs.
- Time – Cost Trade off in Project Crashing.
- Optimal (Minimum) Project Cost and Optimal Project Completion Time.
- Process of Project Crashing.
- Numerical Consisting of Maximum Ten (10) Activities.
- Numerical based on Maximum Four (04) Iterations of Crashing

c) Program Evaluation and Review Technique (PERT)

- Three Time Estimates of PERT: Optimistic Time (a), Most Likely Time (m) and Pessimistic Time (b).
- Expected Time (te) of an Activity Using Three Time Estimates.
- Difference between CPM and PERT.
- Numerical Consisting of Maximum Ten (10) Activities.
- Construction of PERT Network using tevalues of all Activities.
- Mean (Expected) Project Completion Time.
- Standard Deviation and Variance of Activities.
- Project Variance and Project Standard Deviation.
- 'Prob. Z' Formula.
- Standard Normal Probability Table. Calculation of Probability from the Probability Table using 'Z' Value and Simple Questions related to PERT Technique.
- Meaning, Objectives, Importance, Scope, RORO/LASH

Module 4 (15 hours): Practical Applications & Case Studies

Shift Towards Practical Applications and Case Studies

The modern OR curriculum is less about abstract theory and more about applying the concepts to solve real business problems. This "10% change" might manifest as:

a) Real-World Case Studies: Replacing purely academic examples with case studies from industries like supply chain management, finance, healthcare, and telecommunications.

b) Interdisciplinary Connections: Highlighting the link between OR and other fields such as Machine Learning, AI, and Operations Management. For example, how an OR model can be used to optimize a logistics network that was designed using a different method.

Project-Based Learning: Students are often required to complete a project where they model and

	solve a complex problem using software, rather than just solving small-scale problems on a test
10	**Text Books** 1. Operations Research – **V. K. Kapoor** 2. Operations Research – **Kanti Swarup, P. K. Gupta and Man Mohan** 3. Operations Research: Theory and Applications – **J. K. Sharma** 4. Operations Research – **Prem Kumar Gupta and D. S. Hira**
11	**Reference Books** ● Operations Research: An Introduction – **Hamdy A. Taha** ● Introduction to Operations Research – **Frederick S. Hillier and Gerald J. Lieberman** ● Operations Research – **Panneerselvam** ● Operations Research – **S. D. Sharma**
12	**Internal Continuous Assessment: 40%** / **Semester End Examination: 60%**
13	**Continuous Evaluation through:** **Particulars** / **Marks** Class test / 20 Assignment / Presentation / Certificate Course / 10 Class participation / 10 **Total** / **40** **Format of Question Paper: External Examination (60 Marks)– 2 hr duration**
14	**Format of Question Paper: (Semester End Examination: 60 Marks. Duration:2 hour)** 1. All questions are compulsory 2. Figures to the right indicate full marks.

Question no.	**Particulars**	**Marks**
Q1	Objectives (MCQs/True or False/Match the column)	15
Q2	A B **OR** P Q	15
Q3	A B **OR** P Q	15
Q4	Case Study	15
	TOTAL	**60**