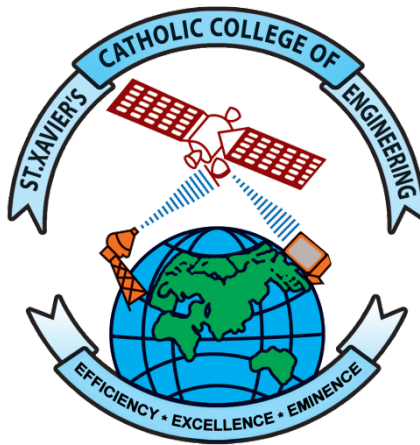


MBA Degree
in
MASTER OF BUSINESS ADMINISTRATION

CURRICULUM & SYLLABUS (CBCS)

(Innovation and Product Development for Sustainability)

(For students admitted from the Academic Year 2026-2027)



DEPARTMENT OF MANAGEMENT STUDIES

St. XAVIER'S CATHOLIC COLLEGE OF ENGINEERING
CHUNKANKADAI, NAGERCOIL – 629 003.
KANYAKUMARI DISTRICT, TAMIL NADU, INDIA

St. XAVIER'S CATHOLIC COLLEGE OF ENGINEERING
Chunkankadai, Nagercoil – 629 003.
AUTONOMOUS COLLEGE AFFILIATED TO ANNA UNIVERSITY
ACADEMIC REGULATIONS 2026
MBA PROGRAMME CURRICULUM
CHOICE-BASED CREDIT SYSTEM

VISION OF THE INSTITUTION

To be a centre of excellence in engineering education and research for a technically empowered humane society.

MISSION OF THE INSTITUTION

M1: Foster a vibrant academic environment for learning fundamental concepts, emerging technologies, and research-oriented practices.

M2: Cultivate personal maturity and professional skills through stimulating coaching and practical training.

M3: Provide inspiring high calibre faculty to mentor students from diverse backgrounds, especially the underprivileged.

M4: Create ample opportunities to transform rural youth into top class professionals and technocrats, capable of serving at the local and global levels with ethical integrity.

MBA PROGRAMME

- ★ **MBA or Master of Business Administration, is a two-year, internationally recognised postgraduate management degree that deals with the science of business administration. The MBA programme aims at “Developing effective and competent ethical leaders to create a better society”. This programme is for aspirants who want to equip exhaustive knowledge of management and principles.**
- ★ **The MBA programme under our institution will “produce socially responsible, creative leaders and managers who engage meaningfully with business and government to create a progressive and connected society imbibing the values of collaborative and impactful sustainability.”**

On successful completion of first year MBA Programme

- ★ **The students gain a better understanding of general business management functions, which helps and improves communication and leadership skills, and focuses on building and learning business principles which are vital to professional success. Also helps to provide a good foundation for how to start a business management career.**

On successful completion of Second year MBA programme:

- ★ **Our graduates get equipped with ‘future-ready skills like greater awareness of the global market, expanding and diversifying professional networks, better time management, and entrepreneurial skills to plan and start a venture – through that, contribute to the success of a social, commercial, or giant multinational by being a part**

of that organisation or looking after the family business. They would be able to handle how to strategically approach problems and become competent professionals.

- ★ Having specialised in dual domains and a string of two internships, our graduates are transformed into future-ready leaders, ready to tackle the challenges of today's global business environment.

VISION OF THE PROGRAMME

Imparting ethical education to create globally competent, innovative, and socially responsible management professionals.

MISSION OF THE PROGRAMME

M 1: Enhancing students' performance to match industry standards.

M 2: Providing a rigorous and dynamic learning environment that blends theory with practical application.

M 3: Nurturing leadership, analytical, and entrepreneurial skills through experiential learning and industry engagement.

M 4: Fostering ethical decision-making, sustainability, and global perspectives in management practice.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

MBA programme curriculum is designed to prepare the postgraduate students.

I.	Develop competent management professionals with strong analytical and decision-making capabilities.
II.	Cultivate leadership, communication, and teamwork skills for effective managerial performance.
III.	Promote ethical, socially responsible, and sustainable business practices in professional roles.
IV.	Encourage lifelong learning and adaptability to dynamic global business environments.

PROGRAMME OUTCOMES (POs):

On successful completion of the programme

I	Apply management concepts to real-world challenges.
II.	Think critically and make sound decisions.
III.	Exhibit leadership, teamwork, and communication excellence.
IV.	Uphold ethics and corporate governance.
V.	Apply global, economic, legal, and ethical understanding to make responsible and informed business decisions.
VI.	Integrate sustainability and social responsibility into business practices for inclusive growth.
VII	Understand global business environments and cultural diversity to make effective international management decisions.

PROGRAMME SPECIFIC OUTCOMES (PSOs):**On successful completion of the programme**

I	Apply multidisciplinary managerial knowledge (finance, HR, marketing, operations, and analytics) to analyse and solve real-world business challenges.
II.	Design, implement, and evaluate strategic and operational decisions to enhance organisational effectiveness and performance.
III.	Demonstrate professionalism, ethical judgement, and social responsibility in managerial and leadership roles.

PEO's – PO's and PSO's MAPPING:

PEO	PO							PSO		
	1	2	3	4	5	6	7	1	2	3
I.	3	3	2	2	3	1	2	3	2	1
II.	2	2	3	2	2	1	3	2	3	1
III.	1	1	1	3	2	3	2	1	2	3
IV.	1	2	2	2	2	2	3	2	2	2

PROGRAMME ARTICULATION MATRIX

Year	Semester	Course name	PO							PSO		
			1	2	3	4	5	6	7	1	2	3
I	I	Management Concepts and Organisational Behaviour	3	2	3	2	2	2	2	2	2	3
		Statistics for Management	3	3	1	1	1	2	1	3	3	1
		Managerial Economics	3	3	1	1	3	1	2	3	2	1
		Accounting for Management	3	2	1	2	2	1	1	3	3	2
		Legal Aspects of Business	2	2	1	3	3	2	2	2	2	3
		Information Management	2	2	1	1	2	1	1	3	2	1
		Entrepreneurship Development	3	2	2	2	2	3	2	2	3	3
		Business Applications Laboratory	2	2	1	1	1	1	1	3	3	1
		Professional and Employability Skills – I *	1	2	3	1	1	1	1	1	1	2
I	II	Optimisation Techniques for Management	3	3	1	1	1	2	1	3	3	1
		Financial Management	3	3	1	2	2	1	1	3	3	2
		Human Resource Management	2	2	3	3	2	2	2	2	2	3
		Operations Management	3	3	1	2	2	2	1	3	3	2
		Business Research Methodology	3	3	2	2	1	1	1	3	3	1
		Marketing Management	3	2	2	2	3	2	3	3	3	2

		Business Analytics	3	3	1	1	1	1	1	3	3	1
		Professional and Employability Skills - II *	2	2	2	1	1	1	1	2	2	2
		Data analysis and Business Modelling	3	3	1	1	1	2	1	3	3	1

SUSTAINABLE DEVELOPMENT GOALS

SDG No.	Goal	Related Subjects
SDG 1	No Poverty	Entrepreneurship Development, Managerial Economics, Project Work
SDG 2	Zero Hunger	Strategic Management, Managerial Economics
SDG 3	Good Health and Well-Being	Human Resource Management, Managerial Economics, Management Concepts and Organisational Behaviour
SDG 4	Quality Education	Statistics for Management Studies, Business Research Methodology, Project Work, Organisational Study, Employability Skills, Capstone Simulation
SDG 5	Gender Equality	Human Resource Management, Legal Aspects of Business, Management Concepts and Organisational Behaviour
SDG 8	Decent Work and Economic Growth	Legal Aspects of Business, Managerial Economics, Human Resource Management, Financial Management, Entrepreneurship Development, Employability Skills, Organisational Study, Capstone Simulation
SDG 9	Industry, Innovation, and Infrastructure	Business Analytics, Data Analysis & Business Modelling, Information Management, Strategic Management, Data Analysis and Business Modelling, Business Applications Laboratory, Professional and Employability Skills
SDG 10	Reduced Inequalities	Human Resource Management, Managerial Economics, International Business Management, Entrepreneurship Development
SDG 11	Sustainable Cities and Communities	Capstone Simulation, Strategic Management, Project Work
SDG 12	Responsible Consumption and Production	Operations Management, Managerial Economics, Marketing Management, Accounting for Management, Optimisation Techniques for Management, Business Applications Laboratory
SDG 15	Life on Land	Operations Management, Project Work
SDG 16	Peace, Justice, and Strong Institutions	Legal Aspects of Business, Managerial Economics, Accounting for Management, Management Concepts and Organisational Behaviour
SDG 17	Partnerships for the Goals	Business Research Methodology, International Business Management, Project Work, Capstone Simulation

SEMESTER: I

Number of Courses: 9

Total Credits: 30

Course Code	Course Title	Course Type	Classroom Instruction(CI) (in Hours per Semesters)		Lab Instruction(LI) (in Hours per Semesters)	Term Work(TW) and Self Learning (SL) (in Hours per Semesters)	Total Number of Hours (in Hours per Semesters)	Total Credits (C) = (Total Hours/30)	SDG Goal Mapped	Category
			L	T	P					
IP26C09	Induction Programme**	Theory	-	-	-	-	40	0	4,8,16	IP
MS26101	Management Concepts and Organisational Behaviour	Theory	60	0	0	60	120	4	3,5,16	FC
MA26107	Statistics for Management	Theory	45	15	0	60	120	4	1,2,3,7	BS C
MS26102	Managerial Economics	Theory	60	0	0	60	120	4	1,3,8,9,10,12,16	PC C
MS26103	Accounting for Management	Theory	45	15	0	60	120	4	12,16	PC C
MS26104	Legal Aspects of Business	Theory	60	0	0	60	120	4	5,8,16	PC C
MS26105	Information Management	Theory	60	0	0	60	120	4	8,9	PC C
NFE	Non-Functional Elective	Theory	45	0	0	45	90	3	4,5,8,9,10, 12	NF E
MS26106	Business Applications Laboratory	Practical	0	0	60	60	120	2	1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 17	EE C
SD26102	Professional and Employability Skills - I *	SD	0	0	60	60	120	1	4,5,8,16	SD
	Total		375	30	120	525		30		

* - Internally Evaluated Courses. The evaluation procedure is detailed in the syllabus

** - Refer clause 21 in regulation 2026. The evaluation procedure is detailed in the syllabus

SEMESTER: II

Number of Courses: 11
Total Credits: 33

Course Code	Course Title	Course Type	Classroom Instruction(CI) (in Hours per Semesters)		Lab Instruction(LI) (in Hours per Semesters)	Term Work(TW) and Self Learning (SL) (in Hours per Semesters)	Total Number of Hours (in Hours per Semesters)	Total Credits (C)=(Total Hours/30)	SDG Goal Mapped	Category
			L	T	P					
MA26201	Optimisation Techniques for Management	Theory	45	15	0	60	120	4	4,9,12,13,17	BSC
MS26201	Financial Management	Theory	45	15	0	60	120	4	1,5,8,9,12,13,16,17	PCC
MS26202	Human Resources Management	Theory	60	0	0	60	120	4	3,4,5,8,9,10,12,13,16,17	PCC
MS26203	Operations Management	Theory	45	15	0	60	120	4	6,7,12,13,14,15	PCC
MS26204	Business Research Methodology	Theory	45	15	0	60	120	4	4,17	PCC
MS26205	Business Analytics	Theory	60	0	0	60	120	4	7,9,12	PCC
MS26206	Marketing Management	Theory	60	0	0	60	120	4	12,13	PCC
MS26207	Data Analysis and Business Modeling	Practical	0	0	60	60	120	2	1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 17	EEC
SD26202	Professional and Employability Skills - II *	SD	0	0	60	60	120	1	4,8,9	SD
	Industry Collaborated Course***	ICC						1		ICC
	Self-Learning Course***	SLC						1		SLC
	Total		360	60	120	540		33		

* - Internally Evaluated Courses.

*** - Evaluation and certification by course offering body

NON-FUNCTIONAL ELECTIVES (NFE)

Course Code	Course Title	Course Type	Semester	Classroom Instruction(CI) (in Hours per Semesters)		Lab Instruction (LI) (in Hours per Semesters)	Term Work(TW) and Self Learning(SL) (in Hours per Semesters)	Total Number of Hours (in Hours per Semester)	Total Credits (C)=(Total Hours/30)	SDG Goal Mapped
				L	T	P				
MS26111	Entrepreneurship Development	Theory - NFE	I	45	0	0	45	90	3	1, 5, 8, 9, 10
MS26112	Event Management	Theory - NFE	I	45	0	0	45	90	3	1, 5, 8, 9, 10
MS26113	Rural Community Engagement	Theory - NFE	I	30	15	0	45	90	3	1,3, 5, 8,9,10, 12, 17

OPEN ELECTIVE COURSES (OEC) (Offered to other P.G. Programmes)

Course Code	Course Title	Course Type	Semester	Classroom Instruction(CI) (in Hours per Semesters)		Lab Instruction(LI) (in Hours per Semesters)	Term Work(TW) and Self Learning(SL) (in Hours per Semesters)	Total Number of Hours (in Hours per Semesters)	Total Credits (C)=(Total Hours/30)	SDG Goal Mapped
				L	T	P				
MS26901	Time Management and Personal Productivity	Theory - OEC	II	30	15	0	45	90	3	4,8,9

SYLLABUS

SEMESTER: I

MS26101	MANAGEMENT CONCEPTS AND ORGANISATIONAL BEHAVIOUR	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	3,4,8,9,10,16
COURSE OBJECTIVES:								
- To familiarise the students with the basics of management and understanding the dynamics of organisational behaviour. - To understand the dynamics of human relations in organisations. - To evaluate the behaviour of individuals, groups and organisations. - To motivate and lead the employees towards objectives. - To apply the management process for effective organisational behaviour.								
COURSE CONTENT:								
Unit 1	Fundamentals of Management and Evolutionary Theories	12	0	0	12	24		8
Basics of Management – Importance of Management, Levels of Management, Evolution of Management – Classical Era – Contribution of F. W. Taylor, Henri Fayol, Neo-Classical-Mayo & Hawthorne Experiments – Modern Era – System & Contingency Approach – Managerial Skills – Effective Communication Process. Activities: Three-Level Decision Game (Levels of Management)/ Time and Motion Study Demo (Taylor)/ Role Play (14 Principles in Action (Fayol))								
Unit 2	Functions of Management	9	3	0	12	24		9
Nature and Purpose of Planning – Planning Premises – Planning Process, Objectives – Setting Objectives – Management by Objectives, Decision Making – Types and Techniques – Significance of Decision Making, Staffing Process, Coordination and Control – Process and Types of Control. Activities: Broken Planning Cycle (Planning)/SMART Objective Writing (MBO)/Decision Maze Game (Decision Making)/Budget Control Simulation (Control)								
Unit 3	Organisational Behaviour	9	3	0	12	24		10,16
Organisation – Formal and Informal – Organisation Structure – Types – Delegation of Authority – Centralisation and Decentralisation, Meaning of Organisational Behaviour – Contributing Disciplines – Importance of Organisational Behaviour – Framework – Organisational Behaviour Models. Activities: Structure Matching Game (Organisation Structure)/ Decision Speed Test (Centralisation vs Decentralisation)/ Discipline Sorting Challenge (OB)								
Unit 4	Individual and Group Behaviour	9	3	0	12	24		3,4
Individual Behaviour – Perception and Learning – Personality – Types of Personality, Motivation Theories, Values, Attitudes and Beliefs, Formation of Groups – Group Dynamics, Leadership –								

Process – Styles of Leadership – Theories and Significance, Communication – Types, Process, Barriers, Making Communication Effective.

Activities: Self-Reflection Profile Card (Individual Behaviour) / “What Do You See?” Optical Illusion Quiz (Perception)/Learn a Skill Under 3 Methods (Learning), Personality Sorting Corners (Personality)

Unit 5	Contemporary Perspectives in Organisational Behaviour	9	3	0	12	24		10,16
--------	--	---	---	---	----	----	--	-------

Comparative Management Styles, Approaches and Practices – Organisational Creativity and Innovation, Organisation Change & Development, Organisation Culture and Climate, Conflict Management Process – Stages and Styles, Power and Politics, Managing Stress, Managing Cultural Diversity.

Activities: Country Management Simulation (Comparative Management Styles) / 30 Circles Creativity Test (Organisational Creativity and Innovation)

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Apply management concepts and skills in solving real-world business problems.

CO2: Implement the functions of management in real-time organisational situations.

C03: Demonstrate the use of organisational behaviour frameworks and models to improve management practices.

C04: Employ knowledge of individual and group behaviour to enhance organisational effectiveness.

CO5: Apply current trends in organisational behaviour to manage workplace situations.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	P.C. Tripathi & P.N. Reddy, “Principles of Management”, Seventh Edition, McGraw-Hill Education India, 2021.
2.	Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, "Organisational Behaviour”, Eighteenth Edition, Pearson Education, 2023.

REFERENCES:

1.	Stephen P. Robbins, Mary Coulter & Lori Long, “Management”, Sixteenth Edition, Pearson Education, 2024.
2.	Harold Koontz & Heinz Weihrich, "Essentials of Management: An International, Innovation, and Leadership Perspective”, Eleventh Edition, McGraw-Hill Education, 2020.
3.	Laurie J. Mullins, Gary Rees, “Management and Organisational Behaviour”, Thirteenth Edition, Pearson Publication, 2023.
4.	Neeru Kapoor, "Organisational Behaviour – Principles and Practices”, Second Edition, McGraw Hill Education, 2020.
5.	K. Aswathappa, "Organisational Behaviour", Fourteenth Edition, Himalaya

	Publishing House, 2024.
E resources/ E materials:	
1.	https://openstax.org/books/principles-management OpenStax – Principles of Management
2.	https://ocw.mit.edu/courses/15-301-managerial-psychology-lab MIT Open Courseware – Principles of Management
3.	https://www.coursera.org/specializations/leadership-organizational-behavior iMBA – University of Illinois
4.	https://www.tutorialspoint.com/management_principles Tutorials Point – Principles of Management

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
CO1	3	2	2	1	2	1	1	3	2	1
CO2	3	3	2	1	2	1	1	3	3	1
CO3	2	3	2	1	2	1	2	3	2	1
CO4	2	2	3	1	1	1	2	2	2	3
CO5	2	2	2	2	3	2	3	2	3	3
Avg	2.4	2.4	2.2	1.2	2	1.2	1.8	2.6	2.4	1.8

MA26107	STATISTICS FOR MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	4,9,12
COURSE OBJECTIVES:								
• To introduce the fundamental concepts of probability and normal distributions for analysing uncertainty in business and management contexts. • To develop the ability to apply statistical inference techniques, including hypothesis testing and design of experiments for effective decision-making. • To enable students to interpret statistical measures such as independence of attributes, goodness of fit, and the U and H tests in real-life situations. • To impart knowledge of statistical quality control techniques, particularly control charts for monitoring and improving management processes. • To equip students with skills in correlation, regression and curve fitting techniques for analysing and interpreting experimental and business data.								
COURSE CONTENT:								
Unit 1	Probability and Normal Distribution	9	3	0	12	24		4,9,12

Mathematics of probability – Conditional probability – Independence of events – Baye's theorem (Statement and Problems) – Mathematical form of normal distributions – Standard normal distribution – Testing the normality of a distribution – Central limit theorem (Statement and Problems).

Activity: Analyse a business scenario such as demand forecasting, insurance risk or sales prediction using probability and normal distribution.

Unit 2	Testing of Hypothesis – Parametric Tests	9	3	0	12	24		4,9
---------------	---	---	---	---	----	----	--	-----

Statistical hypothesis – Type I and Type II errors – Testing Significance Based on Normal distribution for single mean and difference of means – Tests based on F distribution for equality of variances – Principles of experimental design: Replication, randomisation, local control – ANOVA: One-way and two-way classifications – Design techniques: Completely Randomised Design (CRD), Randomised Block Design (RBD).

Activity: Apply statistical tests and interpret results for management decisions and design a simple experiment related to production, marketing or service quality and analyse the results.

Unit 3	Non-Parametric Tests	9	3	0	12	24		4,9
---------------	-----------------------------	---	---	---	----	----	--	-----

Chi-square test for single variance – Independence of attributes – Contingency table: Analysis of $r \times c$ tables – Kolmogorov-Smirnov test for goodness of fit – Rank sum tests: Mann-Whitney U test – Wilcoxon two-sample test – Kruskal-Wallis H test.

Activity: Analyse survey data (consumer preference, marketing research) to test goodness of fit or independence of attributes.

Unit 4	Statistical Quality Control	9	3	0	12	24		4,9
---------------	------------------------------------	---	---	---	----	----	--	-----

The Control Chart – Nature of the Control limits – Control charts for variables or measurements – and R charts for variables – Control charts for attributes – The p-chart for fraction defective – Control Charts for Number of Defectives – (c and np charts).

Activity: Construct control charts using sample industrial data and interpret whether the process is under control.

Unit 5	Correlation, Regression and Model Fitting	9	3	0	12	24		4,9
---------------	--	---	---	---	----	----	--	-----

Correlation (discrete case) – Karl Pearson's coefficient of correlation and Spearman's rank correlation – Linear regression – Regression coefficients – Definitions: Unbiased estimators, Efficiency, Consistency, Sufficiency – Curve fitting by the method of least squares (linear and quadratic forms).

Activity: Analyse relationships between variables (advertising vs sales, price vs demand) using correlation, regression and curve-fitting techniques.

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Utilise probability concepts and normal distribution to solve problems in business applications.

CO2: Apply the techniques of statistical tests and design of experiments in management studies. CO3: Interpret independence of attributes and goodness of fit, U and H tests in real-life situations. CO4: Develop and use control charts to evaluate quality in management processes. CO5: Apply correlation, regression and curve fitting techniques to analyse experimental data.	
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%	
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)	
TEXT BOOKS:	
1.	S.C. Gupta & V.K. Kapoor, “Fundamentals of Mathematical Statistics”, Eleventh edition, S. Chand & Company, 2024.
2.	Levin R. I., Rubin D. S., Siddiqui M. H., & Rastogi S., “Statistics for management”, Eighth edition, Pearson Education, 2023.
REFERENCES:	
1.	Anderson D. R., Sweeney D. J., Williams T. A., Camm J. D., & Cochran, J. J., “Statistics for business and economics”, Fifteenth edition, Thomson South Western Asia, 2024.
2.	Spiegel M.R., Schiller J. and Srinivasan R.A., "Schaum's Outlines on Probability and Statistics", Fourth edition, Tata McGraw Hill, Reprint 2024.
3.	Black K, "Applied business statistics", Eleventh edition, Wiley India, 2023.
4.	Devore, J.L., "Probability and Statistics for Engineering and the Sciences", Cengage Learning, New Delhi, Ninth edition, Reprint 2023.
5.	Mann, P. S., “Introductory statistics”, Tenth edition, Wiley Publications, 2020.
E resources/ E materials:	
1.	NPTEL – Introduction to Probability and Statistics https://nptel.ac.in/courses
2.	NPTEL: Business Statistics and Analytics for Decision Making https://nptel.ac.in
3.	https://onlinecourses.nptel.ac.in/noc19_bt19/preview
4.	edX – Statistics and Data Science MicroMasters (MIT) https://www.edx.org/micromasters/mitx-statistics-and-data-science
5.	SWAYAM – Business Statistics / Statistical Methods https://nptel.ac.in/courses

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	2	-	-	1	-	1	2	2	-
CO2	2	2	-	-	1	-	1	2	2	-

CO3	2	2	-	-	1	-	1	2	2	-
CO4	2	2	-	-	1	-	1	2	2	-
CO5	2	2	-	-	1	-	1	2	2	-
Avg	2	2			1		1	2	2	-

MS26102	MANAGERIAL ECONOMICS	L	T	P	TW/SL	Total	C	SDG
		60	0	0	60	120	4	1,3,8,9,10,12,16
COURSE OBJECTIVES:								
- To understand the fundamental concepts and principles of economics that influence managerial decision-making and resource allocation. - To analyse consumer and producer behaviour and evaluate how demand, supply, and cost structures determine market outcomes. - To explain how different market structures and factor-pricing mechanisms influence firm equilibrium and resource allocation. - To understand key macroeconomic variables and their interrelationships in determining national income and economic stability. - To examine the impact of monetary factors, inflation, and unemployment on economic performance and policy formulation.								
COURSE CONTENT:								
Unit 1	Introduction to Managerial Economics and Fundamental Concepts	12	0	0	12	24		1,3,8,9,12
The themes of economics, scarcity and efficiency, three fundamental economic problems, society's capability, production possibility frontiers (PPF), productive efficiency vs economic efficiency, economic growth & stability, microeconomics and macroeconomics, the role of markets and government, and positive vs negative externalities. Activities: Quiz, Assignment / Role-play								
Unit 2	Market Behaviour and Production Analysis	12	0	0	12	24		8,9,12
Demand, Supply and Consumer Behaviour: Market, demand and supply, determinants, market equilibrium, elasticity of demand and supply, consumer behaviour, consumer equilibrium, approaches to consumer behaviour. Production, Costs and Firm-Level Analysis: Production, short-run and long-run production function, returns to scale, economics vs dis-economics of scale, analysis of cost, short-run and long-run cost function, relation between production and cost function, production pricing model, types of pricing model. Activities: Demand-Supply Simulation / Market Equilibrium Simulation								
Unit 3	Market Structures and Factor	12	0	0	12	24		8,9,12

	Pricing							
Product market – perfect and imperfect market – different market structures – firm's equilibrium and supply, Market efficiency, Economic costs of imperfect competition, factor market – land, labour and capital – demand and supply – factors of production, determination of factor price – interaction of product and factor market – general equilibrium and efficiency of competitive markets. Activities: Market Structure Mapping / Marketplace Simulation.								
Unit 4	Macroeconomic Performance Indicators	12	0	0	12	24		8,10,16
Macroeconomic aggregates, circular flow of macroeconomic activity, national income determination, aggregate demand and supply, macroeconomic equilibrium, components of aggregate demand and national income, multiplier effect, Demand side management, fiscal policy in theory. Activities: Quiz, Presentation / Case Study								
Unit 5	Monetary Economics and Supply-Side Perspectives	12	0	0	12	24		3,8,10,16
Short-run and long-run supply curve – Unemployment and its impact – Okun's law, Inflation and the impact – Reasons for inflation – Demand vs Supply factors – Inflation vs unemployment trade-off, Phillips curve – short-run and long-run – Supply side Policy and management- Money market – Demand and supply of money, money-market equilibrium and national income, the role of monetary policy. Activities: Group Discussion / Debate								
COURSE OUTCOMES:								
At the end of the course, the students will be able to: CO1: Analyse core economic concepts such as scarcity, efficiency, and production possibilities, and apply them to real-world economic situations. CO2: Evaluate consumer behaviour, production functions, and pricing models to support managerial decisions. CO3: Differentiate between market structures and assess how product and factor markets determine prices and efficiency. CO4: Interpret macroeconomic indicators and assess the role of fiscal policy in influencing aggregate demand and economic growth. CO5: Analyse the role of monetary policy, money market equilibrium, and supply-side measures in maintaining economic stability.								
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%								
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)								
TEXT BOOKS:								
1.	Ahuja H. L., “Managerial Economics”, Ninth edition, S. Chand Publishing, 2022.							
2.	Salvatore D, “Managerial Economics: Principles and Worldwide Applications”, Tenth edition, Oxford University Press, 2021.							
REFERENCES:								
1.	Gregory Mankiw, “Principles of Economics”, Tenth edition, Cengage Learning, 2024.							
2.	Richard Lipsey and Alec Chrystal, “Economics”, Fourteenth edition, Oxford University							

	Press, New Delhi, 2020.
3.	Karl E. Case & Ray C. Fair, “Principles of Economics”, Thirteenth Edition, Pearson Education Asia, New Delhi, 2020.
4.	Panneerselvam R., “Engineering economics”, Second edition, PHI Learning, 2023.
5.	Gupta G.S., “Managerial Economics”, Second edition, Tata McGraw-Hill, 2022.
6.	Samuelson, P.A. & Nordhaus, W.D., “Economics”, twenty-first edition, McGraw-Hill Education, 2021.
E resources/ E materials:	
1.	Coursera – Managerial Economics and Business Analysis Specialisation (University of Illinois). https://www.coursera.org/specializations/managerial-economics-business-analysis
2.	edX – Microeconomics Principles (IE Business School). https://www.edx.org/course/microeconomics-principles-2
3.	NPTEL – <i>Managerial Economics</i> (IIT Kanpur). https://nptel.ac.in/courses/110/105/110105132/
4.	SWAYAM – <i>Macroeconomic Theory and Policy</i> (IIT Madras). https://swayam.gov.in/nd1_noc21_ec11/preview
5.	Khan Academy – <i>Economics and Finance</i> (Micro & Macro Modules). https://www.khanacademy.org/economics-finance-domain
6.	RBI Bulletin and Monetary Policy Reports (https://rbi.org.in)

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO 3
CO1	3	3	2	2	3	2	1	3	2	1
CO2	3	3	2	2	3	2	2	3	3	2
CO3	2	3	2	2	3	2	2	3	2	2
CO4	2	3	1	2	3	2	2	2	3	2
CO5	2	3	1	2	3	2	2	2	3	2
Avg	2.4	3	1.6	2	3	2	1.8	2.6	2.8	1.8

MS26103	ACCOUNTING FOR MANAGEMENT	L	T	P	TW/ SL	Tota l	C	SDG
		45	15	0	60	120	4	12,16
COURSE OBJECTIVES:								
- To familiarise with the basic accounting concepts and processes used to find out the profit or loss of a business. - To analyse and interpret the financial position of the company using ratio analysis, the funds flow statement, and the cash flow statement. - To enable students to understand and apply various costing methods and techniques for effective cost control and decision-making. - To equip students with the knowledge of marginal costing techniques for effective profit planning and managerial decision-making. - To develop an understanding of budgetary control and computerized accounting systems for effective financial planning and compliance with accounting standards.								
COURSE CONTENT:								
Unit 1	Introduction to Financial Accounting and Reporting	9	3	0	12	24		8,10,13,16
Introduction to Financial, Cost and Management Accounting—Generally Accepted Accounting Principles—Double Entry System—Preparation of Journal, Ledger and Trial Balance Preparation of Final Accounts: Trading, Profit and Loss Account, and Balance Sheet – Reading the financial statements. Activities: 1. Provide a trial balance. Students prepare: - Trading Account - Profit & Loss Account - Balance Sheet 2. Conduct a role play of accountant, manager, and investor.								
Unit 2	Analysis of Financial Statements	9	3	0	12	24		8,10,12,17
Financial ratio analysis (problems), interpretation of ratio for financial decisions- Dupont Ratios, Comparative statements – common size statements. Cash flow (as per Accounting Standard 3) and funds flow statement analysis (problems), trend analysis. Activities: Group discussion; prepare the funds flow statement and comment on the financial position of the company.								
Unit 3	Cost Accounting Systems	9	3	0	12	24		1,8,9,12,13

Cost accounts, classification of costs, job cost sheet, job order costing, process costing (excluding interdepartmental transfers and equivalent production), activity-based costing, and target costing.

Activities:

- Provide relevant data and have students prepare a job cost sheet.
- Give a production example and instruct students to identify the stages involved in process cost

Unit 4	Marginal Costing and Variance Analysis	9	3	0	12	24		8,9,12,13
---------------	---	----------	----------	----------	-----------	-----------	--	------------------

Marginal Costing and Profit Planning – Cost, Volume, Profit Analysis – Break Even Analysis- Exploring new markets – add or drop products – expand or contract, make or buy. Standard costing and variance analysis.

Activities:

- Engage students in analysing how profit changes with an increase in sales.
- Provide standard and actual cost data and have students calculate the variances.

Unit 5	Budgeting and Accounting in Computerised Environment	9	3	0	12	24	1,8,9,10,13
---------------	---	----------	----------	----------	-----------	-----------	--------------------

Budgetary Control – Sales, Production, Cash, Fixed and Flexible Budget, Terms Used in Computerised Accounting – Significance of Computerised Accounting System, Pre-packaged Accounting Software – Accounting Standards and Accounting Disclosure Practices in India.

Activities: To prepare a fixed budget based on given figures, Conduct a discussion on the importance of computerised accounting systems.

COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1: Explain the basic concepts of the accounting system and prepare final accounts.

CO2: Interpret financial performance by applying ratio analysis and preparing funds flow and cash flow statements.

C03: Describe the principles of management accounting and apply fundamental cost accounting techniques.

CO4: Analyse marginal costing statements and variance analysis to evaluate managerial and business performance.

C05: Prepare and assess different types of budgets and use computerised accounting systems in accordance with accounting standards and disclosure norms.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

REFERENCES:

1.	M.Y. Khan & P.K. Jain, "Management Accounting", Tata McGraw Hill, Eighth edition, 2021
2.	T.S. Reddy and A. Murthy, "Financial Accounting", Margham Publications, 2021.
3.	C. A. Sharad, K. Maheshwari and Suneel K. Maheshwari, "Accounting for Management", Fifth Edition, S. Chand and Company Ltd., New Delhi, 2022.
4.	Peter Atrill, Eddie McLaney, and E. J. McLaney Pearson, "Management Accounting for Decision Makers", Pearson Publication, 2021.
5.	R. Narayanaswamy, "Financial Accounting", A Managerial Perspective, Seventh Edition, PHI Learning Pvt. Ltd., New Delhi, 2022.

E resources/ E materials:

1.	ICAI – Accounting Standards and Guidance Notes (https://www.icaai.org)
2.	IFRS Foundation (https://www.ifrs.org)
3.	Website: accountingcoach.com
4	Website: accountingformanagement.org

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course out Come	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	1	2	2	2	2	3	3	2
CO2	2	2	-	2	1	1	2	3	3	3
CO3	3	2	-	1	2	1	1	3	2	2
CO4	2	3	1	2	2	1	2	2	3	2
CO5	3	2	1	2	2	2	2	3	2	2
Avg	2.6	2.2	0.6	1.8	1.8	1.4	1.8	2.8	2.6	2.2

MS26104	LEGAL ASPECTS OF BUSINESS	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	5,8,16

COURSE OBJECTIVES:

- To familiarize the students with the principles of law that are essential to manage complex business transactions.
- To get a basic understanding related to the Sale of Goods Act and Negotiable Instruments Act.
- To get knowledge about the Companies Act and industrial laws.
- To understand the basic aspects of corporate tax planning and good and services tax.
- Create awareness about consumer rights, cyber laws, and intellectual property rights to help students manage modern business challenges in the digital era.

COURSE CONTENT:

Unit 1	The Indian Contract Act 1872	9	3	0	12	24		5,16,17
Definition of contract, essential elements, and types of a contract, Formation of a contract, performance of contracts, breach of contract and its remedies, quasi-contracts – Contract of Agency: Nature of agency, creation and types of agents, authority and liability of agent and principal: rights and duties of principal and agents, termination of agency. Activities: Quiz, Assignment/Contract Formation, Role Play.								
Unit 2	The Sale of Goods Act 1930	9	3	0	12	24		8,12,16
THE SALE OF GOODS ACT 1930: Nature of sales contracts, documents of title, risk of loss, guarantees and warranties, performance of sales contracts, conditional sales and rights of an unpaid seller – Consumer Protection Act 2019: Consumer rights, procedures for consumer grievance redressal, types of consumer redressal machinery and forums. Activities: Mock Buying & Selling Activity / Drafting a Sale Agreement.								
Unit 3	Company Law and Labour Legislation	9	3	0	12	24		5,8,9
COMPANY ACT 1956, 2013 & 2025: Major principles – Nature and types of companies, formation, memorandum and articles of association, prospectus, powers, duties and liabilities of directors, winding up of companies, and corporate governance – labour legislation. Activities: Company Formation Simulation / Drafting Legal Documents.								
Unit 4	Corporate Tax and Goods & Services Tax (GST):	9	3	0	12	24		8,9,12
Corporate Tax Planning, Corporate Taxes and Overview of Latest Developments in Indirect Tax Laws Relating to GST: An introduction including constitutional aspects, levy and collection of CGST & IGST, basic concept of time and value of supply, input tax credit, computation of GST liability, registration, tax invoice, credit & debit notes, electronic waybill, Returns, payment of taxes including reverse charge. Activities: GST Invoice Preparation / Corporate Tax Calculation.								
Unit 5	Intellectual Property Rights (IPR) and Cyber Laws	9	3	0	12	24		4,8,16
Cyber-crimes, the IT Act 2000 and 2002, cyber laws, the introduction of IPR (Intellectual Property Laws) – Introduction, Legal Aspects of Patents, Filing of Patent Applications, Rights from Patents, Infringement of Patents, Copyright and its Ownership, Infringement of Copyright, Civil Remedies for Infringement – Copyrights, Trademarks, Patent Act, and Right to Information Act – 2005. Activities: Patent & Trademark Identification Activity / Create Your Own Trademark.								
COURSE OUTCOMES:								
At the end of the course, the students will be able to: CO1: Evaluate the fundamental legal principles governing the formation and enforcement of various contracts and commercial laws in the business environment. CO2: Analyse the legal provisions relating to guarantees, warranties, and the performance of sales contracts in commercial transactions. CO3: Interpret laws governing the industrial environment and their impact on organisational practices. CO4: Evaluate the impact of corporate tax and GST frameworks on organisational financial strategies. CO5: Examine the nature and types of cyber-crimes and analyse the legal framework governing them under the Information Technology Act and its amendments.								

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%	
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)	
TEXT BOOKS:	
1.	Kapoor, N. D., “Elements of mercantile law”, Thirty-ninth edition, Sultan Chand and Company, 2024.
2.	Goel, P. K., "Business Law for Managers", Second edition, Biztantra Publishers, 2023–2024.
REFERENCES:	
1.	Pathak, A., “Legal aspects of business”, Eighth edition, McGraw-Hill Education, 2022.
2.	M. K. Nabi, “Legal Aspects of Business”, Taxmann, 2022.
3.	Singh, Avtar, “Mercantile Law”, Eastern Book Company, 2021.
4.	Padhi, P. K., "Legal Aspects of Business", Second edition, PHI Learning, 2020.
5.	Taxmann, “GST Manual with GST Law Guide & Digest of Landmark Rulings”, Twelfth edition, Taxmann Publications, 2023.
E resources/ E materials:	
1.	Ministry of Corporate Affairs https://www.mca.gov.in/content/mca/global/en/home.html
2.	GST Portal: https://www.gst.gov.in/
3.	WIPO Intellectual Property Resources: https://www.wipo.int/portal/en/index.html
4.	<i>NPTEL-Legal and Regulatory Compliance for Small and Medium Business Enterprises, IIT Kharagpur</i>
5.	Coursera – Legal Aspects of Entrepreneurship, University of Maryland https://www.coursera.org/specializations/legal-aspects-of-entrepreneurship

Mapping of Course Outcomes to Programme Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO 3
CO1	3	1	1	1	2	2	2	2	2	3
CO2	2	1	1	1	1	2	2	2	2	3
CO3	2	2	2	3	1	2	1	3	3	3
CO4	2	1	-	3	2	1	1	3	3	3
CO5	2	2	2	3	2	2	2	3	2	3
Avg	2.2	1.4	1.2	2.2	1.6	1.8	1.6	2.6	2.4	3

technology adoption models, IT project management, and the role of information systems in business analytics and decision science.

Activities: Smart Environments Mapping / IoT Home Blueprint

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Demonstrate knowledge of information systems, design, databases, security, and emerging technologies in strategic business use.

CO2: Interpret information systems, development methods, databases, emerging technologies, and IT governance for effective managerial decisions.

CO3: Apply system design, database management, security, and emerging technologies to solve business problems and support strategic decisions.

CO4: Evaluate information systems, design models, databases, security, and emerging technologies for their impact on business strategy, transformation, ethics, and governance.

CO5: Develop strategic information management solutions integrating systems, databases, security, and emerging technologies to achieve business objectives.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

- | | |
|----|---|
| 1. | Dr Ramkumar A, "Information Management", Akinik Publications, 2025. |
| 2. | Samrat Bose, "Management Information System", Taurean Publications, 2025. |

REFERENCES:

- | | |
|----|--|
| 1. | Kenneth C. Laudon and Jane P. Laudon, "Management Information Systems", Seventeenth edition, Pearson, 2022. |
| 2. | Rahul M Raut, "Management of Information System", Notion Press, 2023. |
| 3. | Laudon K. C., Turban E., & Traver, C. G., "E commerce: Business, technology, Society", Seventeenth edition, Pearson, 2023. |
| 4. | Loshin, D., "Big Data Analytics", Second Edition, Elsevier, 2021. |
| 5. | Waman S Jawadekar, Sanjiva Shankar Dubey, "Management Information System: Text and Cases", Sixth edition, McGraw Hill, 2020. |

E resources/ E materials:

- | | |
|----|--|
| 1. | Coursera: Introduction to Information Systems for Business Specialisation:
https://www.coursera.org/specializations/introduction-to-information-systems-for-business |
| 2. | DBMS: www.mongodb.com |
| 3. | Information Systems, Security, and Technological Trends:
https://open.oclearnok.org/informationssystem |

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO 3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
CO1	2	3	2	3	3	1	3	2	2	1
CO2	2	3	1	2	2	2	3	3	2	2
CO3	3	2	2	3	2	2	3	3	3	2
CO4	2	3	2	2	3	2	2	2	3	3
CO5	3	3	1	3	2	2	3	3	3	3
Avg	2.4	2.8	1.6	2.6	2.4	1.8	2.8	2.6	2.6	2.2

IP26C09	INDUCTION PROGRAMME	L	T	P	TW/SL	Total	C	SDG
		30	15	0	45	90	0	4,8,16

COURSE OBJECTIVES:

- To enable students to develop essential managerial skills such as time management, critical thinking, problem-solving, professional etiquette, and interpersonal effectiveness for enhanced personal and professional effectiveness.
- To introduce fundamental concepts of communication and communication competencies through the application of these concepts in academic and business contexts.
- To strengthen students' analytical and mathematics skills that build a strong foundational understanding for students.
- To familiarise students with the institutional environment, departmental structure, and available academic resources.
- To enable students to understand the core principles of Indian ethos and ethical values and apply them in managerial situations for responsible and value-based decision-making.

COURSE CONTENT:

Unit 1	Essential Managerial and Professional Skills	6	3	0	9	18		4
--------	--	---	---	---	---	----	--	---

Time management and goal setting, critical thinking and problem-solving, decision-making techniques, creativity and innovation, stress management, professional etiquette and behaviour, interpersonal skills, teamwork and collaboration, conflict management, leadership basics, workplace ethics and professionalism.

Activities: Goal setting / Time management exercise, case analysis / role-based scenario activities.

Unit 2	Business Communication Essentials	6	3	0	9	18		8
Principles of communication, barriers, non-verbal communication, business letters, memos, notices, email, resume writing, and presentation skills. Activities: Resume drafting, email writing tasks, mock interview.								
Unit 3	Business Mathematics Foundations	6	3	0	9	18		4
Basic algebra, percentages, profit & loss, simple interest, compound interest, matrices (basics), statistical measures. Activities: Business math problem solving, data interpretation.								
Unit 4	Department Visit and Programme Familiarisation	6	3	0	9	18		4
Introduction to department vision, mission, and facilities - Interaction with faculty members - Lab visits and infrastructure overview - Curriculum overview and career opportunities - Interaction with senior students. Talks by industry experts and academicians - Career guidance and motivation -Emerging trends in management - Entrepreneurship awareness Activities: Students visit labs and listen to expert talks to understand facilities, careers, and professional ethics.								
Unit 5	Indian Ethos and Ethics in Management	6	3	0	9	18		16
Introduction to Indian Ethos – Indian Learning Systems and Holistic Growth - Business Ethics in Contemporary Organisations - Individual Ethics and Moral Development - Professional responsibility CSR, Sustainability & Environmental, Social, and Governance Practices - Cyber Ethics, IPR & Global Ethical Challenges. Activities: Case analysis on value-based Indian companies.								
COURSE OUTCOMES:								
At the end of the course, the students will be able to: CO1: Demonstrate effective time management, apply critical thinking and problem-solving skills, and exhibit professional etiquette and workplace behaviour in managerial contexts. CO2: Demonstrate foundational communication skills. CO3: Solve elementary business mathematical problems. CO4: Analyse and utilise institutional facilities and departmental resources to support academic learning and career planning. CO5: Apply the core principles of Indian ethos to managerial contexts and interpret their relevance in modern organisational practices.								
Weightage: Continuous Assessment 100%								
Assessment Methodology: Activities (70%), Quizzes (30%)								

TEXT BOOKS:	
1.	Prasad R. & Kumar A., “Foundations of Management and Business Skills”, Second edition, Sage Publications India, 2022.
2.	Stephen P. Robbins & Mary Coulter, “Management”, Fifteenth Edition, Pearson Education, 2022.
REFERENCES:	
1	Koontz, H., & Weihrich, H., “Essentials of Management", Tenth edition, McGraw-Hill Education, 2021.
2	Bovee, C. L., & Thill, J. V., “Business Communication Today”, Fifteenth edition, Pearson Education, 2021.
3	Sinha, P. K., "Business Mathematics and Statistics”, Third edition, Pearson Education, 2023.
4	Tripathi P.C. & Reddy P.N., “Principles of Management”, Seventh Edition, McGraw-Hill Education India, 2021.
4	Bhavani B. & Chakraborty S.K., “Indian Ethos and Values for Managers”, Third edition, Himalaya Publishing House 2021.
5	Sharma A., “Indian Ethos and Business Ethics”, Second edition, PHI Learning India, 2022.
E resources/ E materials:	
1.	Coursera – “Foundations of Management” (University of London), https://www.coursera.org
2.	edX – “Communication Skills and Teamwork” (RIT), https://www.edx.org
3.	SWAYAM – “Soft Skills and Personality Development”, https://swayam.gov.in
4.	NPTEL – "Organisational Behaviour” (IITs), https://nptel.ac.in

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	3	3	2	1	2	1	2	1	2
CO2	1	2	3	1	1	1	1	1	1	2
CO3	3	2	1	1	1	1	1	3	2	1
CO4	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	3	2	3	1	1	1	3
Avg	1.6	1.8	1.8	1.6	1.3	1.6	1	1.6	1.2	1.8

NON-FUNCTIONAL ELECTIVES (NFE)

MS26121	ENTREPRENEURIAL DEVELOPMENT	L	T	P	TW/SL	Total	C	SDG
		45	0	0	45	90	3	1,5,8, 9,10
COURSE OBJECTIVES:								
- To display the skills and characteristics of successful entrepreneurs. - To examine the entrepreneurial environment. - To enable students to prepare a feasible business plan. - To prepare students to analyse the resource requirements and plan the launch of a new business. - To develop students' ability to monitor and evaluate the performance of a small business.								
COURSE CONTENT:								
Unit 1	Entrepreneurial Competence	9	0	0	9	18		8,9
Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality – Characteristics of Successful Entrepreneurs – Knowledge and Skills of an Entrepreneur.								
Activities: Identify the Entrepreneur – Characteristics of Successful Entrepreneurs – Role Play / Assignment								
Unit 2	Entrepreneurial Environment	9	0	0	9	18		1,8,9
Business Environment—Role of Family and Society—Entrepreneurship Development Training and Other Support Organisational Services—Central and State Government Industrial Policies and Regulations.								
Activities: Business Environment Scanning – PESTEL Group / SWOT Analysis								
Unit 3	BUSINESS PLAN PREPARATION	9	0	0	9	18		8,10
Sources of Product for Business - Pre Feasibility Study - Criteria for Selection of Product - Ownership - Capital Budgeting - Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.								
Activities: Product Idea Generation / Business Plan Generation								
Unit 4	Launching of Small Business	9	0	0	9	18		1,9
Finance and Human Resource Mobilisation – Operations Planning – Market and Channel Selection – Growth Strategies – Product Launching – Incubation, Angel Funds, Venture Capital, Start-ups.								
Activities: Assignment								
Unit 5	Management of Small Business	9		0	9	18		5,10
Monitoring and Evaluation of Business – Business Sickness – Prevention and Rehabilitation of Business Units – Effective Management of Small Business – Case Studies.								
Activities: Interviewing a Successful Entrepreneur								
COURSE OUTCOMES:								
At the end of the course, the students will be able to:								

CO1: Determining the essential knowledge, skills, and competencies required to successfully run a business. CO2: Analyse the entrepreneurial environment and make informed decisions for business development. CO3: Conduct preliminary market surveys and develop a feasible business plan for launching a new venture. CO4: Examining the concepts of incubation, startup processes, and project launch mechanisms in business. CO5: Evaluate small business performance and propose measures for rehabilitation and growth.	
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%	
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)	
TEXT BOOKS:	
1.	S. S. Khanka, "Entrepreneurial Development", Fourth edition, S. Chand & Sons, 2024.
2.	Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, "Entrepreneurship", Eleventh edition, McGraw Hill, 2020
REFERENCES:	
1.	S S Khanka, "Women Entrepreneurship", Fifth edition, S. Chand and Company Limited, 2025.
2.	Dr. Vasant Desai, "Small Scale Industries and Entrepreneurship", Ninth Edition, HPH, 2023.
3.	Sangeeta Sharma, "Entrepreneurship Development", Second Edition, PHI Learning, 2025.
4.	Donald F. Kuratko, Entrepreneurship: Theory, Process, Practice, Twelfth Edition, Cengage Learning, 2023.
E resources/ E materials:	
1.	NPTELPrep — Practice / Materials for Entrepreneurship Essentials: https://www.nptelprep.in/courses/127105007
2.	"Entrepreneurship Development" (Awareness booklet) — AnyFlip
3.	Research Paper – "Perceptions of Entrepreneurship Among Graduate Students" Open-access paper on arXiv. Useful for understanding challenges, opportunity recognition, and traits.

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	3	3	2	1	2	1	3	1	2
CO2	3	3	2	2	2	2	2	2	3	2

CO3	3	2	2	1	2	3	3	3	3	2
CO4	2	2	3	3	1	2	2	2	2	3
CO5	1	2	1	2	2	3	3	3	3	3
Avg	2.2	2.4	2.2	2	1.6	2.4	2.2	2.6	2.4	2.4

MS26122	EVENT MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	0	0	45	90	3	1,5,8,9,10

COURSE OBJECTIVES:

- To provide a comprehensive understanding of the principles, practices, and professional standards in event management.
- To help students learn how to plan and design events creatively and effectively.
- To teach students the strategies and tools used to market events and manage sponsorships effectively.
- To develop students' ability to plan, organise, and manage event venues, logistics, and on-site operations effectively.
- To familiarise students with risk management, safety standards, and legal aspects essential for successful event execution.

COURSE CONTENT:

Unit 1	Foundations of Event Management	9	0	0	9	18		1,5
---------------	--	----------	----------	----------	----------	-----------	--	------------

History and evolution of event management – Types of events – MICE (Meetings, Incentives, Conferences, and Exhibitions) – Event industry structure – Event management as a profession – Perspectives: Government, Corporate, Community – Professional ethics and codes of conduct.

Activities: Preparing event plans – a team-building communication exercise.

Unit 2	Event Design and Conceptualisation	9	0	0	9	18		1,8
---------------	---	----------	----------	----------	----------	-----------	--	------------

Event ideation – Roles of host, sponsor, media, participants, spectators, and crew – Designing the event concept – Theme and content development – Setting event objectives – Functional sheets – Timeline planning – Budget preparation – Budget checklist.

Activities: Budget creation, audio-visual class presentation / agenda preparation assignments.

Unit 3	Event Marketing and Sponsorship	9	0	0	9	18		8,9
---------------	--	----------	----------	----------	----------	-----------	--	------------

Strategic event marketing – Pricing decisions – Communication channels – Integrated marketing communication – Sponsorship planning and management – Evaluation of sponsorship effectiveness – Role of digital marketing in events.

Activities: Field exercise, group exercise / role plays / assigning in-house committee responsibilities.

Unit 4	Operations and Logistics	9	0	0	9	18		5,9
---------------	---------------------------------	----------	----------	----------	----------	-----------	--	------------

Venue and site selection – Infrastructure requirements: AV, lighting, catering, stage, décor – Protocols and guest management – Freelance event operations – Event day logistics – On-site execution and supply coordination – Managing children, media, and entertainment – Vendor management.

Activities: Exercise on venue selection, vendor coordination / technical requirements / transportation-related assignments / on-site visits.

Unit 5	Risk, Safety and Event Evaluation	9	0	0	9	18		1,10
---------------	--	----------	----------	----------	----------	-----------	--	-------------

Risk identification and assessment – Safety planning – Food safety – Fire and structural safety – Crowd and traffic control – Waste and sanitation – Post-event evaluation – Customer satisfaction – Service quality – Measuring event impact – Legal and regulatory aspects.

Activities: Exercise on post-event analysis / Experimental group exercise.

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Demonstrate proficiency in planning, coordinating, and executing various types of events.

CO2: Develop a comprehensive budget and financial management for event marketing strategies utilising both traditional and digital channels.

CO3: Acquire knowledge and understanding about developing and selling sponsorship proposals successfully for various types of events.

CO4: Exhibit proficiency in vendor selection, negotiation, and management for successful event execution.

CO5: Analyse the potential risks and risk factors to ensure event safety, and evaluate overall event performance and compliance.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Dr. Sewa Singh Bajwa, “Foundations of Event Management”, Kalpana Prakashan Publications, 2025.
2.	Dr. Savita Sharma & Dr. Sidharth Srivastava, "Event Planning and Management", The Hospitality Press, 2024.

REFERENCES:

1.	Lynn Van der Wagen & Louise H., “Event Management for Tourism, Cultural Business & Sporting Events”, Sixth edition, Pearson, 2023
2.	Julia Rutherford Silvers, “Professional Event Coordination, third edition, Wiley, 2022
3.	Shannon Kilkenny, “The Complete Guide to Successful Event Planning”, Third edition, Atlantic Publishing, 2021
4.	Judy Allen, “Event Planning (includes expanded ethics and social media modules)”, Fourth edition, Wiley, Canada, 2020
5.	John Beech, Sebastian Kaiser & Robert Kaspar, “The Business of Events Management”, Second edition, Pearson, 2020.

E resources/ E materials:	
1.	Swayam: Basics of Event Management (BHC-011) https://onlinecourses.swayam2.ac.in/e-learning/preview/nou20_ge01
2.	LPU University, Punjab, India – Event Management – DMGT-304 https://ebooks.lpude.in/management/bba/term_5/DMGT304_EVENT_MANAGEMENT.pdf
3.	Oxford Home Study: https://www.oxfordhomestudy.com/courses/event-management-courses-online/event-planning-certification-online
4	Udemy.inc. https://www.udemy.com/topic/event-planning/
5	Alison.com https://alison.com/tag/event-planning

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
CO1	3	2	2	3	2	2	2	3	2	2
CO2	1	2	2	2	1	1	1	2	3	1
CO3	2	3	1	2	3	2	-	1	3	1
CO4	2	2	3	1	1	2	3	2	2	2
CO5	3	3	2	3	2	1	-	2	1	3
Avg	2.2	2.4	2	2.2	1.8	1.6	1.2	2	2.2	1.8

MS26123	RURAL COMMUNITY ENGAGEMENT	L	T	P	T W/ SL	Total	C	SDG
		30	15	0	45	90	3	1,3, 5, 8,9,10,12, 17

COURSE OBJECTIVES:

- Explain the fundamental concepts, principles, and approaches of rural development, including participatory development, community empowerment, and sustainable livelihoods.
- Analyse the socio-economic, cultural, and environmental characteristics of rural communities and identify key factors influencing rural change and development.
- To identify and prioritise problems in rural communities across four dimensions – agricultural, social, economic, and communal – using evidence-based approaches.
- Promote inclusive and gender-sensitive rural development strategies, ensuring participation among marginalised and vulnerable groups.
- Develop ethical and responsible leadership competencies to support equitable and community-driven rural transformation.

COURSE CONTENT:

Unit 1	Community Asset Mapping Exercise	9	0	0	9	18		1, 3, 5, 8, 17
---------------	---	----------	----------	----------	----------	-----------	--	-----------------------

Introduction to Rural Development: Models and approaches: community development, integrated rural development, sustainable livelihoods, participatory rural development Sketching the Rural Community/Village: Homes, Farms, Water Points, Schools, Churches/Mosques, Markets, Roads and Natural

Activities: Field survey of students' own villages

Unit 2	Community Needs Assessment & Development Planning	6	3	0	9	18		1, 3, 8, 10, 12, 17
---------------	--	----------	----------	----------	----------	-----------	--	----------------------------

Identifying Priority Problems: Agriculture, Social, Economical, and Communal Participatory Rural Appraisal (PRA) tools: mapping, transects, social mapping, seasonality, need assessment & community mobilisation, social capital, leadership, conflict management, designing community-based projects, monitoring, evaluation & impact assessment methods.

Activities: Worksheet—Community Action Planning/ Preparing a community work diary.

Unit 3	Rural Development Programmes & Institutions	6	3	0	9	18		1,3, 9, 10, 12,17
---------------	--	----------	----------	----------	----------	-----------	--	--------------------------

National rural development policy framework, key schemes: MGNREGA, NRLM, PMGSY, PMAY-G, Jal Jeevan Mission, Digital India (rural), rural banking, financial inclusion, MFIs, SHGs, cooperatives & producer companies. Role of NGOs, CSR, and international agencies.

Activities: Group presentation: analysis of a rural scheme; guest lecture by NGO/SHG leader.

Unit 4	Community Engagement & Participatory Approaches	6	3	0	9	18		1, 3, 8,9, 10, 17
---------------	--	----------	----------	----------	----------	-----------	--	--------------------------

Participatory Rural Appraisal (PRA) tools: Mapping, transects, social mapping, seasonality, need assessment & community mobilisation, social capital, leadership, conflict management, designing community-based projects, monitoring, evaluation & impact assessment methods.

Activities: Survey-based mini project.

Unit 5	Rural Entrepreneurship & Sustainable Development	3	6	0	9	18		1, 3, 8, 9, 10, 17
---------------	---	----------	----------	----------	----------	-----------	--	---------------------------

Agri-business models, FPOs, rural supply chains, Social entrepreneurship in rural development, ICT and digital innovations for rural transformation, Climate resilience, natural resource management, sustainable livelihoods.

Activities: Feasibility Study on Rural start-ups.

COURSE OUTCOMES:

CO1: Analyse the socio-economic, cultural, and governance structures of rural communities to identify critical development issues.

CO2: Apply participatory tools and methods to diagnose community needs and priorities.

CO3: Design community-based rural development interventions addressing challenges in sectors such as health, education, agriculture, livelihoods, and gender equity.

CO4: Integrate digital technologies, innovative practices, and sustainable development principles to enhance rural resilience and community well-being.

CO5: Demonstrate effective communication, facilitation, and teamwork skills required for mobilising community participation and supporting grassroots initiatives.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Dr Parvez Shashid Ali, “Rural Development and Social Justice”, Book Rivers Publisher, 2023.
2.	Kaushal Kumar Sharma, Arun Kumar Tripathi, “Rural Development: A Holistic Perspective”, Raj Publications, 2024.

REFERENCES:

1.	Rhonda Phillips, Robert H. Pittman, “An Introduction to Community Development”, Third edition, Imprint Routledge, New York, 2026.
2.	Manohar Pawar, “ Social and Community Development Practice ”, Atlantic Publishers & Distributors (P) Ltd, 2024.
3.	Nishant Jha, “Introduction to Community Development”, Discovery Publishing House, 2025.
4.	Adele Orosz, Inside the Sustainable Development Goals – From Fighting Poverty to Saving the World, Routledge Publisher, 2025.
5.	Alan Twelvetrees and Russell Todd, “ Community Development, Social Action and Social Planning: A Practical Guide ”, Sixth edition, Policy Press, 2024.
5.	Margaret Ledwith, “ Community Development ” A Critical and Radical Approach”, Third edition, Policy Press, 2020.

E resources/ E materials:

1.	https://feedly.com/i/top/community-development-blogs , Best Community Development Blogs and Websites
2.	https://www.ccdindia.org/ , Centre for Community Development
3.	https://icdss.1ngo.in/ , India Community Development Service Society (ICDSS)

4	https://www.dlffoundation.in/community-development-programme.php , Community Development Programme: Empowering rural communities
5.	https://sagarmala.gov.in/project/coastal-community-development , Coastal Community Development, Ministry of Ports, Shipping and Waterways
6.	https://www.communitycommons.org/entities/c51b04d5-6adc-40ee-b9dc-d7639d0bc6b2 , Publications on Community Development

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
CO1	3	2	2	3	2	2	2	3	2	2
CO2	1	2	2	2	1	1	1	2	3	1
CO3	2	3	1	2	3	2	-	1	3	1
CO4	2	2	3	1	1	2	3	2	2	2
CO5	3	3	2	3	2	1	-	2	1	3
Avg	2.2	2.4	2	2.2	1.8	1.6	1.2	2	2.2	1.8

MS26106	BUSINESS APPLICATIONS LABORATORY	L	T	P	TW/S L	Total	C	SDG
		0	0	60	60	120	2	1, 2, 3, 4, 5, 8, 9, 10, 11, 12,17

COURSE OBJECTIVES:

- To enable students to apply descriptive statistical techniques for business decision-making.
- To provide hands-on experience in data analysis for effective business modelling.
- To familiarise students with spreadsheet software and essential data analysis tools.
- To develop the ability to record and manage accounting entries for various business transactions.
- To equip students with the skills required to prepare and finalise accounts using accounting software

LIST OF EXPERIMENTS

1.	Module 1: Ms Excel
	Spreadsheet Analytics using MS Excel
2.	Data Visualisation
3.	Descriptive Analysis with MS Excel Tools
4.	Module 2: Statistical Analysis using SPSS
	Overview of statistical analysis in business research

5.	Basic Functionalities of SPSS
6.	SPSS Graphical Representation
7.	Parametric Statistical Tests
8.	Non-Parametric Statistical Tests
9.	Module 3: Computerized Accounting Management
	Foundation Setup through Company Creation in Tally
10.	Creation of GST-compliant invoices
11.	Smart Structuring of Groups and Ledgers
12.	Optimising Inventory Management
13.	Payroll Administration and Employee Compensation Management
14.	Reports using the Tally financial accounting package.
COURSE OUTCOMES:	
At the end of the course, the students will be able to: CO1: Apply MS-Excel/SPSS functions in performing data analysis tasks. CO2: Analyse the Data using Descriptive Statistics. CO3: Apply various parametric and non-parametric tests using SPSS. CO4: Construct accounting entries for business transactions. CO5: Develop the final accounts using accounting software.	
Weightage: Continuous Assessment: 60%, End Semester Examinations: 40%	
Assessment Methodology: Evaluation of Student's Work, Observation, Record, Activities, etc. (75%) and Model Practical Examination (25%)	
TEXT BOOKS:	
1.	Dr. Lalit Prasad, Dr. Priyanka Mishra, "DATA ANALYSIS USING SPSS: Text and Cases", Nirali Prakashan, 2022.
2.	Tally Education Pvt. Ltd., "Tally Essential Level 1", Sahaj Enterprises, 2021
REFERENCES:	
1.	Wayne Winston, "Microsoft Excel Data Analysis and Business Modelling (Office 2021 and Microsoft 365)", Seventh Edition, 2021.
2.	Darren George, Paul Mallery, "IBM SPSS Statistics 27 Step by Step: A Simple Guide and Reference", Seventeenth edition, Taylor & Francis Books India Pvt. Ltd, 2022.
3.	Paul McFedries, "Microsoft Excel Formulas and Functions (Office 2021 and Microsoft 365)", 2023.
4.	Tally Solutions Pvt, "Tally Essential Level 2 (Release 4.1)", 2024.
5.	Tally Solutions Pvt. "Tally Essential Level 3 Release 4.0 & 5.0" Standard Edition, Sahaj Enterprises, 2024.

Persuasive communication techniques and opinion expression, Group discussion basics — rules, roles, and etiquette, Story-building fundamentals and narrative structure

Activities

1. Professional Self-Introduction and Networking Challenge
2. Who Gets the Heart? – Ethical Decision-Making Group Discussion
3. Story Building and Group Discussion Activity

Unit 2	CREATIVE COMMUNICATION & PUBLIC SPEAKING			12	12	24		4,16
--------	---	--	--	----	----	----	--	------

Story Mason activity — imagination and verbal expression, Listening and story continuation skills, Creativity and narrative development techniques, Argument construction and debate structure, Presenting viewpoints effectively in a debate format, Rebuttal skills — countering arguments with evidence, Public speaking fundamentals — voice, posture, and eye contact, Confidence building through public speaking practice, Active listening in competitive communication contexts, Evidence-based communication and fact usage, Theatrix activity — role play and situational communication, Voice modulation and facial expression techniques, Non-verbal communication cues and body language, Emotional expression and empathy in communication

Activities

1. Story Mason: Collaborative Storytelling Challenge
2. Structured Debate and Public Speaking Competition
3. Theatrix: Role Play and Non-Verbal Communication Activity

Unit 3	SPONTANEOUS SPEAKING & PITCHING SKILLS			12	12	24		5,8
--------	---	--	--	----	----	----	--	-----

Extempore speaking — thinking on the spot and quick structuring, Fluency development and articulation exercises, Vocabulary building for impromptu communication, Structuring a speech in 60 seconds — introduction, body, conclusion, Confidence and delivery in unplanned speaking, Tourism Pitch activity — pitching ideas persuasively, Storytelling as a tool for audience engagement, Clarity of message and logical flow in a pitch, Handling audience questions and responding confidently, Presentation skills — visual and verbal alignment, team vs. wild activity — collaboration and strategy building, leadership and delegation in group challenges, Conflict resolution and decision-making under pressure, Problem-solving through teamwork and shared goals

Activities

1. Extempore Speaking and Impromptu Communication Challenge
2. Tourism Pitch: Presentation and Audience Engagement
3. Team vs. Wild: Leadership and Collaborative Problem-Solving Activity

Unit 4	PROFESSIONAL COMMUNICATION & INFORMATION SKILLS			12	12	24		4,8
--------	--	--	--	----	----	----	--	-----

Reporter activity — interviewing and questioning techniques, Active listening for information gathering and summarising, Reporting and professional information communication, Picture Connector activity — visual interpretation and pattern recognition, Connecting ideas through structured storytelling, Creative reasoning and observation skills, Group discussion techniques — initiating, sustaining, and concluding, Expressing opinions and agreeing or disagreeing professionally, Building on others' ideas in collaborative discussions, Teamwork dynamics in group communication tasks, Resume basics — sections, formatting, and content, Professional profile

building and personal branding, elevator pitch construction and delivery, communicating strengths, achievements, and career goals

Activities

1. Reporter: Interview and Professional Communication Activity
2. Picture Connector: Visual Reasoning and Group Discussion Challenge
3. Resume Building and Elevator Pitch Presentation

Unit 5	CAREER READINESS & FINAL ASSESSMENT			12	12	24		8,16
--------	--	--	--	----	----	----	--	------

Interview preparation strategies and research techniques, Common HR questions and structured response techniques, the STAR method — Situation, Task, Action, Result framework, Answering difficult and tricky interview questions confidently, Body language and professional etiquette in interviews, Technical and HR interview differences and preparation, Mock interview practice and peer feedback sessions, Professional email writing — structure, tone, and formatting, Formal and informal workplace conversation skills, Meeting etiquette and giving or receiving constructive feedback, presentation planning and slide design principles, Public speaking with storytelling and handling Q&A, confidence building through individual performance review, Personal feedback and reflection on communication growth, Final communication activity and individual performance evaluation

Activities:

1. Mock HR and Technical Interview Practice
2. Professional Email Writing and Workplace Communication Workshop
3. Final Presentation and Communication Skills Assessment

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Remember and reproduce key elements of self-introduction, professional etiquette, and structured communication in formal and informal contexts.

CO2: Understand and explain the principles of critical thinking, logical reasoning, group discussion techniques, and persuasive communication strategies.

CO3: Apply storytelling, role-play, extempore, and pitching techniques to demonstrate verbal fluency, creativity, and audience engagement in real-life scenarios.

CO4: Analyse communication challenges in team settings, interviews, and workplace environments to identify strengths, gaps, and areas for improvement.

CO5: Evaluate and create professional communication artefacts such as resumes, email drafts, interview responses, and presentations reflecting career readiness and personal branding.

Weightage: Continuous Assessment: 100%

Assessment Methodology:

Assessment Type	Weightage	Marks	Mode of Evaluation
Continuous Skill Assessment (CSA)	60%	60	Continuous, rubric-based across all five units
Terminal Skill Assessment (TSA)	40%	40	Weekly & skill practical + personal interview + portfolio viva
Total	100%	100	—

A. Continuous Skill Assessment (CSA)

Component	Description	CO(s)	Marks
Daily Topical Assessment	Short assessment at the close of each session on that day's topic — concept recall and skill demonstration, recorded continuously	CO1, CO3	10
In-class Activity & Participation	Rubric-based evaluation of unit activities (Who Gets the Heart, Story Mason, Theatrix, Reporter, Picture Connector, Team vs. Wild)	CO1, CO3	10
Group Discussion & Debate	Structured GD and debate — reasoning, rebuttal, etiquette, and evidence-based argument	CO2, CO4	10
Presentation & Pitching	Storytelling, extempore, elevator/tourism pitch and slide-based presentation	CO3, CO5	10
Mock Interview	HR and technical mock interview using the STAR method — responses, body language, confidence	CO4, CO5	10
Professional Portfolio	Resume, professional email drafts and reflective journal	CO5	10
Subtotal (CSA)			60

B. Terminal Skill Assessment (TSA)

Component	Description	CO(s)	Marks
Weekly Assessment	Cumulative score of weekly consolidation tests held at the end of each week, evaluating retention and application across the topics covered that week	CO1, CO2	10
Personal Interview	Panel-based HR interview assessing communication, confidence and professionalism	CO4, CO5	15
Extempore / Presentation	On-the-spot topic or prepared presentation followed by audience Q&A	CO2, CO3	10
Portfolio Viva-Voce	Review of resume, email samples and self-assessment reflection	CO1, CO5	5
Subtotal (TSA)			40

C. Common Evaluation Rubric

The following rubric is applied uniformly across all performance-based components. Each criterion is rated on a four-point scale — 4 = Excellent, 3 = Good, 2 = Satisfactory, 1 = Needs Improvement.

Evaluation Criterion	Descriptor	Weight
Content & Structure	Relevance, logical organisation and clarity of ideas	25%
Delivery & Fluency	Articulation, pace, vocabulary and language accuracy	25%
Confidence & Body Language	Posture, eye contact, gestures and poise	20%

Engagement & Responsiveness	Audience connection, active listening and handling of questions	20%
Professionalism & Etiquette	Time management, appropriateness and courtesy	10%

TEXT BOOKS:

1.	Barun K. Mitra, “ <i>Personality Development and Soft Skills</i> ”, Third Edition, Oxford University Press, 2024.
2.	Sanjay Kumar, Pushp Lata, “ <i>Communication Skills</i> ”, Third Edition, Oxford University Press, 2024.
3.	Jeff Butterfield, “ <i>Soft Skills for Everyone</i> ”, Second Edition, Cengage Learning India, 2020.

REFERENCES:

1.	Dale Carnegie, “ <i>How to Win Friends and Influence People</i> ”, Updated for the Next Generation of Leaders Edition, Simon & Schuster, 2022.
2.	Stephen R. Covey, “ <i>The 7 Habits of Highly Effective People</i> ”, Thirtieth Anniversary Edition, Simon & Schuster, 2020.
3.	Adair Lara, “ <i>Naked, Drunk, and Writing: Shed Your Inhibitions and Craft a Compelling Memoir or Personal Essay</i> ”, Ten Speed Press, 2010.
4.	Ramesh Bhatia, “ <i>Soft Skills for Everyone</i> ”, Cengage Learning India, 2011.
5.	Stephen E. Lucas, “ <i>The Art of Public Speaking</i> ”, Fourteenth Edition, McGraw Hill, 2023.

Web / Online Resources

1.	Spoken English and Soft Skills — NPTEL Course (NPTEL) — https://nptel.ac.in/courses/109105052
2.	Communication Skills for Engineers — Coursera (Coursera) — https://www.coursera.org/learn/communication-skills-engineers
3.	Soft Skills and Personality Development — GeeksforGeeks (GeeksforGeeks) — https://www.geeksforgeeks.org/soft-skills/

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO I	PO II	PO III	PO IV	PO V	PO VI	PO VII	PSO 1	PSO 2	PSO 3
CO1	2	1	3	2	1	—	—	2	1	2
CO2	2	3	2	1	2	—	1	2	2	1
CO3	2	2	3	1	2	—	1	2	2	2
CO4	2	3	3	2	2	1	2	2	3	2
CO5	3	3	3	2	2	1	2	3	3	2
Avg	2.2	2.4	2.8	1.6	1.8	1	1.2	2.2	2.2	1.8

SEMESTER: II

MA26201	OPTIMISATION TECHNIQUES FOR MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	4,8,9,12
COURSE OBJECTIVES:								
- To familiarise the students with the formulation and construction of mathematical models for a linear programming problem in real-life situations. - To develop students' ability to formulate and solve real-world optimisation problems using transportation models. - To develop students' ability to formulate and solve real-world optimisation problems using assignment models. - To understand the applications of simulation modelling and queuing techniques to solve real-life problems - Analyse competitive business situations using game theory techniques.								
COURSE CONTENT:								
Unit 1	Linear Programming	9	3	0	12	24		4,7,9
Formulation of liner programming problem – Graphical method of solution – Canonical and standard form of liner programming problem – Simplex method – Artificial variables: Big-M method. Activities: Formulate and solve a profit maximisation linear programming model for a manufacturing system under resource constraints.								
Unit 2	Transportation models	9	3	0	12	24		4,8,9,12
Mathematical formulation of transportation models – Basic feasible solution: North-West corner rule, least cost method and Vogel's approximation method – Optimality test – MODI method – Degeneracy in transportation problem – Unbalanced transportation problem. Activities: Construct and optimise a transportation model using the MODI method for cost minimisation.								
Unit 3	Assignment models	9	3	0	12	24		4,8,9,12
Mathematical formulation of assignment models – Hungarian method for solution of the assignment problem – Variations of the assignment problem – Travelling salesman problem. Activities: Formulate and solve a workforce assignment problem using the Hungarian method for optimal task allocation.								
Unit 4	Simulation	9	3	0	12	24		4,8,9,12
Discrete event simulation – Monte Carlo simulation – Use of random numbers – Introduction to queueing theory – Structure and characteristics of queueing systems – Queue disciplines – Kendall's notation – Markovian models: M/M/1/. Activities: Perform Monte Carlo simulation of a business scenario using random numbers to analyse decisions under uncertainty.								
Unit 5	Game Theory	9	3	0	12	24		4,8,9,12
Competitive game – Characteristics of games – Saddle point – Minimax (maximin) method of optimal								

strategies – Value of the game – Two-person zero-sum game with saddle point – Matrix reduction by dominance – Mixed strategy for 2 X 2 games – Graphical method for rectangular games.

Activities: Analyse a competitive business scenario using payoff matrices, dominance, and minimax. strategies.

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Apply the graphical method, the simplex method, and the Big-M method to solve linear programming problems and obtain optimal solutions.

CO2: Solve transportation problems using the MODI method to obtain optimal allocation results.

CO3: Apply the Hungarian method to determine optimal assignment solutions.

CO4: Interpret business systems involving uncertainty using simulation concepts.

CO5: Analyse strategic interactions between competing firms to identify rational and optimal business strategies.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Hamdy A. Taha, "Operation Research: An Introduction", Eleventh edition, Pearson Education, New Delhi, 2022.
2.	Kanti Swarup, P.K. Gupta, Man Mohan, "Operations Research", Fifteenth edition, S. Chand & Sons Education Publications, New Delhi, 2024.

REFERENCES:

1.	S. Kalavathy, "Operations Research", Fourth edition, Vikas Publishing House, 2022.
2.	Bernard W. Taylor III. "Introduction to Management Science", Pearson Education, Ninth edition, 2020.
	Johnson, R.A., Miller, I.R. and Freund, J.E., "Probability and Statistics for Engineers", Ninth edition, Pearson Education, Asia, Reprint 2024.
	Frederick Hillier & Mark Hillier, "Introduction to Management Science", McGraw Hill India, Sixth edition, 2023.
	R. Paneerselvam, "Operations Research", Fourth edition, PHI Learning, 2018.

E resources/ E materials:

1.	https://allen.in/jee/maths/graphical-method-linear-programming
2.	Introduction to Operations Research, an NPTEL course, https://onlinecourses.nptel.ac.in/noc22_mg30/preview

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	2	-	-	1	-	1	2	2	-
CO2	2	2	-	-	1	-	1	2	2	-
CO3	2	2	-	-	1	-	1	2	2	-
CO4	2	2	-	-	1	-	1	2	2	-
CO5	2	2	-	-	1	-	1	2	2	-
Avg	2	2	-	-	1	-	1	2	2	-

MS26201	FINANCIAL MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	1,5,8,9,12,13,16,17

COURSE OBJECTIVES:

- To enable students to understand and evaluate major financial decisions in business.
- To help the students to understand principles and techniques in investment decisions.
- To make students understand financing and dividend decisions.
- To educate students about working capital management.
- To acquire knowledge about long-term financing strategies.

COURSE CONTENT:

Unit 1	Foundations of Financial Management	9	3	0	12	9	4	1,8,9,12
---------------	--	----------	----------	----------	-----------	----------	----------	-----------------

Introduction, Nature and Scope of Financial Management – Objectives of Financial Management – Major Financial Decisions – Role of Finance Manager – Organisation of Finance Functions – Time Value of Money – Valuation of Shares and Bonds – Risk and Return Analysis: Single Asset and Portfolio Context. **Activities:** Mind Map Creation/Personal Finance Planning.

Unit 2	Investment and Capital Budgeting Decisions	9	3	0	12	9	4	1,8,9,12
---------------	---	----------	----------	----------	-----------	----------	----------	-----------------

Capital Budgeting: Concepts and Relevance – Identification of Cash Flows – Evaluation Techniques: Payback, ARR, NPV, IRR, Profitability Index (Problem) – Comparison of DCF and Non-DCF Methods – Cost of Capital: Specific Costs and Weighted Average Cost (Problem) – Application of Investment Appraisal Tools.

Activities: Investment Simulation / Numerical Exercise

Unit 3	Dividend Policy Decisions	9	3	0	12	9	4	8,9,16
---------------	----------------------------------	----------	----------	----------	-----------	----------	----------	---------------

Dividend Policy: Importance and Issues – Relevance and Irrelevance Theories – Walter’s Model, Gordon’s Model, MM Hypothesis – Types and Forms of Dividends – Factors Influencing Dividend Decisions – Real-World Dividend Practices.

Activities: Chart / Poster Making, Group Discussion								
Unit 4	Working Capital Management	9	3	0	12	9	4	8,9,12
Working Capital: Concepts, Determinants and Estimation – Operating Cycle – Receivables Management – Inventory and Cash Management – Working Capital Financing: Trade Credit, Commercial Paper, Bank Finance, Company Deposits – Liquidity vs Profitability Trade-offs. Activities: Cash Budget Preparation, Flowchart Creation/Draw the operating cycle								
Unit 5	Long-Term Financing and Capital Markets	9	3	0	12	9	4	8,9,12,16, 17
Indian Capital Market Overview – Primary and Secondary Markets – Long-Term Sources: Equity, Debentures, Term Loans – Lease and Hire Purchase – Venture Capital and Private Equity – SEBI Regulations – Financing Strategies for Startups. Activities: Group Presentation / Case Study Analysis								
COURSE OUTCOMES:								
At the end of the course, the students will be able to: CO1: Demonstrate the application of financial management concepts in making effective investment, financing, dividend, and working capital decisions. CO2: Apply capital budgeting techniques and cost of capital concepts to evaluate investment proposals and make effective long-term investment decisions. CO3: Evaluate major theories, forms, factors, and practices of dividend policy to support effective dividend decision-making. CO4: Evaluate working capital requirements, the operating cycle, and the management of receivables, inventory, and cash, while assessing appropriate sources of working capital financing to balance liquidity and profitability. CO5: Analyse the structure and functioning of the Indian capital market and evaluate various long-term financing sources, SEBI regulations, and financing strategies for start-ups.								
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%								
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)								
TEXT BOOKS:								
1.	I.M. Pandey, “Financial Management”, Vikas Publishing, Twelfth edition, 2023.							
2.	M.Y. Khan & P.K. Jain, “Financial Management: Text”, Problems and Cases, TMH, Ninth edition, 2023.							
REFERENCES:								
1.	Prasanna Chandra, “Financial Management”, Tenth Edition, TMH, 2022.							
2.	Brigham & Ehrhardt, “Financial Management: Theory and Practice”, Fifteenth Edition, Cengage, 2022.							
3.	James C. Van Horne, “Fundamentals of Financial Management”, Fourteenth edition, PHI Learning”, 2021.							
4.	Chandra, P, "Financial Management: Theory and Practice", McGraw Hill, latest edition, 2022.							

5.	Rustagi, R. P., “ <i>Fundamentals of Financial Management</i> ”, Taxmann Publications, 2025.
E resources/ E materials:	
1.	Investopedia Financial Education – https://www.investopedia.com
2.	Coursera: Corporate Finance Specialisations – https://www.coursera.org/
3.	SEBI Investor Awareness – https://investor.sebi.gov.in/
4.	NSE India https://www.coursera.org/specializations/financial-management/corporate-finance-modules – https://www.nseindia.com/
5.	Coursera- https://www.coursera.org/specializations/financial-management

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course out Come	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	3	3	3	3	3
CO2	3	3	3	3	2	3	3	3	3	2
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	2	2	3	2
CO5	3	3	3	3	3	3	3	3	2	3
Avg	3	3	2.8	2.8	2.6	3	2.8	2.8	2.8	2.6

MS26202	HUMAN RESOURCE MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	3,4,5,8,9,10,12,13,16,17

COURSE OBJECTIVES:

- To enable students to understand the evolution, importance, roles, challenges, trends, computer applications, accounting, and audit in human resource management.
- Enable students to understand the concepts and processes of human resource planning, recruitment, selection, induction, and matching employee supply with organisational demand.
- Develop students' ability to apply concepts of training, executive development, self-development, and knowledge management in organisational contexts.
- Prepare students to apply compensation, reward systems, motivation theories, career management, mentoring, and employee engagement practices in professional settings.
- Provide students with an understanding of performance management systems, employee job transitions, organisational control mechanisms, and grievance handling procedures.

COURSE CONTENT:

Unit 1	Perspectives in Human Resource Management	9	3	0	12	24	4	3,4,5,8,13
Evolution of human resource management – The importance of human capital – Role of human resource manager – Challenges for human resource managers – Trends in human resource policies – Computer applications in human resource management – Human resource accounting and audit. Activities: Role Play: HR Manager’s Role Students enact the role of an HR manager handling issues such as recruitment, employee welfare, or performance appraisal.								
Unit 2	Human Resource Planning and Recruitment	9	3	0	12	24	4	4,8,9,10,16
Importance of Human Resource Planning – Forecasting human resource requirements – matching supply and demand – internal and external sources – organisational attraction. Recruitment, Selection, Induction and Socialisation – Theories, Methods and Processes. Activities: 1. Job Analysis Activity Students prepare a job description and job specification for a selected position. 2. Design a Recruitment Advertisement Create a recruitment advertisement for a given job role using appropriate organisational attraction techniques.								
Unit 3	Training and Development	9	3	0	12	24	4	3,4,8,9,16,
Types of training methods – purpose – benefits – resistance. Executive development programme – Common practices – Benefits – Self-development – Knowledge management. Activities: 1.Design a Training Program Students design a basic training programme stating objectives, methods, duration, and evaluation. 2.Role Play: Training Session Conduct a short mock training session using any training method.								
Unit 4	Employee Engagement	9	3	0	12	24	4	3,4,8,10,16
Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring – Development of mentor – protégé relationships – Job satisfaction, employee engagement, and organisational citizenship behaviour: theories and models. Activities: 1. Design a Reward System Create a simple reward and recognition plan for improving employee engagement. 2. Motivation Theories Application Students apply Maslow’s, Herzberg’s, or McClelland’s theory to real workplace situations.								
Unit 5	Performance Planning and Control	9	3	0	12	24	4	3,4,8, 10

Method of performance management – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implications of Job Change. The control process – Importance – Methods – Requirements of effective control systems – Grievances – Causes – Implications – Redressal methods.

Activities:

1. Performance Appraisal Methods Chart

Students prepare a chart comparing different performance management methods.

2. Group Discussion: Effective Control Systems

Discuss requirements and the importance of effective organisational control systems.

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Apply the concepts of Human Resource Management, including its evolution, roles, emerging trends, computer applications, accounting, and auditing aspects, in organizational contexts.

CO2: Demonstrate the use of human resource planning processes, including recruitment, selection, induction, and workforce supply–demand matching, to meet organisational staffing requirements..

CO3: Execute appropriate training and development methods, executive development techniques, self-development practices, and knowledge management approaches in organisational settings.

Demonstrate the application of training and development methods, executive development techniques, self-development practices, and knowledge management in organisational contexts.

CO4: Employ compensation and reward systems, motivation theories, career management, mentoring, and employee engagement practices to enhance employee performance and organisational effectiveness.

CO5: Practice performance management, employee job transition, organisational control, and grievance-handling procedures in workplace situations.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Mamoria, C. B., & Gankar, S. V. A, “ <i>Human Resource Management</i> ”, Seventh edition, Himalaya Publishing House. 2022.
2.	Susan L. Verhulst, David A. DeCenzo, “ <i>Human Resource Management</i> ” Fifteenth Edition (Indian Adaptation), Wiley India, 2025

REFERENCES:

1	Gary Dessler & Biju Varkkey, “ <i>Human Resource Management</i> ”, Seventeenth edition, Pearson Education, 2023.
2	David A. DeCenzo, Stephen P. Robbins & Susan L. Verhulst, “ <i>Fundamentals of Human Resource Management</i> ”, Thirteenth edition, Wiley, 2023.
3	Gupta N. & Gupta A. K., “ <i>Human Resource Management for Organisational Success</i> ”, Volume 1 & 2, Springer Nature, 2025.
4	K. Aswathappa & Sadhna Dash, “ <i>Human Resource Management</i> ” Text and Cases, Tenth edition, McGraw-Hill, 2024
5	Wayne F. Cascio, “ <i>Managing Human Resources: Productivity, Quality of Work Life, Profits</i> ”, Eleventh edition, McGraw Hill Education, 2021.

E resources/ E materials:

1.	SHRM India Knowledge Center – https://www.shrm.org/
2.	HBR Human Resource Management Articles- https://hbr.org/topic/industry/human-resource-services
3.	Coursera – HR Management Specialization- https://www.coursera.org/specializations/human-resource-management
4.	LinkedIn Learning – Human Resources Courses- https://www.linkedin.com/learning/topics/human-resources

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course out Come	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	3	2	3	3	2
CO2	3	3	3	2	3	3	3	3	3	3
CO3	2	3	3	2	2	2	2	3	2	2
CO4	3	2	3	3	3	3	2	2	3	2
CO5	3	3	3	3	2	3	3	3	2	2
Avg	2.8	2.8	2.8	2.4	2.4	2.8	2.4	2.8	2.6	2.2

MS26203	OPERATIONS MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	6,7,12,13,14,15

COURSE OBJECTIVES:

- To understand the principles and functions of operations management in manufacturing and service organisations.
- To develop knowledge of operations planning and control, including capacity planning, product design, and process improvement.
- To understand supply chain strategies, quality management, and lean operations for improving organisational performance
- To explore modern trends in operations management, such as digital operations, sustainable practices, and data-driven decision-making.
- To enhance problem-solving and analytical skills for achieving strategic and operational excellence in a competitive business environment.

COURSE CONTENT:

Unit 1	Overview of Operations Management and Strategic Alignment	9	3	0	12	9	4	12
--------	--	---	---	---	----	---	---	----

Operations Management – Nature, Importance, Historical Development, Transformation Processes, Differences between Services and Goods, System Perspective, Functions, Challenges, Current Priorities, and Recent Trends. Operations Strategy – Strategic fit, framework. Productivity: world-

Activities: Group Discussion

Activities: Group Discussion

Capacity Planning – Long range, types, developing capacity alternatives, and tools for capacity planning. Facility Location – Theories, Steps in Selection, and Location Models. Sourcing and procurement – strategic sourcing, making or buying decisions, procurement process, managing vendors.

Activities:

- 1. Group Discussion:**
 - Analyse real-world examples of capacity planning in manufacturing and service industries.
- 2. Case Study Analysis:**
 - Evaluate a company's long-range capacity decisions and suggest suitable capacity alternatives.

Activities:

- Analyse real-world examples of capacity planning in manufacturing and service industries.

- Evaluate a company's long-range capacity decisions and suggest suitable capacity alternatives.

Product Design – Criteria, Approaches. Product development process – stage-gate approach – tools for efficient development. Process – design, strategy, types, analysis. Facility Layout – Principles, Types, Planning Tools and Techniques; Service Blueprinting; Role of Design in Lean and Agile Systems. Activities: 1. Tool-Based Exercise: Apply tools such as Quality Function Deployment (QFD) or Value Engineering for efficient product development. 2. Problem-Solving Exercise: Analyse process flow using process charts or flow diagrams for a manufacturing or service system.
--

Activities:

Apply tools such as Quality Function Deployment (QFD) or Value Engineering for efficient product development.

Analyse process flow using process charts or flow diagrams for a manufacturing or service system.

Demand Forecasting – Need, Types, Objectives and Steps – Overview of Qualitative and Quantitative Methods. Operations planning – Resource planning – Inventory planning and control. Operations Scheduling - Theory of Constraints - bottlenecks, capacity-constrained resources, synchronous manufacturing.

Activities:

1. Numerical Exercise:
Solve problems using quantitative forecasting techniques (moving average, exponential smoothing).

2. Assignment:
Prepare a report outlining the steps involved in demand forecasting for a selected industry.

Activities:

Solve problems using quantitative forecasting techniques (moving average, exponential smoothing).

Prepare a report outlining the steps involved in demand forecasting for a selected industry.

Definitions of quality, the quality revolution, quality gurus, TQM philosophies, quality management tools, certification and awards. Lean Management – philosophy, elements of JIT manufacturing, continuous improvement. Six sigma and DMAIC methodology.

Activities:

1. Lean Simulation Activity:
Demonstrate Lean principles through a simple process improvement exercise (e.g., waste identification).

2. DMAIC Project: Conduct a mini project applying DMAIC methodology (Define–Measure–Analyse–Improve–Control) to solve a problem.

Activities:

Demonstrate Lean principles through a simple process improvement exercise (e.g., waste identification).

2. DMAIC Project: Conduct a mini project applying DMAIC methodology (Define–Measure–Analyse–Improve–Control) to solve a problem.

COURSE OUTCOMES:	
At the end of the course, the students will be able to: CO1: Demonstrate conceptual knowledge of operations management, operations strategy, capacity planning, supply chain decisions, product and process design, forecasting, quality management, lean thinking, and emerging trends like Industry 4.0 and sustainability. CO2: Interpret and relate the principles of operations management, capacity planning, supply chain strategies, product and process design, forecasting techniques, TQM, lean manufacturing, and the impact of digital and sustainable practices on operational excellence. CO3: Apply operational management tools and techniques, including capacity and location models, product and process design methods, forecasting models, and quality management tools, to solve real-world business problems. CO4: Analyse operations strategies, facility layouts, supply chain decisions, demand forecasts, and quality management systems to evaluate operational efficiency and identify areas for improvement. CO5: Evaluate various operational strategies, including capacity planning and sourcing, process and product design, forecasting methods, and quality management philosophies, to make informed decisions for achieving competitive advantage.	
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%	
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)	
TEXT BOOKS:	
1.	Gyanesh Kumar Sinha, “Operation Management: Modern Practices and Analytics”, Sultan Chand & Sons, 2025.
2.	Sidhartha S. Padhi, “Operation Management”, Eighth edition, Wiley, 2024.
REFERENCES:	
1.	Richard B. Chase, Ravi Shankar, F. Robert Jacobs, “Operations and Supply Chain Management”, Seventeenth edition, McGraw Hill, 2023
2.	B. Mahadevan, “Operations Management: Theory and Practice”, Third edition, Pearson, 2023
3.	William J. Stevenson, “Operations Management”, Fourteenth edition, McGraw Hill, 2022
4.	Norman Gaither & Gregory Frazier, “Operations Management”, Eleventh edition, Cengage, 2022
5.	Russell & Taylor, “Operations Management”, Eleventh edition, Wiley, 2022
E resources/ E materials:	
1.	MIT Open Courseware – Operations Management
2.	Coursera - Operations Management by Wharton
3.	LinkedIn Learning - Operations Strategy
4.	ASQ – American Society for Quality

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	1	-	-	1	1	1	2	1	-
CO2	2	2	-	-	1	1	1	2	-	-
CO3	3	2	1	-	1	1	1	3	2	-
CO4	2	3	1	-	1	1	1	2	3	-
CO5	3	3	1	1	2	2	1	3	3	1
Avg	2.4	2.25	1	1	1.2	1.2	1	2.4	1.8	1

MS26204	BUSINESS RESEARCH METHODOLOGY	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	4,17

COURSE OBJECTIVES:

- This course aims to apply business research concepts and scientific inquiry methods to analyse real-world business problems.
- This course aims to apply research design and measurement techniques in developing valid and reliable research instruments for business studies.
- This course aims to develop a research-orientated mindset by imparting the principles and practices of scientific business research.
- It enables students to systematically approach real-world business problems using exploratory, descriptive, and causal research designs.
- The course also trains students to critically evaluate research studies and independently prepare business research reports for data-driven decision-making.

COURSE CONTENT:

Unit 1	Foundations of Business Research and Scientific Inquiry	9	3	0	12	9	4	4
--------	---	---	---	---	----	---	---	---

Business Research – Definition and Significance – The Research Process – Types of Research – Exploratory and Causal Research – Theoretical and Empirical Research – Cross-Sectional and Time-Series Research – Research Questions / Problems – Research Objectives – Research Hypotheses – Characteristics – Research in an Evolutionary Perspective – The Role of Theory in Research.

Activities: Real-World Problem Identification

Unit 2	Research Design and Measurement Techniques	9	3	0	12	9	4	4,17
--------	--	---	---	---	----	---	---	------

Research design – Definition – Types of research design – Exploratory and causal research design – Descriptive and experimental design – Different types of experimental design – Validity of findings – Internal and external validity – Variables in research – Measurement and scaling – Different scales – Construction of instrument – Validity and reliability of instrument.

Activities:

1. Scale Identification
2. Case Analysis

Unit 3	Data Collection Methods and Sampling Techniques	9	3	0	12	9	4	4
--------	---	---	---	---	----	---	---	---

Types of data – Primary vs. Secondary data – Methods of primary data collection – Survey vs. Observation – Experiments – Construction of questionnaire and instrument – Types of validity – Sampling plan – Sample size – Determinants of optimal sample size – Sampling techniques – Sampling methods.

Activities:

1. Build a questionnaire
2. Factor Ranking

Unit 4	Data Preparation and Analytical Techniques	9	3	0	12	9	4	4
--------	---	---	---	---	----	---	---	---

Data Preparation – editing – Coding – Data entry – Validity of data – Qualitative vs Quantitative data analyses – Applications of bivariate and multivariate statistical techniques, factor analysis, discriminant analysis, cluster analysis, multiple regression and correlation, multidimensional scaling – Conjoint analysis – Application of statistical software for data analysis.

Activities:

1. Clean the Dataset
2. Data Analysis Tool Practice

Unit 5	Report Writing and Research Communication	9	3	0	12	9	4	4, 17
--------	--	---	---	---	----	---	---	-------

Research report – Types – Contents of report – need for executive summary – chapterisation – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format – title of the report – ethics in research – ethics in research – subjectivity and objectivity in research. Research Integrity – Emerging Trends: Digital Surveys, Infographics, AI in Research, Online Panels, Real-Time Analytics – Case Studies on Ethical Dilemmas in Research.

Activities:

1. Write an executive summary in 150 words.
2. Report Writing Practice/
3. Case Study

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Demonstrate conceptual knowledge of the research process, various research designs, data collection methods, analytical techniques, report writing, and emerging trends and ethical considerations in business research.

CO2: Interpret and relate research questions and objectives to appropriate research designs, measurement scales, sampling techniques, and data analysis methods for conducting scientific inquiry.

CO3: Apply research design principles, instrument construction, data collection methods, and statistical software to collect, prepare, and analyse both qualitative and quantitative data.

CO4: Analyse the validity and reliability of research instruments, the outcomes of bivariate and multivariate statistical analyses, and the ethical implications of a research project to derive meaningful insights and conclusions.

CO5: Evaluate different research methodologies, data analysis techniques, and ethical dilemmas in business research to ensure the integrity, objectivity, and reliability of research findings and develop a comprehensive, ethically sound business research report.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Donald R. Cooper, Pamela S. Schindler, J. K. Sharma, “Business Research Methods”, Thirteenth Edition, McGraw Hill, 2021.
2.	Dr C. R. Kothari, Dr Gaurav Garg, “Research Methodology: Methods and Techniques”, Fifth Edition, New Age International Publishers, 2023.

REFERENCES:

1.	Uma Sekaran & Roger Bougie, “Research Methods for Business: A Skill-Building Approach”, Seventh Edition, Wiley, 2020.
2.	William G. Zikmund et al., “Research Methods for Business: A Real-World Approach", Third Edition, Cengage, 2024.
3.	Alan Bryman & Emma Bell, “Business Research Methods”, Sixth Edition, Oxford University Press, 2022.
4.	Pamela S. Schindler, Kapil Gumte & Pratik Maheshwari, “Business Research Methods”, Fourteenth Edition, McGraw Hill, 2026.
5.	Mark Saunders, Philip Lewis, Adrian Thornhill, “Research Methods for Business Students”, Eighth Edition, Pearson, 2022.

E resources/ E materials:

1.	Harvard Business Review - Search Harvard Business Review – Research Insights
2.	Sage Research Methods - Books and Reference SAGE Research Methods Library
3.	Search Elsevier Researcher Academy Elsevier – Researcher Academy
4.	Coursera Online Courses From Top Universities. Join for Free Coursera – Data-Driven Decision Making (PwC)

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	1	3	2	-	1	3	2	3
CO2	3	3	2	2	2	-	1	3	3	2
CO3	3	3	2	2	2	-	1	3	3	2
CO4	3	3	2	3	2	2	2	3	3	3
CO5	3	3	2	3	3	2	1	3	3	3
Avg	3	2.8	1.8	2.6	2.2	2	1.2	3	2.8	2.6

MS26205	BUSINESS ANALYTICS	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	7,9,12
COURSE OBJECTIVES:								
- To introduce students to the fundamental concepts, processes, and strategic importance of business analytics in effective organisational decision-making. - To develop knowledge of managing analytics infrastructure, data resources, governance, and technology integration in business analytics. - To enable students to apply descriptive analytics, statistical methods, and visualisation techniques for data interpretation and business insights. - To provide understanding of predictive analytics and data mining techniques for forecasting and solving real-world business problems. - To familiarise students with prescriptive analytics, optimisation techniques, and emerging trends in business analytics for improving business performance and competitive advantage.								
COURSE CONTENT:								
Unit 1	Introduction to Business Analytics	9	3	0	12	9	4	8,9,12
Business Analytics – Importance – Business Analytics Process – Relationship between Business Analytics and Organisational Decision Making – Business Analytics for Competitive Advantage – Strategic Role of Analytics. Activities: Group discussion/Case study								
Unit 2	Data and Resource Management in Analytics	9	3	0	12	9	4	8,9,16
Managing Analytics Infrastructure – Human Resources and Data Requirements – Aligning Organisational Structure with BA – Role of Technology – Information Policy – Data Governance – Data Quality Management – Change Management in BA. Activities: Brainstorm session on commonly used analytics tools/role-play								
Unit 3	Descriptive Analytics and Visualization	9	3	0	12	9	4	4,8,9,12
Descriptive Analytics – Visualising and Exploring Data – Descriptive Statistics – Sampling Techniques – Estimation Methods – Probability Distributions used in Descriptive Analytics – Use of dashboards and visualisation tools. Activities: Classroom Statistics/Interactive Dashboard Presentation.								
Unit 4	Predictive Analytics and Data Mining	9	3	0	12	9	4	8,9,11,12,13
Predictive Analytics – Predictive Models – Data-driven vs. Logic-driven Models – Predictive Modelling Procedures – Supervised vs. Unsupervised Learning – Reinforcement Learning – Data Mining Techniques – Association Analysis and Cluster Analysis – Model Validation – Application in Business Cases. Activities: Predicting future outcomes using real data.								

Unit 5	Prescriptive Analytics, Optimisation, and Emerging Trends in Business Analytics	9	3	0	12	9	4	8,9,12,16,17
Prescriptive Analytics – Prescriptive Modelling Techniques – Non-linear Optimisation – Simulation – Scenario Planning – Demonstrating Business Performance Improvement – Role of Decision Support Systems. Industry applications in marketing, HR, finance, and operations – real-time analytics – AI & ML integration – cloud-based BA tools – business intelligence vs. BA – ethics in analytics – case studies on contemporary analytics usage. Activities: Prescriptive Modelling & Scenario Planning Exercise/Industry Applications & Ethics Discussion								
COURSE OUTCOMES:								
At the end of the course, the students will be able to: CO1: Apply business analytics to enhance and support effective decision-making processes in organisations. CO2: Apply appropriate analytical tools to solve different business analytics scenarios effectively. CO3: Apply descriptive analytics tools to generate meaningful solutions. CO4: Develop predictive analytics skills and understand their applications. CO5: Apply prescriptive analytics to demonstrate business process improvement and understand emerging trends in business analytics.								
Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%								
Assessment Methodology: Internal Assessment Test (70%), Activities (30%)								
TEXT BOOKS:								
1.	Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, “Business Analytics”, Cengage, 2020.							
2.	Richard Huntsinger, “Business Analytics: Methods and Cases for Data-Driven Decisions”, Cambridge University Press, 2025.							
REFERENCES:								
1.	Marc J. Schniederjans, Dara G. Schniederjans, Christopher M. Starkey, “Business Analytics: Principles, Concepts, and Applications”, Pearson, 2022.							
2.	Christian S. Albright & Wayne L. Winston, “Business Analytics: Data Analysis and Decision Making”, Seventh edition, Cengage, 2022.							
3.	James R. Evans, “Business Analytics: Methods, Models and Decisions”, Third edition, Pearson, 2020.							
4.	U Dinesh Kumar, “Business Analytics: The Science of Data-Driven Decision Making”, Second edition, Wiley, 2021.							
5.	N.D. Vohra, “Quantitative Techniques in Management”, Sixth edition, McGraw Hill, 2021.							
E resources/E materials:								
1.	Harvard Business Review https://hbr.org/topic/Business-analytics							

2.	IBM Data and AI Blog https://www.ibm.com/blogs/watson
3.	Microsoft Learn for Data Analytics https://learn.microsoft.com/en-us/training/paths/analyze-data-power-bi
4.	Tableau Public Learning https://public.tableau.com/en-us/s/resources

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	3	1	2	2	1	1	3	2	1
CO2	2	3	1	1	2	1	2	2	3	1
CO3	2	3	1	1	2	1	2	3	2	1
CO4	1	3	1	1	2	1	2	2	3	2
CO5	2	2	2	2	3	2	3	3	3	2
Avg	1.8	2.8	1.2	1.4	2.2	1.2	2	2.6	2.6	1.4

MS26206	MARKETING MANAGEMENT	L	T	P	TW/SL	Total	C	SDG
		45	15	0	60	120	4	8,9,12,16,17

COURSE OBJECTIVES:

- To provide students with a clear understanding of the fundamental concepts and principles of marketing and its role in business organisations.
- To help students understand how organisations develop and implement marketing strategies to achieve competitive advantage, customer satisfaction, and long-term business growth in dynamic market environments.
- To provide students with knowledge of product, price, place, and promotion strategies and their role in satisfying customer needs and achieving organisational goals.
- To analyse buyer behaviour, develop market-driven strategies, and apply contemporary tools in digital and social media marketing.
- To emphasise real-world application through case analysis, marketing research, and simulations aligned with global and Indian business scenarios

COURSE CONTENT:

Unit 1	Introduction to Marketing	9	3	0	12	24	4	9,12,16,17
--------	---------------------------	---	---	---	----	----	---	------------

Marketing – Definitions - Conceptual Framework - Marketing Process - Marketing Environment: Internal and External - PESTEL - SWOT Analysis - Marketing Interface with Other Functional Areas -

1.	Philip T. Kotler and Kevin Lane Keller, Alexander Chernev, Jagdish N. Sheth, and G. Shainesh, “Marketing Management”, Seventeenth edition, Pearson Education, 2025.
2.	KS Chandrasekar, “Marketing Management – Text and Cases”, Second edition, Tata McGraw Hill, 2021.

REFERENCES:

1.	Lamb, Hair, Sharma, McDaniel, “Marketing – An Innovative Approach to Learning and Teaching: A South Asian Perspective”, Cengage Learning, 2021.
2.	Paul Baines, Chris Fill, and Kelly Page, “Marketing”, second edition, Oxford University Press, 2022.
3.	Micheal R. Czinkota, Masaaki Kotabe, Demitris Vrontis, S. M. Raid Shams, “Marketing Management - Past, Present, Future”, Fourth edition, Springer, 2021.
4.	Ramasamy, V.S., Namakumari, S., “Marketing Management: Global Perspective Indian Context”, Sixth edition, Macmillan Education, New Delhi, 2020.
5.	Douglas J. Dalrymple, Leonard J. Parsons, “Marketing Management, Seventh Edition, John Wiley & Sons”, 2020.

E resources/ E materials:

1.	Coursera Top Free Courses – Learn Free Online
2.	Swayam NPTEL 1.Marketing Management – I – Course 2.Preview: Marketing Management SWAYAM
3.	Amityonline.com Master of Business Administration (Online MBA) 2-year Degree
4.	elevify.com Marketing Skills Course Free. Valid Certificate

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO2	PSO3
CO1	3	2	3	3	2	3	2	3	2	2
CO2	1	3	2	1	1	2	3	2	1	3
CO3	1	2	1	2	1	3	3	3	3	2
CO4	2	1	1	2	1	2	2	2	2	1
CO5	2	1	1	3	1	2	2	2	1	1
Avg	1.8	1.8	1.6	2.2	1.2	2.4	2.4	2.4	1.8	1.8

MS26207	DATA ANALYSIS AND BUSINESS MODELING	L	T	P	TW/SL	Total	C	SDG
		0	0	60	60	120	4	1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 17

COURSE OBJECTIVES:

- To gain hands-on experience in data analysis for business modelling.
- Analyse and integrate analytics to optimise data-driven business decisions

COURSE CONTENT:

Unit 1	Data Preparation and Analysis	0	0	12	12	24	4	4,9
--------	--------------------------------------	---	---	----	----	----	---	-----

Introduction to data analysis and research design: Data Instruments and Preparation Using Excel Data Transformation – Descriptive statistics – Testing of normality – Hypothesis testing.

Unit 2	Correlation, Regression and Forecasting	0	0	12	12	24	4	8,9
--------	--	---	---	----	----	----	---	-----

Bivariate and multivariate correlation Simple and multiple regression analysis Interpretation of coefficients forecasting using time series data, moving averages, exponential smoothing, and real-time forecasting models.

Unit 3	Revenue Management and Optimisation	0	0	12	12	24	4	4,8,9,12
--------	--	---	---	----	----	----	---	----------

Revenue maximisation principles – Pricing decisions – Capacity allocation – Data modelling for revenue optimisation – Real-life case modelling in Excel

Unit 4	Operations Research Models for Business	0	0	12	12	24	4	8,9,11,12
--------	--	---	---	----	----	----	---	-----------

Linear programming using Solver – Transportation models – Assignment problems – Network models – Application of queuing theory – Waiting line models – Inventory control models.

Unit 5	Integrated Lab Projects and Advanced Excel Tools	0	0	12	12	24	4	4,8,9,12
--------	---	---	---	----	----	----	---	----------

Use of Solver, Data Analysis Toolpak, Power Query – Mini project integrating multiple models – Dashboard preparation – Report generation and decision support system development using spreadsheet / analytics software.

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Demonstrate analytics concepts for data-driven business decisions.

CO2: Interpret analytics models and tools for business problem-solving.

CO3: Analyse business data to model, forecast, and evaluate solutions.

CO4: Evaluate analytical models to optimise business decisions.

CO5: Develop integrated analytics solutions for data-driven decisions.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)	
TEXT BOOKS:	
1.	Andy Field, “Discovering Statistics Using IBM SPSS Statistics”, Sixth Edition SAGE Publications Ltd, 2024.
2.	Steven Nahmias, “Tava Lennon Olsen, Production and Operations Analytics”, Eighth Edition, Waveland Press, Incorporated, 2020.
REFERENCES:	
1.	David R. Anderson et al., “An Introduction to Management Sciences”, Sixteenth edition, South-Western College, 2024
2.	Hansa Lysander Manohar, “Data Analysis and Business Modelling using Microsoft Excel”, PHI, 2023
3.	David M. Levine et al., Statistics for Managers using MS Excel, Ninth edition, Pearson, 2021
4.	Hamdy A. Taha, "Pearson Operations Research: An Introduction, 10e - Operations Research”, Tenth edition, Pearson, 2022.
5.	Wayne L. Winston, “Microsoft Excel Data Analysis and Business Modelling (Office 2021 and Microsoft 365)”, Seventh edition, Pearson, 2024.
E resources/ E materials:	
1.	Applied statistics resources https://statisticalhorizons.com
2.	https://dataanalysisfordummies.com
3.	Building Next-Generation AI Professionals https://www.analyticsvidhya.com
4.	AI-powered Decision Intelligence https://www.solver.com

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	-	1	-	-	1	3	2	1
CO2	3	3	-	1	-	-	2	3	2	1
CO3	3	3	-	1	-	-	2	3	3	1
CO4	3	3	1	2	-	-	2	3	3	2
CO5	3	3	2	2	2	-	3	3	3	2
Avg	3	2.8	0.6	1.4	2	-	2.0	3	2.6	1.4

SD26202	PROFESSIONAL AND EMPLOYABILITY SKILLS – II	L	T	P	TW/SL	Total	C	SDG
		0	0	60	60	120	1	4,8,9

COURSE OBJECTIVES:

- To equip students with speed mathematics techniques for rapid and accurate arithmetic computations in competitive aptitude assessments.
- To develop proficiency in quantitative aptitude topics, including number systems, time-work, percentages, and financial mathematics.
- To strengthen problem-solving skills in areas of ratio, proportion, permutation, combination, and probability for placement examinations.
- To enable students to solve complex problems related to time-speed-distance, logarithms, progressions, geometry, and quadratic equations.
- To build mental arithmetic agility and logical calculation shortcuts essential for competitive examinations and campus recruitment drives.

COURSE CONTENT:

Unit 1	SPEED MATHS – FOUNDATIONAL TECHNIQUES			12	12	24		4,8
--------	--	--	--	----	----	----	--	-----

SAW Method: speed addition techniques and fast subtraction methods, SAW Method: shortcut calculations and mental arithmetic practice, Oz Method: quick multiplication tricks and rapid calculation techniques, Oz Method: shortcut arithmetic approaches, Mirror Method: fast division techniques and reverse calculation methods, Mirror Method: mental math accuracy improvement, High 5 Method: multiplication shortcuts using 5-based calculations, High 5 Method: quick percentage estimations, Minion's Method: simplified arithmetic tricks and approximation techniques, Minion's Method: logical calculation shortcuts, King and Queen Method: advanced number manipulation tricks and rapid comparison techniques, King and Queen Method: mental computation strategies, Introduction to Vedic Mathematics principles underlying speed maths, Practice drills combining SAW, Oz, Mirror, High 5, Minion's and King-Queen methods

Activities

1. Speed Math Sprint: SAW, Oz, and Mirror Method Challenge
2. Vedic Mathematics and Mental Calculation Workshop
3. Rapid Arithmetic Championship

Unit 2	SPEED MATHS – ADVANCED CALCULATION METHODS			12	12	24		4,8
--------	---	--	--	----	----	----	--	-----

Square Root shortcut methods and approximation strategies, Cube Root shortcut methods and Vedic math techniques for roots, Butterfly Method: fraction addition and subtraction shortcuts using LCM-based fast calculations, Butterfly Method: simplification methods for complex fractions, Inception Method: multi-step arithmetic shortcuts and nested calculation techniques, Inception Method: logical simplification approaches for competitive problems, Conversion of Percentage into Fraction: common percentage-fraction conversions and shortcut memorisation, HCF and LCM: prime factorisation and shortcut divisibility methods, HCF and LCM: application problems using shortcut HCF and LCM techniques, Cube of a Number: fast cube calculation techniques and cube patterns, Cube of a Number: shortcut multiplication methods for cubes, Goldeneye Method: advanced mental calculation and rapid arithmetic simplification, Base Multiplication Method: multiplication using base values 10, 100 and 1000, Crisscross Method: fast cross multiplication and multi-digit multiplication shortcuts, Super Power Method: advanced arithmetic shortcuts and competitive

speed, Problems on races: head start, lead and dead heat problems, Logarithms: definition, laws of logarithms and change of base formula, Arithmetic Progression: nth term, sum of n terms and application problems, Geometric Progression: nth term, sum of n terms, infinite GP and applications, Geometry: lines, angles, triangles, congruence and similarity theorems, Geometry: circles, chords, tangents and related theorems, Mensuration: area and perimeter of 2D figures, including circles, triangles and polygons, Mensuration: volume and surface area of 3D solids – cube, cuboid, cylinder, cone and sphere, Quadratic Equations: roots using factorisation and the quadratic formula, relationship between roots and coefficients, Quadratic Equations: nature of roots using discriminant and word problems involving quadratic equations

Activities:

1. Time, Speed, and Distance Problem-Solving Workshop
2. Geometry, Mensuration, and Logarithms Practice Challenge
3. Advanced Quantitative Aptitude and Mathematical Reasoning Test

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Remember and recall speed mathematics techniques such as SAW, Oz, Mirror, High 5, Minion's, and King and Queen methods, and apply them to perform rapid mental arithmetic calculations.

CO2: Understand and explain advanced speed maths methods, including Base Multiplication, Crisscross, Goldeneye, Super Power, and Cast Away methods, and use them to verify and simplify multi-step arithmetic problems.

CO3: Apply quantitative aptitude concepts of number systems, time and work, percentages, simple and compound interest, and profit and loss to solve placement-level numerical problems accurately.

CO4: Analyse and solve problems on ratio, proportion, permutation, combination, probability, time-speed-distance, and related topics by selecting appropriate techniques and strategies

CO5: Evaluate and solve advanced quantitative problems involving logarithms, arithmetic and geometric progressions, geometry, mensuration, and quadratic equations to demonstrate readiness for competitive and campus recruitment examinations.

Weightage: Continuous Assessment: 100%

Assessment Methodology:

Assessment Type	Weightage	Marks	Mode of Evaluation
Continuous Skill Assessment (CSA)	60%	60	Continuous, rubric-based evaluation through problem-solving, speed tests, activities and assignments
Terminal Skill Assessment (TSA)	40%	40	Comprehensive aptitude assessment comprising weekly tests, practical speed mathematics evaluation and viva/problem-solving
Total	100%	100	—

A. Continuous Skill Assessment (CSA)

Component	Description	CO(s)	Marks
Daily Topical Assessment	Short daily quizzes and numerical exercises conducted at the end of each session to assess concept understanding, calculation speed and accuracy.	CO1, CO2	10
Speed Mathematics Activities & Participation	Evaluation of participation and performance in Speed Math Sprint, Vedic Mathematics Workshop, and Rapid Arithmetic Championship, Mental calculation challenge and other in-class activities using rubrics.	CO1, CO2	10
Problem-Solving Worksheets	Individual worksheets covering number systems, time & work, percentages, interest, profit & loss, ratios and other	CO3, CO4	10

	aptitude topics emphasising logical reasoning and accuracy.		
Aptitude Challenge & Analytical Tests	Unit-wise aptitude challenge involving quantitative reasoning, shortcut techniques and analytical problem solving under timed conditions.	CO3, CO4	10
Timed Practice Test	Placement-orientated timed aptitude tests evaluating speed, accuracy and time management using mixed-topic questions.	CO3, CO5	10
Practice Portfolio	Maintenance of an aptitude practice portfolio comprising solved worksheets, shortcut notes, error analysis and reflective learning log.	CO2, CO5	10
Subtotal (CSA)			60

C. Terminal Skill Assessment (TSA)

Component	Description	CO(s)	Marks
Weekly Consolidation Assessment	Cumulative score of weekly tests assessing retention, application of speed mathematics techniques and quantitative aptitude concepts.	CO1, CO3	10
Comprehensive Aptitude Test	Placement-orientated aptitude examination covering all five units with emphasis on speed, accuracy and problem-solving ability.	CO3, CO4, CO5	15
Speed Mathematics Practical Assessment	Practical demonstration of mental arithmetic, Vedic Mathematics techniques and shortcut methods under timed conditions.	CO1, CO2	10
Portfolio Viva-Voce	Evaluation of aptitude portfolio, shortcut techniques adopted, error analysis and mathematical reasoning through viva.	CO2, CO5	5
Subtotal (TSA)			40

C. Common Evaluation Rubric

The following rubric shall be uniformly applied for worksheets, speed mathematics activities, aptitude challenges, practical demonstrations and portfolio evaluation. Each criterion is assessed on a four-point scale (4 = Excellent, 3 = Good, 2 = Satisfactory, 1 = Needs Improvement).

Evaluation Criterion	Descriptor	Weight
Accuracy	Correctness of calculations, logical steps and final answers	30%
Speed & Time Management	Ability to solve problems efficiently within the stipulated time	25%
Application of Techniques	Effective use of shortcut methods, Vedic Mathematics principles and appropriate problem-solving strategies	20%
Analytical Reasoning	Logical interpretation, selection of suitable methods and solution approach	15%
Presentation & Neatness	Organized work, clarity of calculations and systematic presentation of solutions	10%

TEXT BOOKS:

1.	Arun Sharma, “ <i>Courseware on Quantitative Aptitude for CAT 2026</i> ”, Thirteenth Edition, McGraw Hill, 2026.
2.	R.S. Aggarwal, “ <i>Quantitative Aptitude for Competitive Examinations</i> ”, (Fully Video Edition). Revised Edition (2024–25), S. Chand Publishing, 2024.
3.	Nishit K. Sinha, “ <i>Quantitative Aptitude for CAT and Other MBA Entrance Examinations</i> ”, Fourth Edition, Pearson Education India, Noida, 2021.

REFERENCES:	
1.	Abhijit Guha, " <i>Quantitative Aptitude for Competitive Examinations</i> ", Seventh Edition, McGraw Hill Education, 2020.
2.	Dinesh Khattar, " <i>The Pearson Guide to Quantitative Aptitude for Competitive Examinations</i> ", Third Edition, Pearson Education India, Noida, 2020.
3.	Rajesh Verma, " <i>Fast Track Objective Arithmetic</i> ", Arihant Publications, Meerut, 2023.
4.	Sarvesh K. Verma, " <i>Quantum CAT: Quantitative Aptitude for CAT</i> ", Second Edition, Arihant Publications, 2024.
5.	M. Tyra, " <i>Magical Book on Quicker Maths</i> ", Revised Edition, BSC Publishing Co. Pvt. Ltd., 2023.
Web / Online Resources	
1.	Quantitative Aptitude – Number Systems and Arithmetic (NPTEL) (NPTEL) — https://nptel.ac.in/
2.	Quantitative Aptitude – Complete Topic-wise Practice (Geeks for Geeks) — https://www.geeksforgeeks.org/aptitude-questions-and-answers/
3.	Aptitude Preparation – Speed Maths, Quants and Reasoning (Tutorials Point) — https://www.tutorialspoint.com/aptitude/index.htm

Mapping of Course Outcomes to Programme Outcomes and Programme Specific Outcomes

COs	PO I	PO II	PO III	PO IV	PO V	PO VI	PO VII	PSO 1	PSO 2	PSO 3
CO1	2	2	1	-	-	-	—	2	1	-
CO2	2	3	1	-	1	-	-	2	2	-
CO3	3	3	2	-	2	-	1	3	3	1
CO4	3	3	2	-	2	-	1	3	3	1
CO5	3	3	2	-	2	-	1	3	3	1
Avg	2.2	2.8	1.6	-	1.4	-	1	2.3	2.4	1

Open Elective

MS26901	TIME MANAGEMENT AND PERSONAL PRODUCTIVITY	L	T	P	TW/SL	Total	C	SDG
		30	15	0	45	90	3	3,4,8,9
COURSE OBJECTIVES:								
- Understand the importance of time management and personal productivity in academic and professional life. - Develop skills to prioritise tasks, set goals, and manage workloads effectively. - Apply productivity tools and techniques to improve efficiency and reduce stress. - Enhance decision-making, communication, and teamwork through effective time management. - Foster lifelong habits for personal and professional excellence.								
COURSE CONTENT:								
Unit 1	Introduction to Time Management	9	0	0	9	18		4
Concept and importance of time management – Time as a strategic resource - Characteristics of highly productive people -Time management challenges among students and professionals - Identifying time wasters - Time audit and self-assessment - Personal productivity and effectiveness. Activities: Time Audit Diary / Personal Productivity Assessment / Prepare a Weekly Time Schedule								
Unit 2	Goal Setting and Planning	3	6	0	9	18		8
SMART Goals – Personal and professional goal setting - Prioritisation technique - Eisenhower Matrix - ABC Analysis - Pareto Principle (80/20 Rule) - Planning daily, weekly, and monthly schedules - Developing productive habits Activities: Goal Setting using SMART Framework / Group Discussion: Managing Academic Pressure								
Unit 3	Productivity Tools and Techniques	6	3	0	9	18		9
To-do lists and task management – Calendar and scheduling techniques - Pomodoro Technique - Time Blocking - Digital productivity tools - Google Calendar - Microsoft To Do - Trello - Notion - Managing meetings effectively - Email and communication management Activities: Personal Productivity Improvement Plan / Productivity Tool Demonstration (Google Calendar/Trello/Notion)								
Unit 4	Managing Stress and Improving Performance	6	3	0	9	18		3
Causes of stress – Work-life balance - Managing interruptions and distractions - Avoiding procrastination – decision-making under time constraints - Delegation and teamwork - Continuous improvement through reflection. Activities: Reflection Report on Productivity Improvement								
Unit 5	Personal Productivity for Career Success	6	3	0	9	18		4,8

Productivity in academic and professional environments - Building self-discipline - Emotional intelligence and productivity - Continuous learning and skill development - Personal branding - Productivity in the digital era - Developing a Personal Productivity Improvement Plan.
Activities: Presentation on Successful Time Management Practices

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO1: Explain the principles, importance, and challenges of time management and personal productivity.

CO2: Apply goal-setting, prioritisation, and planning techniques to improve academic and professional performance.

CO3: Utilise productivity tools and digital applications to organise tasks, schedules, and projects effectively.

CO4: Analyse time-management problems and recommend appropriate strategies to improve individual and team productivity.

CO5: Develop a personalised productivity improvement plan incorporating stress management, work-life balance, and continuous self-development.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%

Assessment Methodology: Internal Assessment Test (70%), Activities (30%)

TEXT BOOKS:

1.	Stephen R. Covey, “ <i>The 7 Habits of Highly Effective People</i> ”, Thirtieth Anniversary Edition, Simon & Schuster, New York, 2020.
2.	Alice Boyes, “ <i>Stress-Free Productivity: A Personalised Toolkit to Become Your Most Efficient and Creative Self</i> ”, TarcherPerigee (Penguin Random House), New York, 2022.

REFERENCES:

1.	Chris McChesney, Sean Covey, Jim Huling, Beverly Walker, and Scott Thele, “ <i>The 4 Disciplines of Execution: Achieving Your Wildly Important Goals</i> ”, Second Edition, Simon & Schuster, 2021.
2.	Damon Zahariades, “ <i>The Time Management Solution</i> , Career Press”, 2023.
3.	Oliver Burkeman, “ <i>Four Thousand Weeks: Time Management for Mortals</i> ”, Farrar, Straus and Giroux, New York, 2021.
4.	Phoebe Gavin, “ <i>The Workplace Guide to Time Management: Best Practices to Maximize Productivity</i> ”, Sourcebooks, 2021.
5.	Peter F. Drucker, “ <i>The Effective Executive</i> ”, Fiftieth edition, Harper Business, New York, 2020.

E resources/E materials:

1.	MIT Open Course Ware – Management and Professional Development Resources https://ocw.mit.edu/
2.	Open Learn – The Open University (Free Courses on Personal Effectiveness and Time Management) https://www.open.edu/openlearn/

3.	Coursera – Work Smarter, Not Harder: Time Management for Personal & Professional Productivity (University of California, Irvine) https://www.coursera.org/learn/work-smarter-not-harder
4.	Google Digital Garage – Free Online Courses on Productivity and Digital Skills https://grow.google/intl/en_in/