AC – Item No. –

As Per NEP 2020

University of Mumbai



Title of the program A- P.G. Diploma in Advance Accountancy B- M.Com. (Advance Accountancy) (Two Year) > 2023-24

C- M.Com. (Advance Accountancy) (One Year) – 2027-28

Syllabus for

Semester - Sem- III

Ref: GR dated 16th May, 2023 for Credit Structure of PG

University of Mumbai



(As per NEP 2020)

Sr. No	Heading		Particulars
. 1	Title of program O:A	Α	P.G. Diploma in Advance Accountancy
	0:B	В	M.Com. (Advance Accountancy) (Two Year)
	0:C	С	M.Com. (Advance Accountancy) (One Year)
2	Eligibility O:A	A	Graduate in faculty from Commerce and Management (B.Com, B.Com(B & I), B.Com(A & F), B.Com (FM), BMS) from any University recognised by UGC
	О:В	В	Graduate in faculty from Commerce and Management (B.Com, B.Com(B & I), B.Com(A & F), B.Com (FM), BMS) from any University recognised by UGC
	o:C	c	Graduate with 4 year UG Degree (Honours/ Honours with Research) with specialization in concerned subject or equivalent academic level 6.0 OR Graduate with 4 year UG Degree Programme with maximum credits required for award of minor degree is allowed to take up the post graduate programme in minor subject provided the student has acquired the required number of credit as prescribed by the concerned Board of Studies
3	Duration of program R:	A B	1 Year 2 Year
		С	1 Year
4	R:Intake Capacity	80	1
5	R: Scheme of Examination	50% Indi	P 6 Internal 6 External, Semester End Examination ividual Passing in Internal and External amination

6	Standards of Passing R:	40%		
7	Credit Structure R:	Attached herewith		
8	Semestere	Α	Sem I & II	
ο	Semesters	В	Sem I, II III & IV	
		С	Sem I & II	
9	Program Academic Level	A	6.0	
		В	6.5	
		С	6.5	
10	Pattern	Semes	ter	
11	Status	New		
12	To be implemented from Academic	Α		
12	To be implemented from Academic Year	В	- 2023-24	
		C	2027-28	

Prof (Dr) Sangeeta N Pawar Professor and Head Department of Commerce University of Mumbai Dr. Kavita Laghate, Dean, Commerce and Management University of Mumbai

Preamble

1) Introduction

Advanced Cost and Management Accounting is a dynamic subject in the field of accounting. This subject helps to identify the cost concepts and its impact on the profitability of the business thereby making the process of managerial decision making easy and quick.

- 2) Aims and Objectives
- 1. To enhance the abilities of learners to develop the concept of Cost and management accounting and its significance in the business
- 2. To enable the learners to understand, develop and apply the techniques of costing in the decision making in the business corporate
- 3. To enable the learners in understanding, developing, preparing and presenting the financial report in the business corporate
- 3) Learning Outcomes
- 1. The students will be able to identify and analyse Cost concepts and understand managerial decision making
- 2. The students will be able to understand standard practices associated with Standard Costing and Variance analysis
- 3. The students will be able to prepare and present functional budgets at organizational level
- 4. The students will be able to identify and analyse practices associated with Operating costing
- 4) Any other point (if any)

5. Credit Structure of the program (Sem-I, II, III & IV) (Table as per Parishisht 1 with Sign of HOD and Dean)

R: ___

Post Graduate Programs in University

Parishishta1

Year (2 Year	Level	Sem (2 Year)	Major		RM	OJT /FP	RP	Cum. Cr.	Degree
PG)			Mandatory*	Electives Any One					
I	6.0	Sem I	Advanced Cost and Management Accounting ICredits 4 Direct and Indirect Taxation (Income Tax) Credits 4 Advanced Financial Accounting Credits 4 Advanced Trends in Accounting - ICredits 2	Any One Credits 4 Mutual Fund Management and Wealth Management OR Introduction to IND AS OR Fundamental Analysis for Corporate RM	4	50		22	1
		Sem II	Advanced Cost Accounting 4 Credits Corporate Finance 4 Credits Direct and Indirect Taxation (Goods and Services Tax) - 4 Credits Advanced Trends in Accounting - II 2 Credits	Credits 4 Risk Management OR Liquidation Accounting OR Accounting of Housing Society & Charitable Trust		4		22	
Cum. Cr	. For PG	Diploma	28	8	4	4	-	44	

Cum. Cr.	For 2 Yi	PG	54	16	4	4	10	88	
Cum. Cr. Degree	For 1 Yı	PG	26	8			10	44	
				Derivatives					
				Management and					
			4 Credits	Forex (Foreign Exchange Rate					
			Financial Planning	Forov (Forsier					
			3. Personal	OR		-			
				Governance)		5			
			4 Credits	and Corporate					
			Standards	Assurance (Accounting Ethics					
			Financial Reporting	Auditing and					
			2. International						
				OR					
			4 Credits	Journalism				N	
		IV	Management	Financial					
		Sem	Financial				6	~~	
			Advanced	Credits 4				22	-
			Accounting – III 2 Credits	Research					
			Trends in	Operations					
			Advanced						
				OR					
			4 Credits	Commodities					
			Services	Securities and					
			Financial	Accounting and Taxation of					
			4 Credits	Accounting and					
			Auditing	OR					
			Advanced	Industries					
				Ecommerce					
			4 Credits	Taxation of					Yr. UG
11	6.5	111	Financial Accounting	Accounting and			4		Degree After 3-
	6.5	Sem	Corporate	Credits 4				22	PG

Note:- *The number of courses can vary for totaling 14 Credits for Major Mandatory Courses in a semester as illustrated

Prof (Dr) Sangeeta N Pawar Professor and Head Department of Commerce University of Mumbai Dr. Kavita Laghate, Dean, Commerce and Management University of Mumbai

-M. Mumber Semester-III

Mandatory 1

Programme Name: M. Com (Advanced Accountancy) Course Name: Corporate Financial Accounting

Total Credits: 04 University Assessment: 50 Total Marks: 100 College Assessment: 50

Aims & Objectives:

- 1. To enable learners to comprehend and apply Indian Accounting Standards.
- 2. To evaluate Human Resource Accounting models.
- 3. To synthesize methods for the valuation of goodwill and shares, enhancing their analytical and practical skills in financial reporting and valuation.

Course outcomes:

- CO1. The learners will be able to identify and apply various Ind-AS in the financial reporting systems.
- CO2. The learners will be able to prepare and analyze statement showing the totalvalue of human capital.
- CO3. The learners will be able to prepare and analyze statement illustrating valuation of good will and shares under various situations of business.

MODULE I

Unit 1: Indian Accounting Standards

- A) Introduction, Indian scenario prior to introduction of Ind AS in India Limitations of Accounting Standard, Emergence of Global Standards, Need and Benefit for Global Standards in India. Convergence v/s Adoption of IFRS, Ind AS Statutory provisions and applicability to various entities.
- B) Specific Ind-AS: (Theoretical and Small case studies/ practical illustrations for its applicability), Ind-AS19: Employee benefits, Ind-AS 32: Financial Instrument Presentation, Ind-AS 33: Earning Per Share, Ind-AS 38: Intangible Assets, Ind-AS109: Financial Instruments, Ind-AS 113: Fair Value Measurement.

Unit 2: Human Resource Accounting

- A) Meaning of Human Resource Accounting. Necessity and Implications of Human Resource Accounting. Models of HRA: Cost based Models and Economic Value Models (TheoreticalAspects only)
- B) Practical Valuation of Human resources using Lev and Schwartz Model 1971. Preparation of Statement showing the Total Value of Human Capital underLev and Schwartz Model 1971.

MODULE II

Unit 3: Valuation of Goodwill

- A) Meaning, Nature, Characteristics, Types and Factors affecting Goodwill.
- B) Methods of Valuation of Goodwill: Average profit method, Super Profit Method, Capitalization Method. (Theoretical and Advanced Practical Aspects)

Unit 4: Valuation of Shares

- A) Purpose of Share Valuation, Factors Affecting Valuation of Shares
 Approaches to Share Valuation: Income Approach, Net Assets Approach andMarket approach.
- B) Income Approach: Discounted Cash Flow, Dividend Discount Model and Maintainable Profit Basis (Theoretical and Practical) Net Assets Approach and Asset Backing Approach (Theoretical and Practical) Market approach (Theoretical and Practical) Preparation of Statement showing valuation of shares.

Reference Books

- Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi
- Advanced Accountancy by R. L Gupta and M Radhaswamy, S. Chand and Company (P) Ltd., New Delhi
- Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill & Co. Ltd., Mumbai Financial Accounting by Lesile Chandwichk, Pentice Hall of India Adin Bakley (P) Ltd.
- Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech.Publishing Co. Ltd., Mumbai.
- Financial Accounting by P. C. Tulsian, Pearson Publications, New Delhi Accounting Principles by Anthony, R.N. and Reece J.S., Richard Irwin Inc.
- Financial Accounting by Monga, J.R. Ahuja, Girish Ahuja and Shehgal Ashok, Mayur Paper Back
- Compendium of Statement & Standard of Accounting, ICAI.
- Indian Accounting Standards, Ashish Bhattacharya, Tata Mc. Grow Hill & Co.Ltd., Mumbai Financial Accounting by Williams, Tata Mc. Grow Hill & Co. Ltd., Mumbai
- Company Accounting Standards by Shrinivasan Anand, Taxman.
- Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.
- Introduction to Financial Accounting by Horngren, Pearson Publications.
- Financial Accounting by M. Mukherjee.M. Hanif. Tata McGraw Hill EducationPrivate Ltd; New Delhi

Mandatory 2 Programme Name: M. Com (Advanced Accountancy) Course Name: Advanced Auditing

Total Credits: 04 University Assessment: 50 Total Marks: 100 College Assessment: 50

Aims & Objectives:

- 1. To acquaint learners with Standards on Auditing and its application in financial reporting systems.
- 2. To develop the ability to plan and execute audits.
- 3. To develop an understanding of the types of audit evidence and how to apply appropriate procedures to gather sufficient and reliable evidence.
- 4. To develop the ability to critically evaluate and interpret audit reports.

Course outcomes:

- CO1. Learners will be able to apply auditing procedures to a simulated financial statement audit, ensuring compliance with relevant Standards on Auditing.
- CO2. Learners will be able to prepare an audit working papers and conduct variance analysis to a simulated financial statement.
- CO3. Learners will be able to distinguish between different types of audit evidence (physical, documentary, analytical) and explain the procedures used to gather evidence for specific audit objectives, justifying the choice of procedures based on the nature of the assertion being tested.
- CO4. Learners will be able to identify, analyze an audit report and explain the auditor's opinion on the financial statements, including the rationale for any modifications made to the opinion.

MODULE I

Unit 1: Auditing Principles and Auditor's Responsibilities

- A) Standard on Auditing: Meaning and Introduction. Objectives and Checklist of Auditor in accordance with SA 230. Objectives and Checklist of Auditor in accordance with SA 240.Objectives and Checklist of Auditor in accordance with SA 250.
- B) Objectives and Checklist of Auditor in accordance with SA 260. (Use Case Study method and Check list for teaching and evaluation)

Unit 2: Audit Planning, Strategy and Execution

 A) SA 200 Commencing an Audit: Checklist. Factors influencing Audit Strategy & Plan. Audit Working Papers: Meaning and Relevance. B) Audit Working Paper on: Planning Scope of Engagement, Initial Audit Check list, Note on understanding client business, key people, Variance Analysis of Balance Sheet and Profit and loss statement.

(Note Practical Problems on Variance Analysis are to be included)

MODULE II

Unit 3: Audit Evidence

 A) SA 500 and 501: Audit Evidence Considerations.SA 505: External Communication. SA 510: Initial Audit Engagement: Checking Opening Balances.

B) SA 530: Audit Sampling. SA 550: Related Party Transactions.

(Use Case Study method and Check list for teaching and evaluation)

Unit 4: Audit Report

A) Meaning, Elements and Types of Audit Report.

SA 700: Forming an Opinion and Reporting on Financial Statements & Checklist. SA 701: Communicating Key Audit Matters in the Independent Auditor's Report. SA 705: Modifications to the Opinion in the Independent Auditor's Report. SA 706: Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report.

B) Reading and Interpretation Extracts of Audit Report.

(Use Case Study method and Check list for teaching and evaluation)

Reference Books

- Guidance notes issued by Auditing and Assurance Standards Board and The Institute of Chartered Accountants of India.
- Arens, A. A., & Loebbecke, J. P. (2023). Audit Theory and Practice. PearsonEducation Limited.
- Arens, A. A., Elder, R. J., & Beattie, M. S. (2022). Auditing and AssuranceServices. McGraw-Hill Education.
- Hodge, T. D., Weiss, E. S., & Arens, G. (2021). Auditing: A Business RiskApproach. John Wiley & Sons.
- Louwers, T. J., Vance, C. J., Ricketts, W. M., & Libby, R. H. (2020). Auditing:An Integrated Approach. McGraw-Hill Education.
- Carmichael, D. R., Green, C. W., & Sethuraman, K. R. (2019). Professional Auditing. CCH Incorporated.
- Desai, M. A., & Sundar, V. (A conceptual framework for auditing theory). Springer.
- Mittal, V. K. (Auditing process and techniques). Taxmann Publications Pvt.Ltd.
- Gupta, R. K. (Auditing). Sultan Chand & Sons.
- Tulsian, P. C. (Auditing). Tulsian Publishers Pvt. Ltd.
- Katzenmeyer, J. L. (The language of audit assertions and evidence). JohnWiley & Sons.

Mandatory 3 Programme Name: M. Com (Advanced Accountancy) Course Name: Financial Services

Total Credits: 04 University Assessment: 50 Total Marks: 100 College Assessment: 50

Aims & Objectives:

- 1. To introduce learners to the concept of financial services, with critical evaluation of leasing service.
- 2. To familiarise learners with various attributes of factoring.
- 3. Learners understand the different types of alternative investment funds andhow they differ from traditional investment funds.
- Learners understand and analyse the fundamental concepts of portfolio management, including portfolio analysis and risk management.

Course Outcomes:

- CO1. The learners will be able to critically evaluate and interpret financial attributes of leasing.
- CO2. The learners will be able to calculate the effective costs of factoring.
- CO3. The learners will be able to categorize and evaluate various alternate investments funds.
- CO4. The learners will be able to compare and contrast various investment avenues considering its risk- return.

MODULE I

Unit 1: Financial Services: Leasing

- A) Introduction to Financial Services: Meaning and Types Leasing : Meaning, Types, Advantages and Disadvantages. Regulatory Aspects of Leasing. Evaluation of Lease: From lessee's and lessor's perspective.
- B) Lessee's Perspective: Present Value Analysis, Internal Rate of Return analysis, and Bower- Herringer Williamson Method. Lessor's perspective: Net Present Value and Internal Rate of Return Method. Calculation of Break Even Lease Rental.

Unit 2: Financial Services: Factoring

- A) Introduction, Definition and Mechanism and Growth of factoring.
 Regulatory Aspects of Factoring. Functions of factor.
- B) Forms of Factoring: Recourse and Non Recourse, Advanced nd Post facto, Full, Disclosed and Undisclosed, Domestic and Cross Border. Forfaiting: Meaning, Process and Difference between forfaiting and exportfactoring. Calculation of net cost of factoring.

MODULE II

Unit 3: Alternative Investment Funds

- A) Introduction, Evolution, Avenues, Distinguish between Traditional and Alternative Investment Funds and Difference between Alpha and Beta. Types: Venture Capital Fund, Angel Fund, Private Equity Fund, Special Fund, Debt Fund, Infrastructure Fund, SME Fund, Hedge Fund and Social Venture Fund. (Theoretical aspects only)
- B) Calculation of Returns: Yield to Maturity, Multiple on Invested Capital, The Kaplan-Schoar Public Market Equivalent (KS-PME) and Direct Alpha Method.

Unit 4: Portfolio Management Services

- A) Portfolio Management Services: Meaning, Advantages, Types, Strategies: Active and Passive Strategies.Portfolio Analysis: Traditional Vs Modern - Rationale of Diversification -Markowitz Theory - Effect of Combining two securities.
- B) Measurement of Expected Return of Portfolio Portfolio Risk (includingPractical Problems).

Reference Books

- Reilly: Investment Analysis and Portfolio Management, Thomson
- Fisher Donald E & Ronald J Jordan: Securities Analysis & Portfolio Management, PHI
- Francaia Jack Clark & Richard W Taylor: Theory & Problems of Investment, Mcgra
- Punithavathi Pundyan: Securities Analysis & Portfolio Management, Vikas
- Avadhani, V.A: Investment & Security Management in India, Himalaya Gangadhar V: Investment Management, Anmole
- Sulochana M: Investment Management, Kalyani
- Strong: Practical Investment Management, Thomson
- Avadhani, V.A: International finance, Himalaya

Mandatory 4

Programme Name: M. Com (Advanced Accountancy) Course Name: Advanced Trends in Accounting-III

Total Credits: 02 University Assessment: 25

Total Marks: 50 College Assessment: 25

Aims & Objectives:

- 1. To acquaint learners with hands-on training under GST procedures and compliances.
- 2. To provide hands- on training and knowledge required for filing of various returns under GST.

Course Outcomes:

- CO1. The learners will be able to register and prepare various documents required underGST law.
- CO2. The learners will be able to file various GST returns.

MODULE I

Unit 1: GST Registrations and Its Components

- A) Basic Procedures: GST Registration for various entities. (Theoretical and Practical Aspects) Amendment of Registration. Cancellation of Registration. Revocation of Cancellation of Registration GST Tax Invoices and Debit & Credit Note: Meaning, Conditions, Format and Preparation Procedure. (Theoretical and Practical Aspects)
 - Bill of Supply and E-Invoicing: Meaning, Conditions, Format and PreparationProcedures.(Theoretical and Practical Aspects) E- Way Bill: Meaning, Conditions, Format and Preparation Procedures.(Theoretical and Practical Aspects)

Unit 2: GST Payment of Tax & Return Filing (Theoretical and Practical Aspects)

A) Payment of Tax: Electronic Cash Ledger Electronic Credit Ledger Electronic Liability Register Interest on delayed payment of tax Tax Deduction at Source and Tax Collection at Source Deductors of Tax at Source.Categories of persons not liable to deduct TDS. Monthly & annual statements by Electronic Commerce Operator.

B) E-Filling Returns: Furnishing Details of Outward Supplies (GSTR-1) Furnishing Details of Inward Supplies (GSTR-2A & GSTR-2B) Furnishing of Returns Under Section 39 (GSTR-3B), Return For Composition Supplier

(GSTR-4), Return for Non-Resident Taxable Person (GSTR-5)Return for TDS (GSTR-7), Statement for TCS (GSTR-8), Annual Return (GSTR-9/9A & GSTR-9B) Final Return (GSTR-10), Due Dates for Payment of Tax and Filling of Returns Default/Delay in Furnishing Return (Theoretical Aspects only)

Note: Simulated Software/Specimen copies can be used to provide hands-on- training to the learners.

References

- Comprehensive Guide to Goods and Services Tax (GST) in India by Bangur &Bangur, 2023 Publisher: LexisNexis
- GST Law & Practice by R.K. Jain Taxmann Publications Ltd.2024
- GST Ready Reckoner by Taxmann Editorial Board Taxmann
 Publications Ltd.2024
- The GST Handbook by PCS Tax Publications 2024
- GST Bare Act.

Web resources:

- 1. https://www.gst.gov.in/
- 2. https://tutorial.gst.gov.in/userguide/returns/Create_and_Submit_GS TR3B.htm

Elective 1

Programme Name: M. Com (Advanced Accountancy) Course Name: Accounting and Taxation for E-Commerce Industries

Total Credits: 04 University Assessment: 50

Total Marks: 100 College Assessment: 50

Aims & Objectives:

- 1. To provide a comprehensive background to learners about the Ecommerceaccounting landscape in the Indian Market.
- 2. To provide a detailed understanding of accounting dynamics and revenue recognition principles of various elements of e-commerce transactions.
- 3. To comprehend advanced knowledge in preparation of financial statements of E-commerce industries.
- 4. To impart knowledge concerning regulatory and tax framework governing E-commerce industries in India.

Course Outcomes:

- CO1. The learners will be able to summarize and analyze the E-commerce landscape in India.
- CO2. Learners will be able to record and reconcile digital transactions, understanding the nuances of different payment methods.
- CO3. Learners will be able to demonstrate the ability to prepare financial statements for e-commerce businesses.
- CO4. Learners will be able to identify and implement compliance requirements for operating an e-commerce business in India.

MODULE I

Unit 1: : Introduction to E-Commerce in India

A) Overview of the Indian e-Commerce Landscape: Introduction, Meaning, Definition of E-commerce, Advantages, Elements of E-commerce Transaction and Challenges. Growth and trends in the Indian e-Commerce sector, including major players and market dynamics. B) Business Models: Principal to Principal, Principal to Agent, Aggregator, Inventory Led Model, Open Market Place Model, Managed market Place Model, Overview of Digital Payment Ecosystems: Introduction, Features,

Advantages and Disadvantages of the digital payment systems prevalent in India, including UPI, Paytm, and other e-wallets, and their impact on e-Commerce. RBI regulations on Digital Payment Ecosystems.

(Case studies on accounting model of E-commerce industries)

Unit 2: Accounting for Digital Transactions:

- A) Record and reconciling digital transactions, understanding the nuances of different payment methods.
- B) Revenue Recognition in e-Commerce Transactions: The principles and framework of revenue recognition specific to e-Commerce, Accounting for Membership Fee, Merchandising, Auction, Shipping and Handling, Advertisements and other services with practical examples and case studies.

MODULE II

Unit 3: Accounting of E – Commerce Business

- A) Preparing profit and loss statements, balance sheets, and cash flow statements for e-Commerce businesses.
- B) Case Studies: Analyse case studies to interpret financial statements, understand financial performance, and make strategic business decisions.

Unit 4: Regulatory and Tax Frameworks

- A) Understanding GST and Other Taxes: Goods and Services Tax (GST) and other taxes applicable to e-Commerce businesses in India, including their calculation and implications.
- B) Compliance Requirements for Online Businesses: The legal and regulatory requirements for operating an e-Commerce business, focusing on compliance and best practices.

Reference Books

- E-Commerce Accounting: A Practical Guide (Indian Edition)" by Bimal Jain & P.C.Tulsian (2023)
- The Law and Practice of E-commerce Accounting in India" by S.P. Goyal (2022)
- Taxmann's E-commerce Accounting (with GST)" by Taxmann Editorial Board(2021)
- E-commerce Accounting in India: A Comprehensive Guide" by Vikas Singh (2020)
- Accounting for E-commerce Transactions (Ind AS)" by Institute of CharteredAccountants of India (ICAI) (2019)
- E-commerce Accounting: Principles and Practices" by R.K. Goyal (2018)
- A Handbook on E-commerce Accounting" by Bangar & Bangar (2017)
- E-commerce Accounting Guidelines for India" by Ministry of Commerce &Industry (Government of India) (2014)

Elective 2

Programme Name: M. Com (Advanced Accountancy) Course Name: Accounting and Taxation of Securities and Commodities

Total Credits: 04 University assessment: 50 Total Marks: 100 College assessment: 50

Aims & Objectives:

- 1. To provide a comprehensive overview of Indian securities markets.
- 2. To acquaint learners with the taxation dynamics of various instruments traded in the Indian securities market.
- 3. To impart practical knowledge with respect to set off and carry forward of losses with respect to capital gain.

Course Outcomes:

- CO1. The learners will be able to distinguish, summarize, analyse the various components of Indian securities market.
- CO2. The learners will be able to calculate tax liability under various circumstances of the given instruments traded in the Indian securities market.
- CO3. The learners will be able to determine the net tax liability of selected instruments.

MODULE I

Unit 1: Introduction to Securities Markets and Securities.

- A) Meaning and Features of Securities Market, Statutes and authorities governing the securities market, Structure and Participants of securities market.
- B) Product and Features of Securities Markets: Shares, Debentures, Derivatives, Government Securities, Employee Stock Option Plans, Masala Bonds, Securities Premium notes, Debt Instruments with Debt Warrants, Sovereign Gold Bonds and Equity Oriented Mutual Funds. Introduction to various Investment Vehicles in Securities Market: Real Estate Investment Trust, Infrastructure Investment Trust, Alternative Investments Funds, Foreign Portfolio Investors.

Unit 2: Taxation of Investment Products. (Theoretical & Practical aspects)

- A) Sources of Income and Debt Products. Interest Income and Computation of Interest on bonds chargeable to the taxand Capital gain in the hands of investor.
- B) Taxation on dividend and capital gain from Mutual Fund.

MODULE II

Unit 3: Taxation of Investment Products (Theoretical & Practical aspects)

- A) Taxation of Securities Tax on inter- corporate dividend.
- B) Taxation on ULIP
 - Unit 4: Taxation of Investment Products (Theoretical & Practical aspects)
 - A) Tax treatment of Global Depository Receipt Tax treatment of American Depository Receipt
 - B) Set off and Carry Forward of Losses.

Reference Books

- Securities and Investment Management (with NSE & BSE)" by P.C. Tulsian &S.P. Tulsian (2023)
- Taxation on Securities Transactions (Including Commodities Trading and F&OSegment)" by Bangar's (2022)
- Securities Market & Investment Management (with NSE & BSE)" by Vinod K.Khanna (2021)
- Taxation of Securities Transactions (Course Material)" by Institute of Chartered Accountants of India (ICAI) (2020)
- Taxmann's Guide to Securities Transaction Tax (STT)
- Securities Regulation in India" by Y.C. Agarwala (2018)
- Securities and Investment Management" by B.B. Bhattacharya (2016)

Elective 3 Programme Name: M. Com (Advanced Accountancy) Course Name: Operations Research

Total Credits: 04 University Assessment: 50 Total Marks: 100 College Assessment: 50

Aims & Objectives:

- A) To gain practical knowledge of statistical tests and its application.
- B) To understand various aspects pertaining to sequencing and design its solutions.
- C) To understand and communicate various approaches to replacement models in terms of human resources, machines and building.
- D) To evaluate and communicate various decisions based on decision tools and techniques.

Course Outcomes:

- CO1. The learner will be able to explain and apply statistical tests under various scenarios.
- CO2. The learner will be able to apply and interpret sequencing problems and solutions.
- CO3. The learner will be able to analyze real-world replacement problems and recommend cost-effective solutions.
- CO4. The learner will be able to proficiently use decision criteria and tools and decision trees to make optimal decisions based on available information.

MODULE I

Unit 1:

A) Definition and scope of operation research, Multidisciplinary nature of operation research, Distinction between operation research and operations management Applications of operation research in Manufacturing(production planning, inventory various fields control, quality management), Logistics and transportation (vehicle routing, network design, scheduling), Finance and economics (portfolio optimization, risk management, decision analysis), Healthcare (resource allocation, facility location, patient scheduling) and Energy environment (energy planning, emissions control, and waste management)

B) Phases of an operation research study: Problem formulation and definition Data collection and analysis, Model development and selection, Solution techniques and Validation and significance analysis and Implementation & monitoring. Practical Illustrations on Tests of Significance: Cronbach Alpha, Chi-Square, Paired T- Test, T – Test, ANOVA, ANCOVA and Factor Analysis.

Unit 2: Job Sequencing

- A) Introduction, Definition, Assumptions and Applicability of Job Sequencing
- B) Types and Solution of Sequencing Problems: a) 'n' jobs are to be processed on two machines say machine A and machine B in the order AB. This means that the job is to be processed first on machine A and then on machine B. (b) 'n' jobs are to be processed on three machines A,B and C in the order ABC i.e. firston machine A, second on machine B and third on machine C. (c) 'n' jobs are to be processed on 'm' machines in the given order.(d) Two jobs are to be processed on 'm' machines in the given order. (Practical Illustrations)

MODULE II

Unit 3: Replacement Model

- A) Introduction, Types of Failure: Gradual failure and (ii) Sudden failure, Bathtub Curve, Cost associated with Maintenance and Types of Replacement problems: Human Resource, Machines and Building.
- B) Approaches to Replacement Model: Actual Cost of item, Direct costs of labourinvolved in replacement. Practical problems: (a) Replacement of Items whose Maintenance Cost Increases with Time and the Value of Money Remains Same During the Period (b) Replacement of Items whose Maintenance Costs Increases with Time and Value of Money also Changes with Time (c) Replacement of Items whose Maintenance Cost Increases with Time and Money Value also Changes and Group Replacement of Items.

Unit 4 Decision Theory

- A) Introduction, What is Decision, Decision and Conflict, Classification of decision, Steps in Decision Theory Approach.
- B) Practical Illustrations on: Decision making under Certainty, Decision making under Risk, Decision making under Uncertainty, Criterion of Optimism, Criterion of Pessimism, Criterion of Regret, Equal Probability Criterion, Decision under conflict and competition, Hurwicz Criterion and Decision Tree(Stochastic Decision Tree).

Reference Books

- Introduction to Operations Research by Frederick S. Hiller and Gerald J. Lieberman (10th Edition)
- Operations Research: Applications and Algorithms by Wayne L. Winston (4thEdition)
- Queuing Theory by J. Richard Jackson
- Introduction to Stochastic Programming by John R. Birge and Francois Louveaux.
- Operations Research: P. Rama Murthy
- Statistics: The Art and Science of Learning from Data by Daryl Pregibon(Fourth Edition)
- Statistical Rethinking: A Bayesian Course with Examples in R and StanbyRichard McElreath
- The Elements of Statistical Learning by Trevor Hastie, Robert Tibshirani, and Jerome Friedman.

Paper Pattern for 4 Credits:

Sr No	Nature of Examination	Bifurcation of Marks					
Ι	Continuous Evaluation						
		Sr No	Examinati	on	Marks		
		1 (Class Test		20	50	
			Project Presentation Assignment / Case S		20		
		-	Active Attendance & Participation	k i	10		
2	Semester End	Question No	Paper Pattern	Unit	Marks	'ks	
		1	Solve (1 out of 2)	Ι	14	50	
		2	Solve (1 out of 2)	II	12		
		3	Solve (1 out of 2)	III	12		
		4	Solve or Short Notes (1 out 2)	IV	12		
			ory Subjects ,questi ed into 4 marks eac				
					Total	100	

Paper Pattern for 2 Credits:

Sr No	Nature of Examination	Bifurcation of Marks				Total Marks
Ι	Continuous Evaluation		000			
	2.1	Sr No	Examinati	ion	Marks	
		1	Class Test		10	25
	•		Project Presentation Assignment / Case S		10	20
		3	Active Attendance & Participation	l l	05	
2	Semester End	Question No	Paper Pattern	Unit	Marks	
		1	Solve (1 out of 2)	Ι	13	25
		2	Solve (1 out of 2)	II	12	
			ory Subjects ,questi led into 4 marks eac			
					Total	50

Paper Pattern (Tota	l 50 Marks)	
Internal =	25 Marks	
External =	25 Marks	
Internal Paper Pattern	(25 Marks)	
Q1. Project Presentation/	Case Study writing	05 Marks
Q2. Quiz/ Group discussion	n	05 Marks
Q3. Paper Presentation/ Se	eminar presentation	05 Marks
Q4. Class Test		10 Marks
	Total	25 Marks
External Paper Pattern	(25 Marks)	
Q1. Case Study Analysis		05 Marks
Q2. Answer the following	(Any One)	10 marks
A Or		
B		
Q3. Answer the following	(Any One)	10 Marks
A		
~ ~		
Or		

Total 25 Marks

	Paper Pattern	(Total 100 Marks)
Internal	= 50 Marks	
External =	50 Marks	
Internal Paper Patte	rn (50 Marks)	
Q1. Project Presenta	ation/ Case Study writing	10 Marks
Q2. Quiz/ Group dis	cussion / Role Playing	10 Marks
Q3. Paper Presentat	tion/ Seminar presentation	10 Marks
Q4. Class Test		20 Marks
	Total	50 Marks
	External Paper Pattern	(50 Marks)
Q1. Case Study Ana	-	(50 Marks) 10 Marks
Q1. Case Study Ana Q2. Answer the follo A Or B	lysis	
Q2. Answer the follo A Or B Q3. Answer the follo A Or	llysis owing (Any One)	10 Marks
Q2. Answer the follo A Or B Q3. Answer the follo A Or B Q4. Answer the follo A Or	llysis owing (Any One) owing (Any One)	10 Marks 10 marks
Q2. Answer the follo A Or B Q3. Answer the follo A Or B Q4. Answer the follo A	owing (Any One) owing (Any One) owing (Any One)	10 Marks 10 marks 10 Marks

Total 50 Marks

Letter Grades and Grade Points:

Semester GPA/ Programme	% of Marks	Alpha-Sign/ Letter Grade
CGPA Semester/ Programme		Result
9.00 - 10.00	90.0 - 100	O (Outstanding)
8.00 - < 9.00	80.0 - < 90.0	A+ (Excellent)
7.00 - < 8.00	70.0 - < 80.0	A (Very Good)
6.00 - < 7.00	60.0 - < 70.0	B+ (Good)
5.50 - < 6.00	55.0 - < 60.0	B (Above Average)
5.00 - < 5.50	50.0 - < 55.0	C (Average)
4.00 - < 5.00	40.0 - < 50.0	P (Pass)
Below 4.00	Below 40.0	F (Fail)
Ab (Absent)	=	Absent

Prof (Dr) Sangeeta N Pawar Professor and Head Department of Commerce University of Mumbai Dr. Kavita Laghate, Dean, Commerce and Management University of Mumbai

Appendix- B

1.	Necessity for starting the course:	NEP 2020
2.	WhethertheUGChasrecommended the course:	Yes
3.	Whether all the courses have commenced from the academic year 2023-24	Yes
4.	The courses started by the University are self-financed, whether adequate number of eligible permanent faculties are available?:	Aided Courses, Yes
5.	To give details regarding the duration of the Course and is it possible to compress the course?:	Two Years Course, Each course has Separate Specialization the course cannot be Compressed
6.	The intake capacity of each course and no. of admissions given in the current academic year:	Advance Accountancy 80
7.	Opportunities of Employability / Employment available after undertaking these courses:	Jobs in teaching field, Research associates, Computer Analyst, Accountants, Banking jobs. Marketing Representatives, HR Staff, Web Designer, Animator, Advertising Personnel, Export, Business Consultancy, Start UPS

Prof (Dr) Sangeeta N Pawar Professor and Head Department of Commerce University of Mumbai Dr. Kavita Laghate, Dean, Commerce and Management University of Mumbai