ಡಾ. ಮನಮೋಹನ ಸಿಂಗ್
ಬೆಂಗಳೂರು ನಗರ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

Dr. MANMOHAN SINGH
BENGALURU CITY UNIVERSITY

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No.BCU/BoS/Syllabus-PG/Commerce/A21 /2025-26 Date:04.03.2026

NOTIFICATION

Sub: Syllabus for the II Semesters Post Graduate Courses in the Faculty of Commerce –reg

Ref: 1. The recommendations of the Board of Studies in Commerce [PG]
2. Orders of the Vice-Chancellor dated:03.03.2026

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In pursuance to the recommendations of the Board of Studies in Commerce [PG] and pending ratification by the Academic Council, the Syllabus for II Semester Post Graduate Courses in the Faculty of Commerce. Accordingly, the following CBCS Syllabus for the II Semester PG Courses of Commerce Faculty are hereby notified for implementation effective from the academic year 2025-26.

Sl. No.	Programmes
1.	M.Com [General] – II Semester
2.	M.Com [Financial Analysis] – II Semester
3.	M.Com [Fintech] – II Semester

The detailed Syllabi for above subjects are notified in the University Website: www.bcu.ac.in for information of the concerned.

REGISTRAR

To,
1. The Registrar [Evaluation], MSBCU
2. The Dean, Faculty of Commerce, MSBCU.
3. The Principals of the concerned affiliated Colleges of MSBCU – through email.

Copy to:
1. The P.S. to Vice-Chancellor/Registrar/Registrar (Evaluation), MSBCU
2. Office copy / Guard file / University Website: www.bcu.ac.in

M.Com (General)

II SEMESTER

Paper Code	Subjects	Total Instruction Hrs	Duration of Exam (Hrs)	Marks			Credits
				IA	Exam	Total	
2.1	Business Research Methodology	**60**	**3**	**30**	**70**	**100**	4
2.2	Operations Research	**60**	**3**	**30**	**70**	**100**	4
2.3	Business Allied Laws	**60**	**3**	**30**	**70**	**100**	4
2.4	Corporate Valuation	**60**	**3**	**30**	**70**	**100**	4
2.5	Sustainability and Environment Accounting	**60**	**3**	**30**	**70**	**100**	4
2.6	Entrepreneurial Ecosystems	**60**	**3**	**30**	**70**	**100**	4
2.7	Financial Modelling	**45**	**3**	**-**	**-**	**100**	3
	Certificate Course	**-**	**-**	**-**	**-**	**50**	2
II SEMESTER TOTAL OF CREDITS							**29**

Note:

1. The student has to undergo a **Compulsory Certification Course of minimum two credits** on Advanced Excel / Spreadsheet and submit the certificate by the end of Second semester before the commencement of exams.

AND

2. Any one course related to their area of Specialization in any MOOC platform such as SWAYAM, NPTEL, AICTE, CEC, SPRINGBOARD (INFOSYS), ORACLE, FKCCI, and NISM of minimum 30 hours during first year and submit the certificate by the end of Third Semester, which is compulsory.
3.
   a. **For 2.1 Business Research Methodology:** The examination is for total of 100 Marks, where term-end theory examination will be conducted for 70 Marks and instead of Internal Assessment, Practical examination will be conducted by BOE. The marks allotment is as follows:

Component	**Marks**
Practical Problem Execution on SPSS	20
Viva-Voce	10
Total	**30**

   b. **For 2.7 Financial Modelling:** The examination is for total of 100 Marks, where term-end examination will be completely Lab-based conducted by BOE. The marks allotment is as follows:

Component	**Marks**
Practical Problem Execution on Spreadsheet	60
Theory / Objective (MCQ-Based)	20
Viva-Voce	20
Total	**100**

M.Com (General)

Name of the Course : Business Research Methodology			
Course Code : 2.1		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description:

Management of business and industrial enterprises involves some basic functions to achieve the objectives of the organizations through well planned decisions on a variety of business issues. For better decision making it is required to have sufficient information about the particular business area as information reduces the uncertainty in decisions. In this context research helps in developing the information about the various business areas and this way it also assists the managerial decision making. This course includes the understanding of various concepts of research methodology, some illustrations of their practical usage and understanding of some data analysis software.

Course Objectives:

1. To understand the concepts, tools and techniques of carrying out business research.
2. To enable students to conduct critical analysis of research in the various fields of business.
3. To develop skills in Designing a study to address a research question.
4. To demonstrate familiarity with various data collection methods.
5. To equip students for identifying appropriate sampling design for different research questions.
6. To expose students with the methods and process of data analysis for scientific research.
7. To develop skills in research report writing.

Course Outcomes:

On successful completion of the course, the student will be able to:

CO1: Develop thorough understanding of the fundamental theoretical ideas and logic of research.
CO2: Propose a research study and justify the theory as well as the methodological decisions.
CO3: Formulate the hypothesis and test the hypothesis.
CO4: Acquire the skill in drafting research report

MODULE 1	**Introduction to Research**	**10 Hrs**

Research: Meaning, Characteristics, Objectives, Types, Methods, Significance, Process, Approaches, Criteria of Good Research. Concept of Theory Empiricism- Deductive and Inductive Theory. Research Ethics, Code of Ethics for Researchers.

Research Problem in Social Sciences- Sources of Research Problem, Selection of Problem of Research, Components of Research Problem, Defining Research Problem, Evaluation of Research Problem

MODULE 2	**Research Design**	**14 Hrs**

Review of Literature: Need, Purpose and methods, Research Gap Identification. Sources of Research Papers and other published works, Search engines and use of keywords, Systematic Review, Methods of Review of Literature. Use of software for Review of Literature.

Research Design: Meaning, Need & Importance, Features of Good Research Design, Types of Research Design – Concept, Pros & Cons. Qualitative, Quantitative and Mixed Research Designs. Qualitative research – concept, basic assumptions and features.

Sampling: Introduction to Sampling: Concepts of Population, Sample, Sampling Frame, Sampling Error, Sample Size, Characteristics of a good sample, Types of Sampling - Probability and Non-Probability, Determining Size of the Sample, Sample v/s Census.

MODULE 3	Measurement Scales and Data Collection	12 Hrs

Scales of Measurement: Meaning, Types of Data Measurement Scales, Techniques of Data Scaling, Variables; Meaning, Characteristics and its Types. Goodness of Measurement Scales, Deciding the Scale; Development of Research Instruments. Types of Research instruments: Questionnaires Vs. Schedules, Questionnaire designing and Use of technology in development of research instruments.
Collection of Data: Primary and Secondary data; Collection of Primary Data: Methods of Data Collection - Field Survey, Observations, Experimentation (Case Studies). Identification and Selection of Respondents, Serving the Instruments, Collection of Instruments, Testing the Research Instruments; Reliability and Validity Tests, Testing the Reliability using different techniques. Secondary data: Sources, Identification and Selection of Source; Databases as Source of Secondary Data.

MODULE 4	Data Processing and Data analysis	14 Hrs

Data Processing: Field work validation, Editing, Coding, Classification and Tabulation of data.
Hypothesis: Concept, Meaning, Types; Steps in Testing the Hypothesis, Error in Hypothesis Testing - Type I and Type II Errors, P – Value Approach.
Data Analysis: Univariate Data Analysis, Bivariate Data Analysis and Multivariate Data Analysis. Methods of analysing qualitative data – content, thematic and narrative analysis.
Parametric Tests: One sample z test, two samples z test, One sample t test, Two samples t test, Paired sample t test (Problems).
Non-Parametric Tests: Chi-square test, Mann Whitney U Test, Wilcoxon Signed Rank Test (Problems).
Software's for Data Analysis and Testing the Significance of Results.

MODULE 5	Report Writing	10 Hrs

Report Writing: Concept, Process, Types of Reports. Footnotes and Endnotes, Reference List and Bibliography, Use of Citations and References; MLA Style, APA Style and Chicago. Reference Management – Meaning, Software's - Mendeley, Zotero, EndNote, Citavi, Papers, Paperpile, JabRef, and CiteULike. Index- Meaning and types. Metrics- Meaning and Types. Plagiarism- Meaning, Types, Software for detection of plagiarism and Research Publications.

SKILL DEVELOPMENT ACTIVITIES

- Illustrate primary and secondary data with examples.
- Construct a questionnaire for collection of primary data with respect a research topic of your choice.
- Activity on observation technique.
- Illustrate different types samples with examples

BOOKS FOR REFERENCE

1. Bajpai, Naval. Business Research Methods. Pearson.
2. Bryman, Alan & Emma Bell. Business Research Methods. Oxford University Press – India Edition.
3. Churchill. Marketing Research. Dryden Press, Harcourt Publications
4. Collis, Jill & Hussey, Roger. Business Research: A Practical Guide for Undergraduates & Postgraduates. Palgrave Macmillan – India.
5. Cooper and Pamela. Business Research Methods. Tata Mc Graw Hill.
6. Kothari, C. R. Research Methodology: Methods and Techniques. New Age International Publishers.
7. Krishnaswamy O.R. and Ranganatham, M. Methodology of Research in Social Sciences.
8. Panneerselvam, R. Research Methodology. PHI Learning Pvt Ltd., New Delhi.
9. Sekaran, Uma. Research Methods for Business. Wiley India, New Delhi.
10. Saunders. Business Research Methods. Pearson Publications.
11. Sharma, K. R. Research Methods. Atlantic Publishers, New Delhi.

E-Resources

1. Swayam https://swayam.gov.in *(Courses: Research Methodology, Social Science Research)*
2. NPTEL https://nptel.ac.in *(Courses: Introduction to Research, Research Methodology)*
3. University Grants Commission – e-PG Pathshala https://epgp.inflibnet.ac.in *(Modules: Research process, theory, ethics)*
4. Directory of Open Access Journals https://www.doaj.org
5. Quantitative Research Course – Coursera https://www.coursera.org/learn/quantitative-research

Note:

Practical Aspect

Students are expected to use relevant software package to learn the following:-

(i) Draw frequencies, bar charts, and histogram.
(ii)Creating and editing graphs and charts.
(iii)Bi-variate correlation.
(iv) Parametric Test: T-test, One way ANOVA, Two Way ANOVA and MANOVA
(v) Non-parametric Tests: Chi-square Test.
(vi) Simple Regression, Multiple Regression, Reliability Analysis, Factor Analysis.

M.Com (General)

Name of the Course : Operations Research			
Course Code : 2.2		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description:

Operations Research (OR) is an essential analytical approach to problem-solving and decision-making in organizations. This course equips Commerce students with key quantitative tools and techniques to tackle business challenges, focusing on model development, optimization methods, and decision-making tools. Students will apply these skills in areas such as supply chain management, production, and finance, preparing them to use OR methods in real-world business scenarios.

Course Objectives:

1. To introduce students to the fundamental concepts and methodologies of operations research.
2. To Develop analytical skills to formulate, solve, and interpret various operational problems.
3. To Familiarize students with quantitative techniques used in decision-making across various business functions.
4. To Utilize decision-making tools to address complex operational challenges in various business contexts.
5. To Analyze real-life business scenarios using Operations Research methods for improved efficiency.

Course Outcomes:

CO1: Develop and solve optimization models for real-world business problems
CO2: Analyze and interpret the results of mathematical models to support strategic decisions.
CO3: Utilize decision-making tools for complex business scenarios across various industries.
CO4: Integrate OR software and tools to solve business optimization problems.

MODULE 1	**Introduction to Operations Research**	**12 Hrs**

Introduction: History of Operations Research, Stages of Development of Operations Research, OR Tools and Techniques, Applications of Operations Research, Limitations of Operations Research.

Linear Programming : Introduction to Linear Programming, Assumption, Advantages, Limitations, General mathematical model, Linear Programming Problem Formulation, Graphical method Solution, Multiple Optimal Solutions, Unbounded Solution, Infeasible Solution, Simplex Method, Duality.

MODULE 2	**Transportation and Assignment Problems**	**12 Hrs**

Transportation Problems: Introduction, Formulation of transportation problem, types, initial basic feasible solution using North-West Corner Rule (NWCR), Least Cost Method (LCM) and Vogel's Approximation method (VAM). Optimality in Transportation problem by Modified Distribution (MODI) method.

Assignment problems: Formulation, Solutions to assignment problems by Hungarian method, Special cases in assignment problems, unbalanced, Maximization assignment problems.

MODULE 3	**Network Analysis**	**12 Hrs**

Introduction to Networks, Rules for drawing network diagram, CPM Computations, Finding critical path, PERT Computations, Computation of earliest and latest allowable times, Probability of meeting the scheduled dates, difference between PERT and CPM, Concept of Project Crashing. Decision Tree Analysis.

MODULE 4	Sequencing and Replacement Models	14 Hrs

Sequencing: Introduction, and Principal Assumptions, Job Sequencing- 'n' jobs on 2 machines, 'n' jobs on 3 machines, 'n' jobs on 'm' machines. Sequencing of 2 jobs on 'm' machines.
Replacement Analysis: Introduction – Replacement of items that deteriorate with time – when money value is not counted and counted – Replacement of items that fail completely, group replacement
Theory of Games: Formulation of game models, Two person Zero sum games & their solution, 2 x N and M x 2 games, pure strategy games with saddle point, Mixed strategies (Graphical and algebraic methods), Limitations of game theory.

MODULE 5	Simulation	10 Hrs

Simulation: Definition – Types of simulation models – phases of simulation– applications of simulation– Advantages and Disadvantages
Queuing Models: Introduction; Characteristics of Queuing models, Models for Arrival and Service Times; Single Poisson arrival with Exponential Service Rate; Applications of Queuing models.

SKILL DEVELOPMENT ACTIVITIES

- Students can analyze real-world business problems and apply OR techniques such as linear programming, transportation models, and assignment problems to propose optimal solutions.
- Conduct hands-on training in OR tools like MS Spreadsheet (Solver), LINGO, or TORA.
- Engage in simulation exercises where students create models to test various scenarios and analyze results.
- Implement role-playing exercises where students simulate decision-making in a business context using OR techniques.
- Encourage students to maintain reflective journals documenting their learning experiences.

BOOKS FOR REFERENCE

1. Operations Research: An Introduction, Taha, H. A., Pearson Education
2. Introduction to Operations Research, Hillier, F. S., & Lieberman, G. J., McGraw-Hill Education
3. Operations Research: Principles and Practice, Ravindran, A., Phillips, D. T., & Solberg, J. J. John Wiley & Sons
4. Quantitative Techniques for Decision Making, Vohra, N. D., McGraw-Hill Education
5. Operations Research: Theory and Applications, Sharma, J. K., Macmillan India Ltd.
6. Linear Programming and Network Flows, Bazaraa, M. S., Jarvis, J. J., & Sherali, H. D., Wiley
7. Operations Research: Applications and Algorithms, Winston, W. L., Cengage Learning
8. Operations Research: Problems and Solutions, Kapoor, V. K., Sultan Chand & Sons
9. Practical Management Science, Albright, S. C., & Winston, W. L., Cengage Learning
10. Optimization in Operations Research, Rardin, R. L., Pearson Education
11. Operations Research: Applications and Algorithms, Wayne L. Winston, Cengage Learning
12. Operations Research, S. D. Sharma, Kedar Nath Ram Nath
13. Operations Research: Introduction and Applications, R. Panneerselvam, PHI Learning
14. Operations Research, S Kalavathy, Vikas Publications
15. Operations Research: Principles and Applications, G Srinivasan, PHI

E-Resources:

- NPTEL, Operations Research, Prof. G. Srinivasan, IIT Madaras
- Swayam, Operations Research, Prof. Kusum Deep, IIT Roorkee
- Swayam, Operations Research, Prof. Bibhas C. Giri, Jadavpur University

M.Com (General)

Name of the Course : Business Allied Laws			
Course Code : 2.3		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description:

Corporate Law and Compliance is a comprehensive course that provides students with an understanding of the legal framework governing corporations and their compliance obligations. The course covers key principles of corporate law, regulatory requirements, and best practices for ensuring adherence to legal standards in corporate operations. It prepares students to effectively manage legal risks, uphold corporate governance standards, and maintain regulatory compliance, essential for fostering ethical and lawful business practices.

Course Objectives:

1. To provide students with a comprehensive understanding of ethical principles, moral philosophies, and value systems relevant to business decision-making.
2. To develop ethical awareness and critical thinking skills for analyzing ethical dilemmas in business and corporate environments.
3. To enable students to understand the role of ethics, corporate governance, and social responsibility in sustainable business practices.
4. To familiarize students with ethical challenges in functional areas and global business operations.

Course Outcomes:

CO1: Demonstrate a thorough understanding of key legal concepts and frameworks that govern business operations.
CO2: Assess compliance with relevant laws and regulations, ensuring that businesses adhere to legal standard
CO3: Explain the various forms of IPR's and their importance in protecting business assets.
CO4: Evaluate and recommend appropriate dispute resolution mechanisms based on specific business scenarios.
CO5: Analyse corporate governance structures and practices, understanding their impact on business decision-making.

MODULE 1	Companies Act, 2013	14 Hrs

Company formation and conversion – Incorporation of Private Cos., Public Cos., Cos. Limited by Guarantee and Unlimited Cos. & their conversions/ reconversion/ re-registration; Board of Directors & Key Managerial Personnel – Appointment, Resignation, removal, remuneration & disclosure; Powers of BOD & restrictions on powers of directors; Accounts & Audit – Maintenance & Preservation of books of accounts; Statutory Auditor, Cost Auditor & Special Auditor, CARO Rules; Prevention of oppression & Mismanagement, Relevant Amendments of Companies Act.

MODULE 2	Compliance and Disclosure Requirements	12 Hrs

Compliance with Securities Laws - SEBI, LODR Regulations; Corporate Disclosures and Reporting Obligations; Penal Provisions for Non-Compliance under Companies Act; E-Filing, XBRL, and Compliance under MCA 21 Portal; Provisions related to CSR under Companies Act, 2013; Environmental, Social, and Governance (ESG) and Value chain Reporting, 2025 Relevant Amendments of Compliance and Disclosure Act.

MODULE 3	Limited Liability Partnership Act (LLP), 2008	12 Hrs

Introduction to LLP - Definition, Nature, and Features; LLP vs. Partnership Firm, LLP vs. Company; Need for LLP Legislation in India; Key Characteristics of LLP**;** Formation and Registration process; Designated Partners **-** Roles, Rights, Liabilities, Responsibilities, and Qualifications; Fiduciary Duties of Partners; Conversion into LLP - From Partnership Firm, Private Company, and Unlisted Public Company; Voluntary and Compulsory Winding Up **-** Grounds, Process, and Legal Consequences; Dissolution of LLP **-** Steps and Legal Effect, Relevant Amendments of LLP.

MODULE 4	Winding-Up & Liquidation	12 Hrs

Types of Winding-Up: Voluntary and Compulsory; Procedure for Winding-Up under Companies Act, 2013; Role of Liquidators and Legal Provisions for Liquidation.
Insolvency & Bankruptcy Code (IBC), 2016 Applicability of IBC; important definitions; Corporate Insolvency Resolution Process – initiation, time-limit, Moratorium & Public Announcement, Appointment of interim resolution professional – Authority & duties; Committee of Creditors; Liquidation of a corporate – Liquidator – Appointment, remuneration, powers & duties; Distribution of Assets, Relevant Amendments of Winding-Up & Liquidation.

MODULE 5	Dispute Resolution System	10 Hrs

Corporate Disputes - Definition, Types, and Causes; Disputes between Shareholders, Directors, Companies, and Creditors; Governance Issues, Mismanagement, and Oppression; Role of courts in corporate disputes; Civil Courts vs Specialised Tribunals; National Company Law Tribunal (NCLT) & Appellate Tribunal (NCLAT); Arbitration in Corporate Disputes; Mediation & Conciliation in Corporate Disputes; Key Business Tribunals – NCLT, Securities Appellate Tribunal (SAT), Competition Commission of India (CCI), Income Tax Appellate Tribunal (ITAT), Debt Recovery Tribunal (DRT), Mediation Act, 2023

SKILL DEVELOPMENT ACTIVITIES

- Conduct a simulated company registration and board meeting, including drafting MOA, AOA and passing mock resolutions.
- Analyse recent annual reports to identify mandatory disclosures under SEBI and Companies Act, and then present a compliance checklist.
- Role-play an LLP conversion advisory exercise, where students advise a partnership firm, private company, or unlisted public company on conversion into LLP, covering legal procedures, tax implications, stakeholder impact, and documentation.
- Create a step-by-step liquidation plan for a hypothetical insolvent company, covering creditor claims, asset realization, and final reporting.
- Organize a mock arbitration or mediation session around a corporate dispute, with students acting as disputing parties, mediators, and legal advisors.

BOOKS FOR REFERENCE

1. Business Law by S. K. Agarwal
2. Business Laws by V. S. Datey
3. Corporate Laws by A. K. Majumdar
4. Company Law by R. S. Sharma
5. Business Law: Text and Cases by S. R. Bhatia and G. S. Bhatia
6. Insolvency and Bankruptcy Code: Law & Practice by Taxmann – 20th Edition 2025
7. Compendium on the *Insolvency & Bankruptcy Code, 2016 – 4th Edition, 2022*
8. Law Relating to Insolvency & Bankruptcy Code, 2016 by Vinod Kothari & Sikha Bansal
9. Law of Arbitration and Conciliation by Avtar Singh
10. The Arbitration and Conciliation Act by O.P. Malhotra and Indu Malhotra
11. Companies Act, 2013 (Bare Act) — Latest Edition
12. Limited Liability Partnership Act, 2008 (Bare Act) — Latest Edition
13. Insolvency and Bankruptcy Code, 2016 (Bare Act with Rules & Regulations) — Latest Edition

E-Resources:

- Swayam, Corporate Law, Prof. (Dr.) Harpreet Kaur.
- NPTEL, Legal Compliance for Incorporating Startup, Prof. Indrajit Dube.
- Swayam, Business Law for Managers, Prof. S. Srinivasan, Prof. Kaushik Mukherjee.
- NPTEL, Legal Compliance for Incorporating Startup, Prof. Indrajit Dube.

M.Com (General)

Name of the Course : Corporate Valuation			
Course Code : 2.4		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description

This course provides a rigorous framework for valuing firms, business units, and financial assets. It examines fundamental valuation approaches including discounted cash flow, relative valuation, and asset-based methods. The course emphasizes the estimation of cash flows, cost of capital, and risk assessment in valuation decisions. Special focus is given to valuation in mergers, acquisitions, restructuring, and strategic decision-making. On completion, students will be able to apply valuation models critically to real-world corporate and investment scenarios.

Course Objectives:

1. To develop a conceptual understanding of the role and importance of valuation in corporate finance.
2. To familiarize students with major valuation approaches such as discounted cash flow, relative valuation, and asset-based methods.
3. To enable students to estimate cash flows, cost of capital, growth, and risk for valuation purposes.
4. To apply valuation techniques in mergers, acquisitions, restructuring, and strategic decision-making.
5. To enhance analytical and critical thinking skills required for evaluating corporate value in real-world business contexts.

Course Outcomes:

On successful completion of the course, the student will be able to:

CO1: Explain the concepts, objectives, and significance of corporate valuation in financial decision-making.

CO2: Apply various valuation approaches such as discounted cash flow, relative valuation, and asset-based methods.

CO3: Estimate cash flows, cost of capital, growth, and risk for valuing corporate entities.

CO4: Analyze valuation issues in mergers, acquisitions, restructuring, and strategic transactions.

CO5: Critically evaluate corporate valuation reports and justify valuation decisions in practical business situations.

MODULE 1	**Fundamentals of Corporate Valuation**	**08 Hrs**

Meaning and objectives of valuation - Valuation vs pricing - Situations requiring valuation: M&A, IPO, buyback, restructuring, insolvency, taxation, litigation - Value concepts: Fair value, intrinsic value, market value, Strategic value, synergistic value, liquidation value - Determinants of corporate value -Overview of valuation approaches: Asset-based, Income-based, Market-based - Ethical issues and professional judgment in valuation – Overview of valuation requirements under Companies Act, SEBI (ICDR), FEMA

MODULE 2	**Asset-Based and Market-Based Valuation Approaches**	**12 Hrs**

Asset-Based Valuation: Net Asset Value (NAV) method, Adjusted book value, Replacement cost method, Liquidation value

Market-Based Valuation: Comparable Companies Analysis (CCA), Valuation multiples: P/E, P/B, EV/EBITDA, EV/Sales - Selection of appropriate peers - Strengths and limitations of relative valuation.

MODULE 3	**Income-Based Valuation Models**	**14 Hrs**

Discounted Cash Flow (DCF) framework, Free Cash Flow to Firm (FCFF), Free Cash Flow to Equity (FCFE), Dividend Discount Models (DDM): Zero growth, Constant growth (Gordon Model), Multi-stage growth models, Terminal value estimation, H-Model and declining growth models - Common pitfalls in DCF valuation.

MODULE 4	External Corporate Restructuring	12 Hrs

Types – Mergers, Acquisitions, Take over, De-mergers (Split off and Spinoffs), Joint Ventures.
Mergers and Acquisitions: Meaning, Objectives, and Motives of M&A, Types of Mergers: Horizontal, Vertical, Conglomerate. Forms of Acquisitions and Takeovers: Mergers, Acquisitions, Takeovers, Spinoff, Synergies, Strategic Alliance, Joint Venture, Leveraged Buyouts, Management Buyouts (MBO) & Buy-in (MBI), Franchising, Intellectual Property Rights (IPRs), Sell-off, Demerger, Disinvestment v/s Divestment, Slump Sale, Reverse Merger, Equity Carve out, Un-levering and Re-levering.
Valuation of Target Firm, Financing of Mergers and Acquisitions, Determination of Exchange Ratio, Terms of Merger, Feasibility of Mergers.

MODULE 5	Advanced Valuation Applications & Contemporary Issues	14 Hrs

Valuation for mergers and acquisitions, Synergy valuation: numerical problems on determination of exchange/ swap ratio, Pre & Post-merger EPS and shareholder wealth implications - Value-based performance measures: Economic Value Added (EVA) and Market Value Added (MVA) and their linkage with firm valuation - Valuation of startups and high-growth firms - Valuation of brands and intangibles - Valuation under distress and insolvency - Valuation adjustments under Ind AS / IFRS - Role of valuation in strategic decision-making - Limitations of valuation models. (Mini case / project on valuation of an Indian company)

SKILL DEVELOPMENT ACTIVITIES

- Preparation of a basic valuation report for a selected company using financial statements.
- Cash flow and cost of capital estimation exercise based on given corporate data.
- Comparative valuation activity using market multiples of peer companies.
- Case study analysis on valuation issues in mergers, acquisitions, or restructuring.
- Presentation and peer review of valuation assumptions and conclusions.

BOOKS FOR REFERENCE

1. Aswath Damodaran – Investment Valuation: Tools and Techniques for Determining the Value of Any Asset
2. Aswath Damodaran – The Dark Side of Valuation: Valuing Old Tech, New Tech, and New Economy Companies
3. Prasanna Chandra – Valuation: Techniques and Applications (McGraw-Hill Education)
4. Tim Koller, Marc Goedhart & David Wessels – Valuation: Measuring and Managing the Value of Companies (Wiley)
5. Shannon P. Pratt & Alina V. Niculita – Valuing a Business: The Analysis and Appraisal of Closely Held Companies
6. McKinsey & Company – Valuation: Measuring and Managing the Value of Companies (University Edition)
7. Richard A. Brealey, Stewart C. Myers & Franklin Allen – Principles of Corporate Finance
8. I.M. Pandey – Financial Management (Vikas Publishing).
9. CFA Institute – CFA Program Curriculum: Corporate Finance and Equity Valuation.
10. Shannon P. Pratt (Editor) – Cost of Capital: Applications and Examples

E-Resources

- **SWAYAM – NPTEL** ,Valuation and Creating Sustainable Value, Prof. Padmini Srinivasan **Coursera (via University of Illinois)**, Corporate Finance and Valuation, Prof. Gautam Kaul
- **edX / Corporate Finance Institute,** Financial Modeling & Valuation (FMVA) Prep (Free Modules),
- **Coursera** ,Valuation: Measuring and Managing the Value of Companies
- **Udemy** , Discounted Cash Flow Valuation Fundamentals

M.Com (General)

Name of the Course : Sustainability and Environmental Accounting			
Course Code : 2.5		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description:

This course aims to develop a comprehensive understanding of sustainability and environmental accounting by examining the integration of environmental, social, and economic dimensions into accounting systems and financial decision-making. It analyzes the concepts of environmental accounting, green accounting, and carbon accounting, and evaluates methods for measuring environmental costs, sustainability performance, and resource utilization at both macro and firm levels. The course examines global sustainability reporting frameworks, ESG disclosure standards, and integrated reporting practices, along with relevant regulatory and institutional developments in India and internationally. It also evaluates sustainability performance measurement, responsible investment, green finance instruments, and sustainability risk management. Finally, the course enables learners to prepare and interpret sustainability reports, analyse carbon accounting and environmental financial statements, and understand contemporary developments and challenges in sustainability reporting, environmental governance, and sustainable business practices.

Course Objectives:

1. Provide conceptual and applied knowledge of sustainability and environmental accounting
2. Develop skills in measuring, reporting and analyzing environmental and social impacts
3. Familiarize students with global sustainability reporting standards and ESG frameworks
4. Enable students to integrate sustainability into financial and strategic decision-making
5. Prepare students for emerging careers in ESG reporting, carbon accounting, and sustainability assurance

Course Outcomes:

On successful completion of the course, the student will be able to:

CO1: Understand sustainability accounting concepts and regulatory frameworks

CO2: Measure and analyse environmental costs and carbon emissions

CO3: Prepare and interpret sustainability and ESG reports

CO4: Apply sustainability accounting in strategic and managerial decisions

CO5: Evaluate sustainability performance and reporting quality

MODULE 1	Introduction to Sustainability and Environmental Accounting	12 Hrs

Concept of Sustainability – Meaning, Importance and Scope – Triple Bottom Line (Economic, Environmental, Social) – Sustainable Development and Sustainable Development Goals (SDGs)- Evolution of Sustainability Accounting – Environmental Accounting: Meaning, Objectives, Functions and Advantages – Environmental Costs: Types and Classification – Environmental Management Accounting (EMA) – Stakeholder Theory and Sustainability – Integrating Sustainability into Business Strategy – Emerging Challenges and Opportunities in Sustainability Accounting.

MODULE 2	Environmental Accounting, Green Accounting and Carbon Measurement	12 Hrs

Environmental Cost: Meaning and Classification - Environmental Cost Identification and Allocation – Environmental Costing Techniques –Material Flow Cost Accounting – Environmental Budgeting – Environmental Performance Measurement.

Carbon Accounting: Concept and Importance – Greenhouse Gas Emissions: Scope 1, Scope 2, Scope 3 – Carbon Footprinting – Water Footprinting – Ecological Foot printing – Carbon Credits: Meaning, Types and Accounting – Carbon Trading and Carbon Markets – Carbon Financing Mechanism – Clean Development Mechanism (CDM)

MODULE 3	Global Frameworks on Sustainability Reporting	12 Hrs

Concept of Sustainability Reporting – Objectives and Benefits – Sustainability Reporting Process – ESG Reporting: Meaning and Importance.
Sustainability Reporting Frameworks: Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), International Sustainability Standards Board (ISSB), Integrated Reporting (IR Framework), Task Force on Climate-related Financial Disclosures (TCFD). Materiality Concept – Double Materiality – Mandatory vs Voluntary Disclosure–Sustainability Reporting in India (BRSR Framework) – Corporate Social Responsibility (CSR) Reporting.

MODULE 4	Sustainability Performance Measurement, Assurance and Governance	12 Hrs

Environmental and Sustainability Performance Indicators – ESG Metrics and Key Performance Indicators – Sustainability Balanced Scorecard – Sustainability and Corporate Governance – Internal Controls for Sustainability Reporting – Responsible Investment: Meaning and Principles – UN Principles for Responsible Investment (UNPRI)- Sustainability Audit and Assurance – Role of Auditors – ESG Ratings – Greenwashing and Ethical Issues – Regulatory Requirements and Compliance – Role of Sustainability in Risk Management.

MODULE 5	Strategic Applications, Investment and Emerging Trends	12 Hrs

Sustainability and Strategic Decision Making – Sustainable Investment and Impact Investing – Green Finance and Green Bonds – Climate Risk and Financial Risk – Sustainability and Executive Compensation – Sustainability and Business Value Creation – Circular Economy and Accounting – Natural Resource Accounting – Environmental Accounting in Public Sector – Sustainability Accounting in India – Emerging Trends in Sustainability Accounting.

SKILL DEVELOPMENT ACTIVITIES

- Select an Indian company and Identify its economic, environmental, and social (Triple Bottom Line) practices and also Map its activities to SDGs
- Calculate Carbon footprint (Scope 1 & 2) of a small business/college department By Identifying environmental costs (energy, water, waste). Suggest carbon reduction strategies
- Analyze an annual report of a listed Indian/ MNC company and Identify ESG disclosures as per GRI / BRSR / Integrated Reporting
- Design ESG Key Performance Indicators (KPIs)
- Analyze a green bond / ESG fund / impact investment & evaluate financial vs sustainability returns

BOOKS FOR REFERENCE

1. Bebbington, J., Gray, R., Hibbitt, C., & Kirk, E. (2001). Full cost accounting: An agenda for action. London: Certified Accountants Educational Trust.
2. Gray, R., Owen, D., & Adams, C. (2010). Accounting and accountability: Changes and challenges in corporate social and environmental reporting (2nd ed.). Harlow: Pearson Education.
3. Schaltegger, S., & Burritt, R. (2017). Contemporary environmental accounting: Issues, concepts and practice. London: Routledge.
4. Global Reporting Initiative. (2021). GRI standards. Amsterdam: GRI.
5. International Sustainability Standards Board. (2023). IFRS S1: General requirements for disclosure of sustainability-related financial information. London: IFRS Foundation.
6. International Sustainability Standards Board. (2023). IFRS S2: Climate-related disclosures. London: IFRS Foundation.
7. Integrated Reporting Council. (2021). International <IR> framework. London: IIRC.
8. Task Force on Climate-related Financial Disclosures. (2017). Final report: Recommendations of the TCFD. Basel: Financial Stability Board.
9. Securities and Exchange Board of India. (2021). Business responsibility and sustainability reporting (BRSR). Mumbai: SEBI.
10. Ministry of Environment, Forest and Climate Change. (2021). India: Third biennial update report

to the UNFCCC. New Delhi: Government of India.
11. Reserve Bank of India. (2022). Discussion paper on climate risk and sustainable finance. Mumbai: RBI

E-Resources

- **United Nations – Sustainable Development Goals (SDGs) Knowledge Platform** https://sdgs.un.org
- ESG and Sustainability By University of Pennsylvania - Course: ESG and Climate Risk
- edX Courses - Platform: https://www.edx.org
- United Nations – Sustainable Development Goals Platform – https://sdgs.un.org
- UNEP – Environmental Accounting Resources – https://www.unep.org
- GHG Protocol – Carbon Accounting Standards – https://ghgprotocol.org
- Global Reporting Initiative – Sustainability Reporting Standards – https://www.globalreporting.org
- IFRS Foundation – Sustainability Disclosure Standards – https://www.ifrs.org
- SEBI – Business Responsibility and Sustainability Reporting – https://www.sebi.gov.in
- RBI – Sustainable Finance and Climate Risk – https://www.rbi.org.in
- World Bank – Green Finance Resources – https://www.worldbank.org

SWAYAM Online Courses

1. IIT Kharagpur – Sustainable Development
2. IGNOU – Sustainability Science
3. IIT Madras – Climate Change: Science and Governance
4. IIM Bangalore – Corporate Social Responsibility
5. NISM – ESG Investing
6. IIT Roorkee – Environmental Impact Assessment
7. IIM Kozhikode – Business Ethics and Corporate Governance
8. NISM – Securities Markets and Investment

Available at: https://swayam.gov.in

M.Com (General)

Name of the Course : Entrepreneurial Ecosystems			
Course Code : 2.6		**Course Credits:** 4	**No. of Hours per week:** 4 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 60 Hrs.

Course Description:

The Entrepreneurial Ecosystem course provides a comprehensive and analytical understanding of the entrepreneurial ecosystem and its role in fostering innovation, venture creation and economic development. The course examines the structural, institutional and policy frameworks that enable entrepreneurship at regional, national, and global levels. It explores the interactions among key ecosystem stakeholders—including government, academia, financial institutions, incubators and industry networks—and their influence on entrepreneurial outcomes

Course Objectives:

1. To develop a comprehensive understanding of the structure, components and dynamics of entrepreneurial ecosystems at national and global levels.
2. To analyze the role of institutions, policies and key stakeholders in fostering entrepreneurship and innovation.
3. To examine innovation systems, technology commercialization and IP management in entrepreneurial contexts.
4. To evaluate entrepreneurial finance mechanisms, policy initiatives and sustainability frameworks supporting new ventures..
5. To equip students with analytical and practical skills for startup ideation, business model development, venture creation and scaling.

Course Outcomes:

On successful completion of the course, the student will be able to:

CO1: Analyze theories, types and trends of entrepreneurship

CO2: Evaluate policies, PPP models, and institutional support mechanisms.

CO3: Evaluate the role of technology, IP strategies and knowledge flow in ecosystem development.

CO4: Design Sustainable, ethical and socially responsible entrepreneurship models.

CO5: Apply ecosystem-based thinking to startup ideation and validation.

MODULE 1	**Foundations of Entrepreneurship and Entrepreneurial Ecosystem**	**14 Hrs**

Entrepreneurship: Concept, Nature, Scope and Types of Entrepreneurship, Entrepreneurship Theory and evolution- classical and modern theories of entrepreneurship (Schumpeterian, Kirznerian, Behavioural effectuation),factors influencing the entrepreneurship, Entrepreneurship vs Intrapreneurship, Entrepreneurial Mindset and competencies – Traits, skills, risk taking, leadership styles and motivation, Policy and socio-cultural influence on entrepreneurship.

Entrepreneurial Ecosystem: Definition, Characteristics, Historical evolution, Importance, Key Components , Challenges and Opportunities in Entrepreneurial Ecosystem, levels of Entrepreneurial Ecosystem – Micro, Meso and Macro Levels, Ecosystem models and frameworks – Isenberg's framework of entrepreneurial ecosystem, Mason and Brown Model, Global comparison frameworks, Metrics and indicators for ecosystem performance.

MODULE 2	**Institutional Framework and Stakeholders of Entrepreneurial Ecosystem**	**12 Hrs**

Stake holder mapping and Analysis: Entrepreneurs, Entrepreneurial networks, Institutional stakeholders: Universities, TTOs, incubators, accelerators, co-working hubs, Government agencies: regulatory, policy and support roles.

Networks and Industry Linkages: Development of industry linkages through professional networks and associations; application of Public–Private Partnership models for ecosystem development.
Ecosystem Health Indicators: Funding availability, policy effectiveness, success stories and failure analysis of stakeholder collaborations.

MODULE 3	Innovation, Technology, and Knowledge Management in Entrepreneurship	14 Hrs

Innovation theory and Entrepreneurial creativity: Incremental vs disruptive innovation, open innovation, frugal innovation and reverse innovation, innovation strategy frameworks for competitive advantage, Design Thinking and Lean innovation

Technology adoption and diffusion: Technology S Curve, Rogers' Diffusion Model of innovation, adoption barriers and strategies for technology based entrepreneurship or startups, Role of digital platforms and ecosystem in scaling innovation, Emerging and frontier technologies.

Knowledge Management: Knowledge sharing, research commercialization, licensing, university-industry collaboration and technology transfers, IP strategies for Startups.

MODULE 4	Policies, Finance and Sustainable Entrepreneurship	10 Hrs

Policy and regulatory frameworks- National entrepreneurship policies: Startup India, MSME Scheme, STEP, SISFS, NPSDE, Make in India, Ease of doing business reforms. Karnataka Startup Policy. Entrepreneurial finance and funding instruments- bootstrapping, seed funding, venture capital, Grants, and more,
Sustainable and Inclusive Entrepreneurship – ESG frameworks, Social Entrepreneurship, Green and climate-tech ventures.
Entrepreneurial Ethics and Governance – Ethical dilemmas, legal and regulatory compliance for sustainable growth.

MODULE 5	Startups- Creation, Growth and Scale-up	10 Hrs

Definition, Characteristics, Types, Eligibility criteria for startups, stand up India, Single Point Registration Scheme (SPRS), Startups Stages, Benefits available to startups from Government, challenges faced by startups, Factors influencing the success of startups. Business Model Development: Lean Startup Approach, Business Model Canvas Approach, Minimum Viable Product, Scaling and Exit Strategies: Expansion strategies, funding for scaling, internationalization, Exit options: IPO, Mergers and Acquisitions, Secondary Sale.

SKILL DEVELOPMENT ACTIVITIES

- Analyze the successful global and Indian entrepreneurial ecosystem
- Prepare a basic business model canvas for a proposed venture
- Analyze the reasons for startup failures to identify ecosystem gaps and strategic lessons
- Start-up pitch activity
- Mock shark tank activity

BOOKS FOR REFERENCE

1. Gupta, A., George, G., & Fewer, T. J. (2024). Venture Meets Mission: Aligning people, purpose, and profit to innovate and transform society. Stanford University Press
2. Kshetri, N. (2014). Global entrepreneurship: Environment and strategy (2nd ed.). Routledge
3. Entrepreneurship and Small Business (2025). Tamilselvan, M., Khurana, J., Aswathaman, D., & Others. KD Publications.
4. Reddy, G. R. (2017). Innovation and Entrepreneurship: Creating Sustainable Competitive Advantage. McGraw Hill Education India
5. Bessant, J. R., & Tidd, J. (2025). Innovation and entrepreneurship (4th ed.). Wiley India.

6. Burns, P. (2025). Corporate entrepreneurship and innovation (1st ed.). Bloomsbury Academic.
7. Bloomsbury Publishing
8. Osterwalder, A., & Pigneur, Y. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Wiley.
9. Huggins, R. (Ed.). (2025). Entrepreneurial ecosystems in cities and regions: Emergence, evolution, and future. Oxford University Press

Ries, E. (2011). The Lean Startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Business.

E-Resources

- **SWAYAM – UGC (CEC),** Entrepreneurship and Start-ups, Dr. P. Jakulin Divya Mary
- **SWAYAM – UGC (CEC),** Entrepreneurship Development, Dr. Nilam Panchal
- **SWAYAM – UGC (CEC),** Entrepreneurship, Dr. Shalini Choithrani
- **SWAYAM – UGC (CEC)**, Entrepreneurship Skills, Dr. Pradeep P. Prajapati
- **SWAYAM – NPTEL,** Entrepreneurship Essentials,

M.Com (General)

Name of the Course : Financial Modelling			
Course Code : 2.7		**Course Credits:** 3	**No. of Hours per week:** 3 Hrs.
CIE : 30	**SEE :** 70	**Total Marks :** 100	**Total No. of Teaching Hours:** 45 Hrs.

Course Description:

The course Financial Modelling is a practice-oriented subject designed to equip students with hands-on skills in building, analysing, and interpreting financial models using Microsoft Spreadsheet. The course focuses on the structured development of models for forecasting, valuation, and managerial decision-making. Emphasis is placed on model design principles, financial statement forecasting, discounted cash flow valuation, scenario and sensitivity analysis, and capital budgeting techniques. By working with real-world company data (NSE/BSE listed firms), students gain applied competence in translating financial theory into decision-support models used in corporate finance, equity research, investment analysis, and strategic planning.

Course Objectives:

The objectives of the course are to:

1. Develop proficiency in using Spreadsheet as a professional tool for financial modelling and analysis.
2. Enable students to design structured, transparent, and logically consistent financial models.
3. Provide practical exposure to financial forecasting, valuation, and capital budgeting techniques.
4. Enhance analytical skills for evaluating business decisions under uncertainty using scenario and sensitivity analysis.
5. Build the ability to interpret model outputs and communicate financial insights for managerial decision-making.

Course Outcomes:

On successful completion of the course, the student will be able to:

CO1: Apply Spreadsheet functions, cell referencing techniques, and formatting standards to construct structured financial models.

CO2: Develop revenue, cost, working capital, and cash flow forecasts using appropriate financial assumptions.

CO3: Construct valuation models including Free Cash Flow–based DCF and relative valuation frameworks.

CO4: Perform scenario, sensitivity, and optimisation analysis to assess financial risk and uncertainty.

CO5: Interpret financial model outputs to support capital budgeting and strategic business decisions.

MODULE 1	**Spreadsheets Foundations for Financial Modelling**	**15 Hrs**

Principles of financial modelling: structure, transparency, consistency. Spreadsheet environment for finance professionals, Cell referencing (relative, absolute, mixed).

Essential Spreadsheet functions for finance - Logical: IF, AND, OR. Lookup: VLOOKUP, HLOOKUP, XLOOKUP, Financial: NPV, IRR, PMT, Statistical: AVERAGE, STDEV, Date and time functions for financial timelines. Formatting standards and error-checking techniques. Building assumption sheets and calculation blocks. Model documentation and version control

MODULE 2	**Financial Forecasting & Valuation Models**	**15 Hrs**

Understanding financial statements for modelling. Revenue forecasting techniques (growth-based, driver-based). Cost and margin modelling, Working capital forecasting, Capital expenditure and depreciation schedules. Free Cash Flow (FCF) computation. Discounted Cash Flow (DCF) valuation model. Terminal value estimation. Relative valuation basics (P/E, EV/EBITDA models). Model validation and cross-checks.

MODULE 3	Decision Models, Scenario & Sensitivity Analysis	15 Hrs

Scenario analysis (best, base, worst cases). Sensitivity analysis using Data Tables. Goal Seek and Solver for optimization problems. Break-even analysis and profitability modelling. Capital budgeting models (NPV, IRR, Payback). Risk-adjusted decision modelling. Dashboard creation for financial models. Interpreting results for managerial decision-making

Practical Exercises:

Module 1: Spreadsheet Foundations for Financial Modelling

1. Create a structured assumption sheet in Spreadsheet for a selected NSE/BSE company covering revenue growth, tax rate, discount rate, and terminal growth. Use absolute and mixed cell references appropriately and document assumptions clearly.
2. Using historical revenue data (minimum 5 years), apply XLOOKUP/VLOOKUP to extract year-wise values and compute average growth rate and standard deviation. Highlight potential data errors using Spreadsheet error-checking tools.
3. Build a cash flow timeline using Spreadsheet date functions and calculate the Net Present Value (NPV) of projected cash flows using Spreadsheet financial functions.

Module 2: Financial Forecasting & Valuation Models

4. Prepare a 5-year revenue forecast using a growth-based or driver-based approach. Clearly show assumptions and calculation blocks
5. Develop a working capital forecast (receivables, inventory, payables) and estimate the net working capital requirement for the forecast period.
6. Construct a Free Cash Flow to Firm (FCFF) model and estimate the **enterprise value** using DCF. Clearly compute terminal value.
7. Perform a relative valuation of the chosen company using P/E and EV/EBITDA multiples, comparing it with at least two peer companies

Module 3: Decision Models, Scenario & Sensitivity Analysis

8. Conduct a scenario analysis (Base, Best, Worst) for revenue growth and operating margin. Analyse the impact on firm value.
9. Perform a sensitivity analysis of firm value with respect to WACC and terminal growth rate using Spreadsheet Data Tables.
10. Develop a capital budgeting model for a hypothetical project of the selected company and compute NPV, IRR, Payback Period, and interpret the decision

BOOKS FOR REFERENCE

1. Winston, W. L. (2016). Microsoft Spreadsheet data analysis and business modelling (5th ed.). Microsoft Press.
2. Sengupta, C. (2016). *Financial modelling using Spreadsheet and VBA*. Wiley India.
3. Bhatt, M. S. (2014). Financial analytics with Spreadsheet. Medallion Press.
4. Rees, M. (2019). *The essentials of financial modelling in Spreadsheet*. Wiley
5. Benninga, S. (2014). *Financial modeling* (4th ed.). MIT Press.
6. Chandra, P. (2017). Financial management: Theory and practice (9th ed.). McGraw Hill Education (India).
7. Chandra, P. (2018). Investment analysis and portfolio management (5th ed.). McGraw Hill Education (India).
8. Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: Measuring and managing the value of companies (7th ed.). Wiley.
9. Albright, S. C., & Winston, W. L. (2015). Business analytics: Data analysis and decision making (6th ed.). Cengage Learning.

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