

Master of Business Administration –MBA (Financial Management)-CBCS

Regulations & Syllabi - 2021-2022 onwards

The Department of Commerce and Financial Studies offers MBA (Financial Management) since 2007 - 2008. The main objective of the Department is to promote teaching, research and training in the frontier fields of Commerce and Management especially in the area of Finance. Centre for Financial Markets, a centre under the Department of Commerce and Financial Studies in association with NSE Academy Limited aims to bring about greater value to the employment ready course MBA (Financial Management). The students of MBA (Financial Management) programme can gain practical knowledge through projects, educational tours, organizing events and other innovative teaching methods.

1) Course Features

Program : M.B.A (Financial Management)

Pattern : Semester

Mode : Full-time Regular On-Campus Programme

Duration : Two Academic Years consisting of Four Semesters

Medium of Instruction : English

Eligibility : B.Com and other Commerce related disciplines (with at least two Accountancy Courses and one Computer related Course in eligibility degree is essential) with a minimum aggregate of at least 50% of marks (IInd class) under Part-III subjects. **Admission is based on Entrance Test** conducted by Centre for Financial Markets, Department of Commerce and Financial Studies and **academic score** in eligible UG programmes (50% weightage for UG part – III marks and 50% weightage for Entrance Test Score). The **exemption** from the Entrance Test will be given for the Candidates **who apply with a valid score of TANCET / GMAT / MAT / CAT / GATE** of respective years. The admission is based on the Reservation policy of the Government of Tamil Nadu as applicable during the respective years.

2) **Fee Structure** : As prescribed by the University from time to time.

3) **Credits** : The total number of credits for this programme are 124.

4) Attendance for students to write exams

Details	Percentage of Attendance
Eligible to write exam without Condonation fee	75 and above
Eligible to write exam with Condonation fee and Medical Certificate	65 to 74
Re-Doing the Semester (s) after completion of the programme	Below 65

5) Evaluation

Evaluation of each course (other than Summer Institutional Training Project, Main Project Work and Extra Disciplinary Courses) shall comprise of Continuous Internal Assessment (CIA) for 25 marks and End Semester Examination (ESE) for 75 marks. The Q.P setting and evaluation of ESE will be done by External Examiners, appointed for the purpose and while CIA components will be evaluated by respective course teachers.

5. a) The Components of CIA Marks are as follows

Test (Two)	10 (Third test for genuine absentees)
Seminar	5
Assignment	5
Case analysis/ Quiz/ Group discussion	5
Total Marks	25

5. b) Question Paper* Pattern for the End Semester Examination (ESE)

	Questions	Marks	Total Marks
Part A	10	2	20 marks
Ten Questions (no choice) (Two Questions from each unit)			
Part B	5	5	25 marks
Five Questions (either or type) (One Question from each unit)			
Part C	3	10	30 marks
Three Questions (either or type) (Not exceeding one Question from each unit)			
Total Marks			75 marks

* QP setters are requested to follow the 'RUPASCE' Level in setting the question papers by giving proper weightage to test the Reasoning, Understanding, Practice, Analysis, Synthesis, Creation and Evaluation ability at Introductory level, Reinforcement level and Mastery level. QP setters may be asked to avoid questions using "What" type and set questions giving equal weightage to all units of the course. The weightage for theory and problem may be given as prescribed in the course syllabus.

6) Passing Minimum

A student will be declared to have passed in each course other than Project Works and Extra Disciplinary Courses if he/she secures not less than 40 % marks in University Exams and 40 % marks in CIA and not less than 50 % marks in the aggregate taking CIA & End Semester Exams (ESE) marks together. The FAILED candidates in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent

semesters (two chances will be given) by assessing the CIA components once again. The regulations of our University relating to Instant Examination, Revaluation and Retotalling will be applicable as usual.

7) Guidelines for Summer Institutional Training Project and Final Project

A project is a necessary condition for the award of MBA (Financial Management) degree. The project must be individual work and should be carried on in any finance firms in the domain covered in the syllabus especially in the Capital Market Domain. There will be an Internal Guide from the respective firm. The project report shall be written and submitted in the form of case analysis. The student should select a real life transaction, event or situation of a finance firm or manager. It should develop practical solutions to the financial problems of business firms. Each student shall be required to carry out two projects- (i) summer institutional training project and (ii) project work.

7. a) Summer Institutional Training Project (FMPW 1)

Each student shall be required to take up institutional training cum project in any business organization for a period of not less than four weeks after completing the second semester (during vacation) and shall submit a report. While doing summer training project, the students are expected to interact with officials in the organization. The Training Certificate, Student Evaluation Form and Attendance Certificate with the Day Wise work carried out (Training Schedule) with the signature of the Official of the sponsored organization should be obtained and enclosed in the project. The project on different topics should be done under the guidance of an official of the chosen finance firms. The students will be evaluated on the basis of the report presentation and the feedback provided by the officials in the respective institutions. The evaluation of FMPW1 will be jointly done by External Examiner appointed for the purpose and Head / Faculty Member of the Centre for Financial Markets, Department of Commerce and Financial Studies.

7. b) Project Work (FMPW2)

In addition to the summer institutional project, each student shall be required to take up a project during the final semester and submit a report. The authenticity of the project work should be certified by a guide/ Director/ Coordinator of the Centre. The Final project report shall be jointly evaluated by the Director/ Coordinator of the Centre /Supervisor and External Examiner appointed for this purpose. At the end, Viva Voce examination shall be conducted. The format of the project report and date of submission will be decided by the Centre for Financial Markets. The weightage for viva voce is 25 marks and 75 marks for the Report.

7. c) Suggested Topics

The students are encouraged to take up a project on “contemporary concerns” under the guidance of a faculty member. The students are suggested to visit the NSE Website for the Student Research Projects, a research initiative by National Stock Exchange. The project should fit within one of the following themes:

Financing Policy - The analysis of specific decisions to issue equity, debt, convertibles, capital structure policy, distress financing, venture capital, project financing, real estate financing etc.

Investment Policy - The analysis of a major investment decision (involving real options), the review of a company’s capital budgeting system/process, the analysis of cross-border investment, etc.

Income Distribution Policy - The analysis of a company’s decision to alter its dividend policy or to distribute cash other than regular dividends, the analysis of the distribution policy of newly started company, etc.

Corporate Restructuring Activity - The analysis of a Joint Venture, Merger or Acquisition, divestiture, spin-off, split-up or carve-out, MBO or LBO, leveraged recap, equity-for-debt swap, IPO, roll-up, privatization, distress restructuring, etc.

Risk Management and Hedging Policy- This might be in the context of a major corporate or multinational, a securities firm, a bank, hedge fund, a pension plan, etc.

Portfolio and Investment Policy - The analysis of the investment policy, investment strategies, and/or performance of a fund manager, mutual fund, endowment fund, pension plan, hedge fund, etc.

Trading, Market Creation and Exchanges - The analysis of an organization’s trading strategies, performance evaluation of a prop-trading desk; the analysis of market- creating (or exchange) systems, including hedging and risk control.

Financial Engineering - The design/analysis of a new financial/structured product, the use/misuse of financial products by firms, complex securitizations, credit derivatives, etc.

Financial Institutions and Markets - Strategy, policy, and response to regulatory changes and other changes in financial markets (e.g. currency convergence).

Corporate Governance - The design of executive compensation schemes, communicating with shareholders, CEO succession; the effectiveness/impact of governance, etc.

Foreign Investment, Foreign Exchange, Capital Market and Trade – The analysis foreign trade, currency futures, currency options, currency swaps, foreign exchange market efficiency, theories of exchange rate can be made.

Contemporary Topics - The students are free to propose other themes that are contemporary in nature and topics that fit within the broad area of finance in tune with emerging trends in government policy and promotions.

8) Case Studies

Each student should go to the identified concern, business unit and develop a case and submit the finance case to the course teacher. They can do the case analysis in the aspects namely Financial Statement Analysis using tools for analyzing Financial Statements, “Z” – Score analysis, Balance Score Card, Application of Accounting Standards, Working Capital Analysis such as Inventory, Cash, Financing policy, ABC, EOQ, Cost Analysis – CVP analysis, Break Even Analysis, Capital Structure Analysis, Corporate Evaluation – EVA, Share Price Analysis, Stock Market Practices analysis such as Trading pattern, Clearing and Settlement Process, Portfolio Management, Fundamental Analysis, Project Management & Analysis, Tax Management, Customer Satisfaction, Quality Control and other Areas of Finance. They should submit their detailed case reports (typed in MS Word Font Times New Roman Size 12 Line Spacing 1.5) covering the Company’s Origin, Structure, Control System and Growth, analysis results along with tables, charts, figures etc., to the Centre for Financial Markets and to the institution whose case they are analyzing. The students will be evaluated, based on the report presentation and the feedback provided by the officials in the respective institutions.

9) Career Oriented Additional Courses

The students will be encouraged to undergo Career Oriented Additional Courses such as Value Added Course, Self-Study Course, Online Courses/MOOCs, NSE Certification in Financial Markets and Financial Professional Certification Course. It is the option of the students to choose these courses. These courses are over and above the courses of MBA and additional credits earned by students against these career oriented courses are not part of MBA programmes.

(a) Value Added Courses (VACs)

The MBA students are encouraged to study the value added courses with 2 credits in each semester. More details are given in the Regulations and Syllabi of **Certification Courses**. Only those students who are qualified for all the four courses relating to the Certification Course can alone get the Certification. If a student doesn’t qualify all the four courses relating

to the Certification Course, he/she can get only Mark Statement for such qualified Value Added Course. The students can also opt for the Value Added Courses offered by other departments of the University.

(b) Self Study Courses

Those willing MBA students are encouraged to study one-self study course in each semester. There is no regular theory & practical classes for those courses and the students need to study on their own and write exams for those courses in the respective semesters.

The Evaluation of each course shall comprise of Continuous Internal Assessments (CIA) for 25 marks and End Semester Exams (ESE) for 75 marks. The pattern of CIA and ESE of other courses of MBA (FM) is applicable to those opted self study course.

(c) Online Courses/ MOOCs

The students are encouraged to register for the MOOCs prescribed in the curriculum. However the students can also select any other MOOCs after obtaining the approval of the University/ Centre for Financial Markets. The students should submit the copy of their MOOCs Certification received from the respective institutions to the Centre for Financial Markets. The credits earned by the students for MOOCs will be incorporated in the Mark Statements and the Consolidated Mark Statements.

(d) Financial Professional Certification Courses

The students are encouraged to undergo the online certification courses offered by reputed institutions like National Stock Exchange, Bombay Stock Exchange, Insurance Institute of India, and National Institute of Securities Market. These certification courses would enable them to qualify themselves to work in the respective finance domain.

(e) NSE Academy Certification Modules

The students are encouraged to undergo the certification courses offered by NSE Academy such as NCFM offers a comprehensive range of modules covering many different areas in finance. NCFM currently tests expertise in the modules NSE Certification in Financial Markets Foundation, Intermediation and Advanced Modules and other courses. The students are instructed to visit the website NSE Academy Limited for details relating to these courses.

10) Industrial Visit

The Centre for Financial Markets will arrange Industrial Visit every year to the industries to impart the knowledge on the functioning of the industry. The students should attend those industrial visits arranged by the Centre for Financial Markets as the part of the

course. The students are expected to make a report on the industrial visit within a week from the date of the industrial visit.

11) Special Lecture

The Centre for Financial Markets will organize Special Lectures by the resources persons from various reputed educational institutions, National Stock Exchange of India Limited and from the industries. The students should attend those Special Lectures organised by the department as the part of the course. The students are expected to make a report on the special lecture within two days of the lecture.

12) Completion of Courses

In line with the UGC Guidelines, the candidates (those who are unable to complete the MBA (Financial Management) within stipulated period of two years) will be allowed to complete within the next successive two years from the completion of period of study. In exceptional circumstances, a further extension of one year may be granted as a private candidate and they are not eligible for ranking.

13) Other Regulations

- a) The Departmental Committee/ members of Centre for Financial Markets will be empowered to change/modify the regulations relating to MBA (Financial Management) programme as and when required through the Board of Studies, Faculty and Academic Committee.
- b) The Departmental Committee/ members of Centre for Financial Markets may be empowered to implement the orders of the University

The Common regulations of the University shall also be applicable to this Programme

**CENTRE FOR FINANCIAL MARKETS (CFM)
DEPARTMENT OF COMMERCE AND FINANCIAL STUDIES,
M.B.A (Financial Management) Under CBCS**

Syllabi - 2021-2022 onwards

Sl. No	Course Code	Title of the Course	Instruction Hours per week		No of Credits	Marks		
			Class Hours	Practical Hours		CIA	ESE	Total Marks
FIRST SEMESTER								
01	FMFC1/21	Foundation Course	5	3	6	25	75	100
		Financial Management						
02	FMCC1/21	Core Courses	5	3	6	25	75	100
		Accounting for Decision Making						
03	FMCC2/21	Commercial Banking (NSE)	5	3	6	25	75	100
04	FMCC3/21 FMCC4/21	Optional Core Courses (Any 1 of the 2)	5	3	6	25	75	100
		Financial Markets (NSE)						
		Management Concepts and Behaviour						
05	FMEC1/21 FMEC2/21	Elective Courses (Any 1 of the 2)	5	3	6	25	75	100
		Applied Operations Research R and Python for Finance (NSE)						
Total			25	15	30	125	375	500

Course Code	Title of the Course	Class Hours (Per semester)	Practical Hours (Per semester)	No of Credits	CIA	ESE	Total Marks
FMSC1/21	Self Study Course Contemporary Business Communication and/or MOOCs	--	--	6	25	75	100
CCIBE1/21	Value Added Course (University Wide) Entrepreneurial Mindset and Innovation	40	40	2	25	75	100

Sl.No	Course Code	Title of the Course	Instruction Hours per week		No of Credits	Marks		
			Class Hours	Practical Hours		CIA	ESE	Total Marks
06	FMFC2/21	SECOND SEMESTER Foundation Course Fixed Income Securities Markets (NSE)	5	3	6	25	75	100
07	EDC1/21	Core Courses Extra Disciplinary Courses (EDC)	--	--	2	--	--	---
08	FMPW1/21	Summer Institutional Training Project	--	--	6	---	---	100
09	FMCC5/21	NSE Smart Trading Simulation Lab (NSE)	5	3	6	25	75	100
10	FMCC6/21 FMCC7/21	Optional Core Courses (Any 1 of the 2) Mergers, Acquisitions and Corporate Restructuring (NSE) Insurance Products and Management	5	3	6	25	75	100
11	FMEC3/21 FMEC4/21	Elective Courses (Any 1 of the 2) Managerial Economics AI/ML for Financial Sector (NSE)	5	3	6	25	75	100
Total			20	12	32	100	400	500

Course Code	Title of the Course	Class Hours (Per semester)	Practical Hours (Per semester)	No of Credits	CIA	ESE	Total Marks
FMSC2/21	Self Study Course Business Environment and/or MOOCs	--	--	6	25	75	100
CCIBE2/21	Value Added Course (University Wide) Business Plan and Ethics	40	40	2	25	75	100

Sl. No	Course Code	Title of the Course	Instruction		No of Credits	Marks		
			Hours per week			CIA	ESE	Total Marks
			Class Hours	Practical Hours				
12	FMFC3/21	THIRD SEMESTER Foundation Course Security Analysis and Portfolio Management(NSE)	5	3	6	25	75	100
13	FMCC8/21	Core Courses Foreign Exchange Management (NSE)	5	3	6	25	75	100
14	FMCC9/21	Business Research Methods (NSE)	--	--	2	--	--	---
15	EDC2/21	Extra Disciplinary Course (EDC)						
16	FMCC10/21 FMCC11/21	Optional Core Courses (Any 1 of the 2) Analytics for Finance (NSE) Management Information System	5	3	6	25	75	100
17	FMEC5/21 FMEC6/21	Elective Courses (Any 1 of the 2) Financial Planning and Wealth Management (NSE) Financial Modelling (NSE)	5	3	6	25	75	100
		Total	25	15	32	125	375	500

Course Code	Title of the Course	Class Hours (Per semester)	Practical Hours (Per semester)	No of Credits	CIA	ESE	Total Marks
FMSC3/21	Self Study Course Working Capital Management/or MOOCs	--	--	6	25	75	100
CCIBE3/21	Value Added Course (University Wide) Digital Marketing for Entrepreneur	40	40	2	25	75	100

Sl. No	Course Code	Title of the Course	Instruction		No of Credits	Marks		
			Hours per week			CIA	ESE	Total
			Class Hours	Practical Hours				
18	FMFC4/21	FOURTH SEMESTER Foundation Course Project Appraisal and Evaluation	5	3	6	25	75	100
19	FMCC12/21	Core Courses Financial Derivatives (NSE)	5	3	6	25	75	100
20	FMPW2/21	Project Work	--	--	6	--	100	100
21	FMCC13/21 FMCC14/21	Optional Core Courses (Any 1 of the 2) Behavioral Finance Mutual Funds (NSE)	5	3	6	25	75	100
22	FMEC7/21 FMEC8/21	Elective Courses (Any 1 of the 2) International Financial Management Algorithmic Trading (NSE)	5	3	6	25	75	100
		Total	20	12	30	100	400	500
		Grand Total	90	54	124	450	1550	2000

Course Code	Title of the Course	Class Hours (Per semester)	Practical Hours (Per semester)	No of Credits	CIA	ESE	Total Marks
FMSC4/21	Self Study Course Corporate Ethics, Governance and Sustainability and/or MOOCs	--	--	6	25	75	100
CCIBE4/21	Value Added Course (University Wide) Financing Innovations and New Ventures	40	40	2	25	75	100

CIA = Continuous Internal Assessment **ESE** = End Semester Examination

FMFC – Financial Management Foundation Course

EDC – Extra Disciplinary Course by other departments

FMCC – Financial Management Core Course

FMPW – Financial Management Project Work

FMEC – Financial Management Elective Course

FMSC – Financial Management Self Study

CCIBE – Certification Course on Innovation and Business Entrepreneurship

List of MOOCs

S. No	Name of the Course	Web Link
1	Fundamentals of Banking and Insurance	https://swayam.gov.in/courses/4992-fundamentals-of-banking-and-insurance
2	Working Capital Management	https://swayam.gov.in/courses/4811-july-2018-working-capital-management
3	Data Analysis and Decision Making - I	https://swayam.gov.in/courses/4812-july-2018-data-analysis-and-decision-making-i
4	Soft Skills	https://swayam.gov.in/courses/4775-july-2018-soft-skills
5	English Language for Competitive Exams	https://swayam.gov.in/courses/4777-july-2018-english-language-for-competitive-exams
6	Regression Analysis	https://swayam.gov.in/courses/4856-july-2018-regression-analysis
7	Project Management for Managers	https://swayam.gov.in/courses/4805-july-2018-project-management-for-managers
8	Management of Inventory Systems	https://swayam.gov.in/courses/4819-july-2018-management-of-inventory-systems
9	Research Methodology	https://swayam.gov.in/courses/5143-research-methodology
10	Statistical Inference	https://swayam.gov.in/courses/4849-july-2018-statistical-inference
11	Project Planning and Control	https://swayam.gov.in/courses/4720-july-2018-project-planning-and-control
12	Introduction to Research	https://swayam.gov.in/courses/4890-july-2018-introduction-to-research
13	Introduction to Operations Research	https://swayam.gov.in/courses/4814-july-2018-introduction-to-operations-research
14	Innovation, Business Models and Entrepreneurship	https://swayam.gov.in/courses/4816-july-2018-innovation-business-models-and-entrepreneurship
15	Corporate Social Responsibility	https://swayam.gov.in/courses/4804-july-2018-corporate-social-responsibility
16	Econometric Analysis	https://swayam.gov.in/courses/5201-econometrics-analysis
17	Financial Accounting	https://swayam.gov.in/courses/5170-financial-accounting
18	Computer Fundamentals	https://swayam.gov.in/courses/5171-computer-fundamentals
19	Mathematical Modelling: Analysis and Applications	https://swayam.gov.in/courses/4850-july-2018-mathematical-modelling-analysis-and-applications
20	Developing Soft Skills and Personality	https://swayam.gov.in/courses/4773-july-2018-developing-soft-skills-and-personality
21	E-Governance	https://swayam.gov.in/courses/5053-e-governance
22	Financial and Material Resources Management	https://swayam.gov.in/courses/5021-financial-and-material-resources-management
23	Business Planning and Project Management	https://swayam.gov.in/courses/4984-business-planning-and-project-management

Course Details of MBA (Financial Management)

Sl.No	Nature of the Course	No. of Courses	No. of Credits
1	Foundation Course	4	24
2	Core Course	6	36
3	Core Course with Electives	4 out of 8	24
4	Elective Course	4 out of 8	24
5	Extra Disciplinary Course	2	4
6	Summer Institutional Training Project	1	6
7	Project Work	1	6
Total		22	124

Self Study Course (Additional)

Sl.No	Nature of the Course	Number of Courses	Number of Credits
1	Self Study Course	4	24

Course Details of Certification on Innovation and Business Entrepreneurship (Additional)

Sl.No	Nature of the Course	Number of Courses	Number of Credits
1	Value Added Course	4	8

PROGRAMME OUTCOMES

- PO1 - PG Graduands buoying upwith **Professional Competences** have right mix of **Knowledge-portfolio, Skill-set, Mind-set and Pragmatism** in their chosen fields that employment/entrepreneurship demands.
- PO2 - PG Graduands with Characteristic sense of being **Seasoned** and **Spiritedness** exhibit commitment to fruitful **society contribution** and **nation-building** ethos.
- PO3 - PG Graduands exuberant with **Leadership Latitude** are mentored such that they are ready to assume stewardship role with **commitment to excellence** and **endurance**.
- PO4 - PG Graduants are directed in understanding of ethical principles and responsibilities, moral and social values in day-to-day life thereby attaining **Cultural** and **Civilized** personality.
- PO5 - PG Graduants are able to **Collate** information from different kinds of sources and gain a coherent understanding of the subject.

PROGRAMME SPECIFIC OUTCOMES

At the completion of the Programme, the students would be able to

- PSO1 - Demonstrate a general knowledge framework and understanding of key financial functions
- PSO2 - Get In-depth Knowledge and understanding of financial management of domestic and multinational corporate.
- PSO3 - Analyse the trend of the securities market using sophisticated software techniques.
- PSO4 - Offer comprehensive solutions to business problems by evaluating information using quantitative and qualitative reasoning and analysis.
- PSO5 - Integrate the social and ethical dimensions in arriving at the final solution.

FMFC1/21- FINANCIAL MANAGEMENT

Course Aim: The aim of the course is to develop critical thinking and problem solving competencies, at both the individual and group levels, of financial statement analysis, financial planning, principles of valuation, capital structuring and to apply financial theory to analyze real life situations in an uncertain environment.

Course Outcome: At the end of this course the students would be able to:

CO1	Understand the concepts and functioning of finance, important elements of finance concepts for running a business.	L1 & L2
CO2	Analyse financial statements and various ratios for overall understanding of financial performance of a company and apply the various tools of financial statement analysis	L4
CO3	Apply the different corporate valuation approaches	L3
CO4	Calculate the cost of debt, cost of equity and the Cost of Capital, and understand the importance of Company's capital structure in Corporate Finance.	L4 & L5
CO5	Evaluate the factors affecting capital structure and describe the capital structure theories	L5

L1 - Remember; **L2** - Understand ; **L3** - Apply; **L4** - Analyze; **L5** - Evaluate; **L6** – Create

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Financial Management: Objectives, Functions, Scope, Evolution, Interface of Financial Management with Other Areas, Environment of Corporate Finance, Need for Ethical Finance. **Sources of Long-term Finance:** Equity Capital, Retained Earnings, Preference Capital, Term loans, Debentures, Pattern of Corporate Financing in India.

Unit II: Financial Statement Analysis: Introduction, Meaning and Concept of Financial Analysis, Types and Devices of Financial Analysis, Understanding Financial Statements: Balance Sheet, Income Statement, Common Size Analysis, Trend Analysis, Ratio Analysis, Dupont Analysis. **Financial Planning and Capital Budgeting:** Introduction and Meaning, Financial Planning, Sales Forecast, Financial Forecasting Vs Budgeting

Unit III: Corporate Valuation: Approaches to Valuation: Adjusted Book Value Approach, Stock and Debt Approach, Direct Comparison Approach and Discounted Cash Flow Approach, Approaches to Facilitate Value Based Management, Marakon Approach, Alcar Approach, McKinsey Approach, EVA and BCG approach.

Unit IV: Cost of Capital: Cost of Debt and Preference; Cost of Equity and Retained Earnings; Weighted Average Cost of Capital; Divisional and Project Cost of Capital; Cost of Capital in Practice. **Dividend Policy:** Types of Dividends; Irrelevance of Dividend; Relevance of Dividend; Factors Influencing Dividend Policy; Types of Dividend Policies.

Unit V: Capital Structure: Introduction, Factors Affecting Capital Structure, Capital Structure Theories – Net Income Approach, Net Operating Income Approach, MM Approaches I & II, Traditional Approach, Optimal Capital Structure.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper: Problems-70% and Theory – 30%

Reference:

Books:

1. Brigham, Gapenski, Ehrhardt, 2019, *Financial Management: Theory and Practice*, 13th Ed., Dryden Press, New York.
2. John Tennent, 2018, *The Economist Guide to Financial Management 3rd Edition*, Profile Books Limited, London.
3. Khan M. Y. and Jain P. K. 2018, *Financial Management: Text, Problems and Cases*, 8th Edition, Tata McGraw Hill, New Delhi.
4. Maheswari SN, 2019, *Financial Management: Principles and Practice*, Sultan Chand & Sons, New Delhi.
5. Pandey, I.M., 2016, *Financial Management*, 11th Ed., Vikas Publishing House, New Delhi
6. Prasanna Chandra, 2019, *Financial Management: Theory and Practice*, 10th Ed., Tata McGraw Hill, New Delhi.
7. Ravi M. Kishore, 2020, *Financial Management*, 8th Ed., Taxmann's Publication, New Delhi
8. Wild, Bernstein, and Subramanyam, 2019, *Financial Statement Analysis*, 10th Ed., McGraw Hill International, New Delhi.

Online Reference:

1. MOOC Material: *Accounting and Finance (edX)*, Created by: Indian, Delivered by: EdX, Taught by: MSNarasimhan.
2. Swayam Course Material: *Financial Management*, Created by Vanitha Tripathi, Delhi University.
3. Study.com Study Material: *Principles of Finance*.
4. NPTEL Course Material: Course Name: Construction Economics & Finance, Module: *Financial Management*, Course Co-ordination: IIT Guwahati.

Mapping with Programme Outcomes										
Cos	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	3	3	1
CO3	1	2	3	3	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC1/21 - ACCOUNTING FOR DECISION MAKING

Course Aim: This programme is designed to provide high quality education in theoretical and practical knowledge and skills in various aspects of accounting for those who wish to pursue or further advance their careers in business.

Course Outcomes: On completion of the course, the students will be able to

CO1	Analyse and interpret financial statements and to make decisions based on the information available.	L1 & L2
CO2	Evaluate cost structure of various production methods.	L2 & L3
CO3	Describe and apply various aspects of management accounting methods.	L4
CO4	Apply the standard costing and budgetary control techniques in costing decisions.	
CO5	Describe the underlying theories of modern accounting and describe the conceptual framework of accounting.	L4 & L5
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Financial Accounting: Accounting principles-concepts and conventions- Journal – Ledger – Trial Balance – Adjustments – Final accounts of a Sole Trader - Profit and Loss Account - Balance Sheet- Company Final Accounts as per the New Companies Act Schedule III - International Accounting Standards and Indian Accounting Standards-Indian GAAP– IFRS-FASB—SEC-IRS– Emissions Trading and Accounting of Carbon Credits.

Unit II: Cost Accounting: Difference between Management Accounting and Financial Accounting - Definition and Scope of Cost Accounting - Significance and Limitations of cost accounting - Cost Classification - Cost Sheet - Methods of Costing - Process Costing - Job Costing.

Unit III: Management Accounting: Definitions – Scope - Significance and Limitations - Marginal Costing - Cost-Volume-Profit Analysis - Break Even Analysis-Profit planning - Decisions Regarding Sales Mix - Make or Buy decisions – Problem of key factor-Organizational Innovation and Management Accounting.

Unit IV: Standard Costing and Budgetary Control:Standard Costing - Variance Analysis-Material and Labour Only- Budgets and Budgetary Control - Classification of Budgets – Functional Budget – Production, Sales, Raw Materials Purchase and Cash Budget - Flexible Budgeting - Zero Based Budgeting.

Unit V: Recent Trends in Cost Accounting: Value Chain Analysis - Quality Costing – Target costing-Life Cycle Costing-Kaizen costing-Activity Based costing.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper: Problems-60% and Theory – 40%

Reference:**Books:**

1. Gupta R.L. and Radhasamy, M. 2019, *Advanced Accounting*, 19th Edition, Sultan Chand & Sons, New Delhi
2. Jain SP and Narayan KL, 2017, *Cost Accounting*, Kalyani Publishers, New Delhi.
3. Larry M. Walther, 2021, *Financial Accounting*, CreateSpace Independent Publishing Platform, Luxemburg.
4. Pandey, I.M., *Management Accounting*, 2018, 3rd Edition, Vani Publication, Delhi.
5. Sharma R.K., Shashi K. Gupta, 2017, *Management Accounting Principles and Practices*, 13th Ed, Kalyani Publishing house, New Delhi.
6. Shukla M.C., Grewal T.S and Gupta S.C., 2016, *Advanced Accounting*, S. Chand & Co., New Delhi

Online Reference:

1. MOOC Material: *Financial Accounting: Foundations (Coursera)*, Created by: University of Illinois at Urbana-Champaign, Delivered by: Coursera, Taught by: Oktay Urcan.
2. MOOC Material: *Accounting for Decision Making (Coursera)*, Created by: University of Michigan, Delivered by: Coursera, Taught by: Greg Miller
3. MOOC Material: *Financial Accounting: Advanced Topics (Coursera)*, Created by: University of Illinois at Urbana-Champaign, Delivered by: Coursera, Taught by: Oktay Urcan
4. Accounting Standards, www.icaai.org

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	3	3	1
CO3	1	2	3	3	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC2/21 - COMMERCIAL BANKING

Course Aim: The aim of this course is to study the fundamentals of banking, improve one's awareness of the policies and practices in the Indian banking sector and to be familiar with Commercial banking services available in India.

Course Outcomes: After completing this course, they should be able to:

CO1	Explain the banking structure in India	L2&L3
CO2	Gain knowledge about Bank deposits	L1
CO3	Understand the basic concepts of Bank lending	L1&L2
CO4	Define Banks investment policy and valuation norms and understand the other activities of commercial banks	L1
CO5	Discriminate the Role of RBI in relation with other commercial banks	L4&L5
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I : Introduction & Banking Structure in India: Definition of banks - Evolution of Commercial Banks in India - Functions of Commercial Banks - Competitive Landscape of Banks in India - Banking Structure in India - Role of RBI vis other commercial banks.

Unit II: Bank Deposit Accounts: Introduction to Bank Deposits - Types of Deposit Accounts - Strategies of mobilizing deposits - Common guidelines of opening and operating accounts - deposit related services - Deposit services offered to Non-Resident Indians - Deposit Insurance

Unit III: Basics of Bank Lending: Principles of Lending and Loan Policy - Basics of Loan – Appraisal - Credit decision making and review - Types of Advances - Management of Non-Performing Assets.

Unit IV: Bank Investments: Investment Policy - Statutory Reserve Requirements - Non-SLR Requirements - Banks' Investment Classification and Valuation Norms.

Unit V: Other Activities of Commercial Banks & Relationship between Banks and Customers: Other Basic Banking activities - Para -banking Activities - Strategy for expanding customer base - services to different customer groups - competition among banks for customers - customer relationship management - Banking Options ombudsman Scheme - Know Your Customer (KYC) norms Evolving Trends in Modern Banking Technology – FinTech - Outsourcing of Non-core Activities - Financial Inclusion

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

References:**Text Books:**

1. Machiraju H.R. (2019), *Modern Commercial Banking*. New Delhi: New Age International Publishers
2. NCFM, NCFM- Commercial Banking, Mumbai: NSE
3. Sinha. V. C. (2020), *Indian Banking System*, SBPD Publishing House, Agra.
4. Weidong Tian (2017), *Commercial Banking Risk management*, Palgrave Macmillan, U,S,A
5. Singh & Dutta. (2017), *Commercial Bank Management*. McGraw Hill Publication, New Delhi.
6. ICSI Study material (2014) *Banking Law And Practice* by AArushi Graphics , Prashant Vihar New Delhi

Online Reference

1. MOOC Material: Digital Banking Business Model (edX), Created by: State Bank of India, Mumbai, Delivered by: EdX, Taught by: Deepak Kumar, Rajeev Shankar and Srinivas Rao Nandiwada
2. MOOC Material: Credit risk management in banking (edX), Created by: State Bank of India, Mumbai, Delivered by: EdX, Taught by: Rajiv Prasad Keshri, Dr. Lalit Arora and Neeraj Yadav
3. MOOC Material: Management of Commercial Banking . Created by: IIT Kharagpur, Delivered : Class Central Swayam, Taught by: Prof. Jitendra Mahakud.
4. MOOC Material: Introduction to Actuarial Science. Created by: Australian National University, Delivered by: edX, Taught by: Adam Butt.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	2	3	3	3	3	3
CO3	3	3	3	3	2	3	3	3	3	2
CO4	3	3	3	3	2	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMCC3/21 - FINANCIAL MARKETS

Course aim: This course aims to get a basic understanding of the products, players and functioning of financial markets, particularly the capital market, to understand the terms and jargons used in the financial newspapers and periodicals which would help them to have a better understanding of the concepts of derivatives.

Course Outcome: Students completing this course will be able to:

CO1	Understand the various constituents of capital market	L1 & L2
CO2	Analyse the functioning and role of primary market	L2 & L3
CO3	Enable to understand the Difference between the primary and the secondary market	L5
CO4	Evaluate the knowledge related to derivatives market	L4 & L5
CO5	Articulate & Analyze the functioning of international financial market	L6
L1 - Remember; L2 - Understand; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Markets and Financial Instruments: Types of Markets: Equity Debt, Derivatives Commodities; Meaning and features of private, Public companies; Types of investment avenues.

Unit II: Primary Market: Initial Public Offer (IPO); Book Building through Online IPO; Eligibility to issue securities; Pricing of Issues; Fixed versus Book Building issues; allotment of Shares; Basis of Allotment; Private Placement.

Unit III: Secondary Market: Role and functions of Securities and Exchange Board of India (SEBI); Depositories; Stock exchanges Intermediaries in the Indian stock market Listing; Membership; Trading Clearing and settlement and risk management; Investor protection fund (IPF); and Do's and Don'ts for investors, Equity and debt investment.

Unit IV: Derivatives: Introduction to Equity, Commodity, Currency, and Interest Rate Derivatives.

Unit V: International Financial Market: Depository Receipts, International Stock Indices: S & P 500 Index, Dow Jones Industrial Average (DJIA), NASDAQ Composite Index (COMP), Nikkei 225 (NKY), Trading in Global Markets Through NSE – Exchange Traded Funds (ETFs).

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

References:

Books:

1. Bharati V. Pathak (2018), *Indian Financial System*, Pearson India Education Services Pvt Ltd.
2. NCFM, NCFM - *Financial Markets: Beginners Module*, Mumbai: NSE
3. H.R. Machiraju (2019). *Indian Financial System*. New Delhi: Vikas Publishing

4. M.Y. Khan, P.K. Jain (2020), *Financial Management*. 11th Edition, Bangalore: McGraw Hill Education
5. Marc Levinson (2018), *Guide to Financial Markets: Why they Exist and How they Work*, The Economist Books
6. S.Mishkin and Stanley Eakins(2017) *Financial Markets and Institutions*, Pearson India

Online Reference:

1. MOOC Material: *Financial Markets* created by: Yale University, delivered by: Coursera, Taught by: Robert shiller
2. MOOC Material: *Financial Markets* created by: ISB, delivered by: Coursera, Taught by: Vaidya Nathan
3. MOOC Material: *Financial Markets* created by: Yale University, delivered by: Coursera, Taught by: Bob shiller
4. MOOC Material: **Understanding *Financial Markets*** created by: University of Geneva, delivered by: Coursera, Taught by: Ines chaieb

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	2	3	1
CO3	3	2	3	3	1	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	1

1 – Low, 2 – Medium, 3 - Strong

FMCC4/21- MANAGEMENT CONCEPTS AND BEHAVIOUR

Course Aim: The course aim is to understand the nature and scope of management; to know the difference between management and administration; to understand various levels of management; and to describe the various skills that are necessary for becoming successful managers.

Course Outcome: At the end of this course, the students would be able to

CO1	Understand the historical backdrop and fundamentals of Management thoughts vital for understanding the conceptual frame work of Management as a discipline.	L1 & L2
CO2	Explain various concepts of planning, decision making and controlling to help solving managerial problems	L2 & L3
CO3	Appraise the principles of organizing and application of motivation theories	L4 & L5
CO4	Assess the principles of directing and various leadership styles	L4
CO5	Analyse the ways and means of exercising effective control	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Self Learning and Peer learning.

Unit 1: Nature and Process of Management-Meaning, Features, Functions and Importance of Management, Management as Science, Art and Profession; Managerial Skills, Tasks of Management, Role of Managers.

Unit II: Planning-Features, Nature, Importance, Benefits, Limitations, Elements, Principles of Planning, Planning Process; **Strategy**-Meaning, Features, Benefits, Limitations and Process of Strategy, Implementation of Strategies, Levels of Strategy, Environmental Analysis and Diagnosis; **Decision Making**-Features, Nature, Process, Types of Decision Making, Approaches to Decision Making, Techniques of Decision Making, Models of Decision Making.

Unit III: Organizing-Elements, Nature, Process and Importance of Organizing, Organizational Behaviour, Organization Manuals, Span of Management, Principles of Organizing, Women in Workplace; **Motivation**-Meaning, Nature and Importance of Motivation, Approaches to Motivation, Theories of Motivation.

Unit IV: Directing-Nature, Principles and Importance of Directing, Supervision, Supervisor's role, Qualities of Supervisor; **Leadership**-Meaning, Elements, Process, Nature and Importance of Leadership, Leadership Styles, Management and Leadership, Effective Leadership, Qualities of a leader.

Unit V: Controlling-Meaning, Nature, Importance and Types of Control, Resistance to Control, Ways to overcome resistance to Control, Focus of Control, Control Process, Essentials of an Effective Control System, Principles of Control.

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

References:**Books:**

1. Luthans (2017), *Organizational Management- An Evidence, 12th edition*, McGraw Hill Education
2. Peter Eichhorn and Ian Towers (2018), *Principles of Management: Efficiency and Effectiveness in the Private and Public Sector*, Springer International Publishing, Switzerland.
3. Prasad. L.M, (2020), *Principles and Practice of Management*, New Delhi: Sultand Chand & Sons.
4. Stephen P. Robbins, Mary Coulter and Agna Fernandez (2019), *Management, Fourteenth Edition*, Pearson Education
5. Varma Sumati (2019), *Fundamentals of International Business, 4th Edition, Pearson Education.*
6. Stephen P .Robbins, Timothy A.Judge (2019), *Essentials of Organization Behaviour*, Pearson Education
7. Tripathi (2017), *Principles of Management 6th Edition*, McGraw Hill Education
8. Tim Matthews(2018),*Principles and Practices of Management*, Meetcoogle
9. Pushpinder Singh Gill, Paramjeet Kaur (2017), *Principles of Management*, Atlantic Publishers &Distributors (P) Ltd.

Online Reference:

1. MOOC Material: *Managing the Company of the Future*, Created by London Business School, Delivered by Coursera, Taught by: Julian Birkinshaw.
2. MOOC Material: *Leadership, Identify, Influence and Power*, Created by Macquarie Graduate School of Management, Delivered by Open2study, Taught by: Randal Tame.
3. MOOC Material: *Human Resources*, Created by Open Training Institute, Delivered by Open2
4. MOOC Material: *Critical Perspectives* study, Taught by: Christina Dahdal.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	2	2	1	2	3
CO2	3	3	3	3	2	2	2	2	3	3
CO3	3	3	3	3	2	2	2	3	3	3
CO4	3	3	3	3	2	3	3	3	3	3
CO5	3	3	3	3	2	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMEC1/21 - APPLIED OPERATIONS RESEARCH

Course Aim: The aim of the course is to give students a solid quantitative foundation alongside practical problem-solving techniques. The course is intended to provide the students with deeper analytical skills and an understanding of how these are applied to business and management problems.

Course Outcome: Upon completion of the course, the students will be able to

CO1	Describe the importance and application of time value of money in solving practical problems in industry	L1 & L2
CO2	Apply linear programming techniques to solve a variety of business problems	L3
CO3	Integrate transportation and assignment problem strategies in real world applications	L6
CO4	Formulate a managerial decision problem into a inventory model and decision making theory	L6
CO5	Structure queuing theory models to evaluate their results	L1
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Time Value of Money: Introduction – Concept and Techniques – Doubling and Multiple Compounding Periods – Effective Rate of Interest – Future Value of Series of Payments and Annuity –Present Value of Series of Payments and Annuity – Practical Applications of Time Value Techniques.

Unit II Linear Programming: Introduction to applications of operations research in functional areas of management – Linear Programming formulation - solution by graphical and simplex methods (only simple problems) – Concepts of Duality – Sensitivity Analysis

Unit III Transportation: Transportation Models (Minimising and Maximising Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by N-W Corner Rule, Least cost and Vogel’s approximation methods - Check for optimality - Solution by Modified Method (MODI) / Stepping Stone method - Assignment Models – Types of Assignment Problem - Hungarian Method.

Unit IV Inventory Models and Decision Theory: Inventory Models – EOQ and EBQ Models (With and without shortages) - Quantity Discount Models. Decision making under risk – Decision trees – Decision making under uncertainty.

Unit V: Queuing Theory: Introduction to Queuing Theory – Terminologies of Queuing System – Empirical Queuing Models.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 40% and Problems-60%
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References:

Books:

1. Hamdy A Taha, 2017, *Operations Research: An Introduction*, 10th Ed., Pearson, USA.
2. Michael W. Carter and Camille C. Price, 2017, *Operations Research: A Practical Introduction*, CRC Press, Florida
3. Nezameddin Faghih, Ebrahim Bonyadi, Lida Sarreshtehdari, 2021, *Quality Management and Operations Research Understanding and Implementing the Nonparametric Bayesian Approach*, CRC Press, Florida.
4. Pandey, I.M., 2015, *Financial Management*, 11th Ed., Vikas Publishing House Pvt. Limited.
5. Prasanna Chandra, 2019, *Financial Management: Theory and Practice*, 10th Ed., McGraw Hill Education (India) Private Limited.
6. Raju N.V.S, 2020, *Operations Research: Theory and Practice*, CRC Press, Taylor and Francis Group, New York.
7. Srinivasan G, 2017, *Operations Research – Principles and Applications*, 3rd Edition, Prentice Hall of India.
8. Yadav .S.R and Malik A. K, 2015, *Operations Research*, Oxford University Press.

Online Reference:

1. Swayam Course Material: *Statistics for Business - I*, Created by Shankar Venkatagiri, IIM Bangalore.
2. MOOC Material: *Principles of Valuation: Time Value of Money*, Created by: University of Michigan, Delivered by: Coursera, Taught by: GautamKau.
3. MOOC Material: *Operations Analytics*, Created by: University of Pennsylvania, Delivered by: Coursera, Taught by: SenthilVeeraraghavan.
4. MOOC Material: *Introduction to Operations Research*, Created by: Department of Management Studies IIT Madras, Delivered by: Swayam, Taught by: Dr. G. Srinivasan.
5. MOOC Material: *Introduction to Decision Making*, Created by: University of Michigan, Delivered by: Coursera, Taught by: Scott E. Page

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	3	3	3	3	3	1
CO3	3	2	3	3	1	3	3	2	3	1
CO4	3	3	3	1	3	3	3	1	3	2
CO5	3	2	3	3	3	3	3	2	3	3

1 – Low, 2 – Medium, 3 - Strong

FMEC2/21 - R AND PYTHON FOR FINANCE

Course Aim: The aim of the course is to provide a broad understanding of the principles and techniques of Python coding for finance applications. The course is intended to illustrate how data analytics can improve financial decision-making. This course would provide students with a foundation for performing data analytics in finance-related roles both inside the financial sector and outside the financial sector.

Course Outcome: After completing this course, the student should be able to:

CO1	Understand the need and advantages of using python for financial analytics.	L1 & L2
CO2	Practice advanced calculation, generate outputs, create variables, abstract from data using python.	L3
CO3	Devise python models and techniques that aid design, analysis and evaluation of financial decision-making.	L6
CO4	Collaborate and implement advanced machine learning models in finance using python.	L6
CO5	Create Excel, Web and GUI based design for trading platforms to support analytics.	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Python and Finance: Python - History of Python – Python Ecosystem – Technology in Finance – Rise of Real-Time Analytics – Finance and Python Syntax, Efficiency and Productivity Through Python – From Proto typing gto production – Python Deployment – Anaconda – IPython – Spyder Algorithmic Trading – Python for Algorithmic Trading

Unit II: Data Types and Structures: Basic Data Types - Basic Data Structures - Excursion: Control Structures - Excursion: Functional Programming – Dicts – Sets. NumPy Data Structures: Arrays with Python Lists - Regular NumPy Arrays - Structured Arrays. Vectorization of Code: Basic Vectorization. Data Visualization - Two Dimensional Plotting – One-Dimensional Data Set – Two Dimensional Data Set – Other Styles.

Unit III: Financial Time Series: pandas Basics - Basic Analytics - Series Class - GroupBy Operations - Financial Data - Regression Analysis - High-Frequency Data.Input/Output Operations: Basic I/O with Python - Writing Objects to Disk - Reading and Writing Text Files - SQL Databases - Writing and Reading NumPy Arrays - I/O with pandas - From SQL to pandas - Data as CSV File - Data as Excel File - Fast I/O with PyTables.

Unit IV: Mathematical Tools: Approximation – Regression – Interpolation. Convex optimization – Global Optimization - Local Optimization - Constrained Optimization. Integration: Numerical Integration - Integration by Simulation - Symbolic Computation.

Unit V: Financial Analytics and Development: Excel Integration – Basic Spreadsheet interaction – Scripting Excel with python – Object Orientation and Graphical User interfaces – Object Orientation – Basics of Python classes – Simple Short Rate class – Cash Flow Series class – Graphical User Interfaces – Short Rate class with GUI – Updating values – Cash Flow Series class with GUI.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Marks: CIA – 25 and ESE – 75 (Out of 75, 45 marks for written and 30 marks for practical)
(The ESE Theory Examination would be conducted for 75 marks and converted for 45 marks)

References:

Books:

1. Fletcher, S., Gardner, C. (2010). Financial Modelling in Python. Germany: Wiley.
2. Hilpisch, Y. (2014). Python for Finance: Analyze Big Financial Data. United States: O'Reilly Media.
3. Hilpisch, Y. (2020). Python for Algorithmic Trading. United States: O'Reilly Media.
4. Lewinson, E. (2020). Python for Finance Cookbook: Over 50 Recipes for Applying Modern Python Libraries to Financial Data Analysis. United Kingdom: Packt Publishing.
5. Lookabaugh, B., Tatsat, H., Puri, S. (2020). Machine Learning and Data Science Blueprints for Finance. China: O'Reilly Media.
6. Molin, S. (2019). Hands-On Data Analysis with Pandas: Efficiently Perform Data Collection, Wrangling, Analysis, and Visualization Using Python. United Kingdom: Packt Publishing.
7. Naik, K. (2019). Hands-On Python for Finance: A Practical Guide to Implementing Financial Analysis Strategies Using Python. United Kingdom: Packt Publishing.

Online Reference:

1. <https://towardsdatascience.com/python-for-finance-the-complete-beginners-guide-764276d74cef>
2. <https://pythonforfinance.net/>
3. <https://github.com/yhilpisch/py4fi>
4. <https://github.com/wilsonfreitas/awesome-quant>
5. MOOC Material: *Applied Data Science with Python Specialisation*, Created by: University of Michigan, Delivered by: Coursera, Taught by: Christopher Brooks.
6. MOOC Material: *Machine Learning A-Z: Hands-on Python & R in Data Science*, Created by: Kirill Eremenko, Hadelin de Ponteves, Super DataScience Support, LGENCY Team, Delivered by: Udemy, Taught by: Christopher Brooks.
7. MOOC Material: *Data Science: R Basics*, Created by: Harvard University, Delivered by: edX, Taught by: Rafael Irizarry.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	2	3	3	3	3	3	3
CO2	3	3	2	2	3	3	3	3	3	3
CO3	3	2	2	3	3	3	3	3	3	3
CO4	3	2	3	2	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMSC1/21 – CONTEMPORARY BUSINESS COMMUNICATION

Course Aim: The course aims to explain the fundamentals, scope and importance of communication in business, develop individual reading and listening skills of the students and to transform their communication abilities by honing their oral, written, and non-verbal communication skills.

Course Outcome: At the end of the Course, the student would be able to

CO1	Articulate correctly and effectively on matters having relevance to day-to-day business operations	L1 & L3
CO2	Develop reading and listening skills among the students	L3 & L6
CO3	Devise effective writings on resumes, and reports	L4
CO4	Preparing agenda, circular and minutes of the meeting for the effective conduct of the office meetings.	L6
CO5	Prepare oneself for the Job Interview	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Business Communication: Meaning and Objectives of Business Communication – Factors Affecting Business Communication - Verbal Communication (Group Discussion, Business Presentation) – Non Verbal Communication – Body Language – Communication and Electronic Media – Communication and Social Media.

Unit II : Parts of the Speech - Nouns – Pronouns – Verbs – Adjectives – Adverbs – Prepositions – Conjunctions – Interjections: **Verb Tenses and Voice** - Principal Parts of Verbs - Regular and Irregular Verbs - Tenses of Verbs - Perfect Tenses - Progressive and Emphatic Forms - Consistency of Tenses - Voice of Verbs - Mood of Verbs

Unit III: Parts of the Sentence - Sample Subjects and Simple Predicates - Complete Subjects and Complete Predicates - Compound Subjects and Compound Predicates - Order of Subjects and Predicate – Complements

Unit IV: Written Communication – The Process of Writing - Notice, Agenda and Minutes - Business Letters – Memorandums – E-mail – Text Messaging – Instant Messaging – Directness in Good and Neutral Messages - Indirectness in Bad-News Messages

Unit V: Employment Communication: The Job Search - Preparing the Application Documents - Constructing the Resume - Types of Interviews - Do's and Don'ts for Interviews - Oft asked questions – Presentation Skills – Event Management.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:**Books:**

1. Barbara G. Shwom, 2018, *Business Communication: Polishing Your Professional Presence*, Pearson Education, Noida.
2. Guffey, M. E., Loewy, D, 2021, *Business Communication: Process & Product*, United States: Cengage Learning.
3. Gupta S.C, 2018, *Practical English Grammar and Composition*, Arihant Publications India Limited.
4. Lawson, C., Witsel, M., Gill, R., Feekery, A, 2019, *Communication Skills for Business Professionals*, United Kingdom: Cambridge University Press.
5. Peter Hartley and Peter Chatterton, 2015, *Business Communication: Rethinking Your Professional Practice for the Post-digital Age*, Routledge, UK.

Online Reference:

1. MOOC material: *Business Communication (edX)* Created by: The University of British Columbia, Canada, Delivered by: EdX, Taught by: Marlis Silver Sweeney
2. MOOC material: *Business Communication (edX)* Created by: Rochester Institute of Technology, United States, Delivered by: EdX, Taught by: Andrea Hickerson
3. MOOC material: *Business Writing (Coursera)* Created by: University of Colorado Boulder, United States, Delivered by: Coursera, Taught by: Dr. Quentin McAndrew.
4. MOOC material: *Soft Skills (SWAYAM)* Created by: IIT Roorke, Delivered by : SWAYAM, Taught by: Dr. Binod Mishra.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	2	2	1	3	3
CO2	3	3	3	3	3	3	2	2	2	3
CO3	3	2	3	2	3	3	3	1	2	3
CO4	3	2	3	3	3	3	3	3	3	2
CO5	3	3	3	3	3	3	2	2	1	2

1 – Low, 2 – Medium, 3 - Strong

CCIBE1/21 –ENTREPRENEURIAL MINDSET AND INNOVATION

The detailed syllabus for this course is given in the Regulation and Syllabus for Certification
Course on Innovation and Business Entrepreneurship

FMFC2/21 - FIXED INCOME SECURITIES MARKETS

Course Aim: This course aims at developing a broad and in-depth knowledge of the key fixed income instruments and markets. Throughout this, there are many exercises which test and assess candidates' knowledge, examine scenarios which will equip participants with practical skills in their day-to-day business activity.

Course Outcome: On successful completion of this course, students will be able to:

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

CO1	Develop a broad knowledge of fixed income markets and its credit products	L1 & L2
CO2	Evaluate the functioning of Central Government Securities Bonds	L2 & L3
CO3	Analyse the fundamentals of State Government Securities Bonds, Call Money Market and Corporate Debt Market	L5
CO4	Compare the uses of Commercial paper, Certificate of Deposits and Repos	L4 & L5
CO5	Appraise the trading mechanism and regulatory aspects of bond securities	L6
L1 - Remember; L2 - Understand; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Unit-I: Debt Instruments: Introduction and overview of debt markets - Basic concepts of debt instruments, Overview of debt contracts and classification of debt securities - Players and their objectives. **Indian Debt Markets:** Different types of products and participants; Secondary market for debt instruments.

Unit-II: Central Government Securities Bonds: Primary issuance process; Participants in Government bond markets; Constituent SGL accounts; Concept of Primary dealers, Satellite dealers; Secondary markets for Government bonds; Settlement of trades in G-Secs; Clearing corporation; Negotiated Dealing System; Liquidity Adjustment Facility (LAF).

Unit-III: State Government Bonds: Gross fiscal deficit of state Governments and its financing; Volume, Coupon rates and ownership pattern of State Government bonds; **Call Money Markets:** Participants in the call markets; Call rates; **Corporate Debt:** Bond Market segments; Issue process; Issue management and Book building; Terms of a Credit rating.

Unit-IV: Commercial Paper & Certificate of Deposits: Guidelines for CP Issue; Rating notches for CPs; Growth in the CP market; Stamp duty; Certificates of deposit. **Repos:** Repo rate; Calculating settlement amounts in Repo transactions; Advantages of Repos; Recent; Issues in repo market in India; Secondary market transactions in Repos; Repo accounting.

Unit-V: Bond Market Indices and Benchmarks: I-Bex: Sovereign bond index; NSE-MIBID/MIBOR **Trading Mechanism in the NSE-WDM** Description of the NSE WDM trading system; Order types and conditions; Order entry in negotiated trades market; Order validation and matching; Trade management; Reports; Settlement; Rates of Brokerage. **Regulatory and Procedural Aspects** G-Sec Act 2006; SEBI (Issue and Listing of Debt Securities) Regulations 2008 and Market Practices and Procedures.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 40% and Problems-60%

Reference:

Books:

1. Choudhry, M. (2019). *Analysing and Interpreting the Yield Curve*. United Kingdom: Wiley.
2. Daring, A. (2021). *Fixed Income Trading and Risk Management: The Complete Guide*. United Kingdom: Wiley.
3. Mukherjee, K. N. (2020). *Demystifying Fixed Income Analytics: A Practical Guide*. United Kingdom: Taylor & Francis.
4. NCFM, FIMMDA Module
5. Parameswaran, S. K, (2019), *Fixed Income Securities: Concepts and Applications*. Walter de Gruyter GmbH & Co KG.
6. Prasanna Chandra, (2017), *Investment Analysis and Portfolio Management*, Tata McGraw Hill International.
7. S.L.Gupta, 2017, *Financial Derivatives (Theory, concepts and Problems)*, 2nd Ed., Prentice Hall of India.
8. Saied Simozar, 2015, *The Advanced Fixed Income and Derivatives Management Guide*, John Wiley & Sons.

Online Reference:

1. MOOC Material: *Finance for Everyone: Values*, Created by: McMaster University, Delivered by: Coursera, Taught by: Arshad Ahamed.
2. MOOC Material: *Finance for Everyone: Debt*, Created by: McMaster University, Delivered by: Coursera, Taught by: Arshad Ahamed.
3. MOOC Material: *Portfolio and Risk Management*, Created by: University of Geneva, Delivered by: Coursera, Taught by: Tony Berrada and others.
4. MOOC Material: *Introduction to Investments*, Created by: IIM Bangalore, Delivered by: edX, Taught by: S.G. Badrinath.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	2	3	1
CO3	3	2	3	3	1	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	1

1 – Low, 2 – Medium, 3 - Strong

FMCC5/21 - NSE SMART TRADING SIMULATION LAB

Course Aim: The main objective of the course is to obtain comprehensive knowledge about technical analysis. The course is also intended to teach the basics of technical analysis and various trading strategies.

Course Outcomes: After completing this course, they should be able to:

CO1	Recognise the strengths and weaknesses of technical analysis	L1
CO2	Analyze Charts and study various patterns	L3
CO3	Know various Indicators and Oscillators	L6
CO4	Obtain knowledge related to various trading strategies and theories	L6
CO5	Understand the importance of risk management	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Technical Analysis & Candle Charts: Meaning of Technical analysis - Price discounts - Price movements - Basic assumption of Technical Analysis - Strengths and Weakness of Technical Analysis - Importance of Technical Analysis – **Charts:** Candlestick analysis.

Unit II: Pattern Study: Meaning of Support and Resistance – Reason for Occurrence of Support and Resistance Zone - Change of support to resistance and vice versa – Importance of Support and Resistance Lines - Head and Shoulders - Head and Shoulders Top Reversal - Inverted Head and Shoulders - Head and Shoulders Bottom - Double Top and Double Bottom - Rounded Top and Bottom - Gap Theory - Common Gaps - Breakaway Gaps - Runaway/Continuation Gap - Exhaustion Gap - Island Cluster

Unit III: Major Indicators and Oscillators: Meaning, Uses and reasons for using Technical Indicators – Tips for using indicators - Types of indicator - Simple Moving Average - Exponential Moving Average – Oscillators - Relative Strength Index – Moving Average, Convergence/Divergence(MACD) – Multiple Indicators for Trading Signal.

Unit IV: Trading Strategies: Day trading - Advantages of Day Trading - Risks Associated with Risk Day Trading – Strategies - Strategies for Day Trading - Momentum Trading Strategies.

Unit V: Trading Psychology and Risk Management: Introduction to Risk Management - Components of Risk Management - Stop Loss - Analyze Reward Risk Ratio - Trail Stop Loss - Booking Profit - Uses of Stop Loss - Qualities of Successful Trader - Golden Rules of Traders - Do's and Don'ts in Trading - Rules to Stop Losing Money - Choosing the Right Market to Trade -Importance of Discipline in Trading

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

<p>Marks: CIA – 25 and ESE – 75 (Out of 75, 45 marks for written and 30 marks for practical) (The ESE Theory Examination would be conducted for 75 marks and converted for 45 marks)</p>
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References:**Books:**

1. NCFM, NCFM-Technical Analysis Module, Mumbai: NSE
2. CNBC (2013), *Technical Analysis Trading: Making Money with Charts*, CNBC
3. Thomas A Meyers (2017), *The Technical Analysis Course, Fourth Edition: Learn How to Forecast and Time the Market*, Bangalore: McGraw Hill Education
4. Edwards, R. D., Magee, J., Bassetti, W. (2018). *Technical Analysis of Stock Trends*. United States: Taylor & Francis.
5. Kyal, A. H., Trivedi, S. R. (2020). *Effective Trading in Financial Markets Using Technical Analysis*. United Kingdom: Taylor & Francis.

Online Reference:

1. MOOC Material: *Finance for Everyone: Values*, Created by: McMaster University, Delivered by: Coursera, Taught by: Arshad Ahamed.
2. MOOC Material: *Behavioral Finance*, Created by: Duke University, Delivered by: Coursera, Taught by: Emma Rasiel.
3. MOOC Material: *Behavioral Finance* (Coursera), Created by: Duke University, Delivered by: Coursera, Taught by: Emma Rasiel.
4. MOOC Material: *Portfolio and Risk Management* (Coursera), Created by: Indian School of Business (ISB), Delivered by: Coursera, Taught by: Ramabhadran Thirumalai.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	2	3	3	3	3	2
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	2
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMCC7/21 - MERGERS & ACQUISITIONS AND CORPORATE RESTRUCTURING

Course Aim: The aim of this course is to give comprehensive idea about mergers, amalgamation and corporate restructuring to all the learners and encourage them to understand various activities and procedures and also the impact of various kinds of acquisition and restructuring modules. The course also aims to make students capable of taking decision on various kinds of restructuring proposal and merging and acquisition modules.

Course Outcome: At the end of this course the students would be able to:

CO1	Understand the nature and scope of mergers, acquisition and corporate restructuring	L1 & L2
CO2	Discover the different activities of corporate restructuring	L2 & L3
CO3	Estimating the value of corporate entity before and after amalgamation	L4&L5
CO4	Evaluate the various legal framework for amalgamation and restructuring	L4 & L5
CO5	Recording transaction related to corporate restructuring and amalgamation	L3&L4
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyse; L5 - Evaluate;		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Mergers & Acquisitions: Background, Types of Re-organisation, Internal Re-organisation, External Re-organisation, Stock Swap, Section 293 (1) (a) of the Companies Act, 1956, Sick Companies, Benefits of Re-organisation, Re-organisation Costs, Due Diligence.

Unit II: Scheme of Compromise, Arrangement or Re-construction: Definitions- Company, Arrangement, Unsecured Creditors, Appointed Date and Effective Date; Power to compromise or make arrangements with creditors and members, NCLT's Power to Enforce Compromise or Arrangement, D. NCLT's Power for Facilitating Reconstruction or Amalgamation, Dissenting Share-holders, Amalgamation in National Interest by Central Government.

Unit III: Buy-back of Securities: Regulation and Definitions -Associate, Control, Small Share-holder, Tender Offer; Permitted Methods of Buy-back, Provisions in the Companies Act, 1956, Buy-back through Tender Offer, Escrow Account in Tender Offer, Payment to Security-holders in Tender Offer, Buy-back from Open Market- Through stock exchange, Through Book-building Process; General Obligations- Obligations of Company, Obligations of Merchant Banker

Unit IV : Substantial Acquisition of Shares & Takeovers: Regulation and Definitions-Shares, Acquirer, Control, Target Company, Persons Acting in Concert, Associate, Immediate Relative, Offer Period, Tendering Period; Compulsory Open Offer- Substantial Acquisition of Shares or Voting Rights, Acquisition of Control, Indirect Acquisition, Voluntary Offer Size, Offer Price, Mode of Payment, General Exemptions, Exemptions by SEBI.

Unit V: Accounting for Mergers & Acquisitions: Regulatory Framework, AS 14: Accounting for Amalgamations-Definitions, Types of Amalgamations, Pooling of Interests Method of Accounting, Purchase Method of Accounting, Consideration, Reserves, Goodwill, Profit & Loss a/c Balance, Disclosures, Amalgamation after Balance Sheet Date; AS 10: Accounting for

Fixed Assets, AS 26: Intangible Assets, ASI, Accounting for Taxes on Income in case of an Amalgamation, Ind AS 103: Business Combinations.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 80% and Problems-20%

Reference:

Books:

1. ICSI, 2019, *Corporate Restructuring, Insolvency, Liquidation & Winding-Up*, The Institute of Company Secretaries of India.
2. Donald M. DePamphilis, 2019, *Mergers, Acquisitions and Other Restructuring Activities*, 6th Edition, Elsevier.
3. Rabi Narayan Kar, 2018, *Mergers, Acquisitions & Corporate Restructuring*, 3rd Edition, Taxmann's.
4. Patrick A. Gaughan, 2017, *Mergers, Acquisitions & Corporate Restructurings*, 7th Edition, Wiley.
5. Sheeba Kapil, Kanwal N. Kapil (2018), *Mergers and : Strategy, Valuation, Leveraged Buyouts and Financing*, Wiley.
6. Chandrashekar Krishnamurti (2018), *Mergers, Acquisitions & Corporate Restructuring: Text and Cases*, SAGE Publication Pvt Ltd.

Online Reference:

1. MOOC Material: *Mergers, Acquisition, and Restructurings* (*online-learning.harvard.edu*) Created and Delivered by Harvard university.
2. MOOC Material: *Mergers and Acquisitions- The Relentless Pursuit of Synergy* (*Coursera*) Created by: American Institute of Business and Economics, Delivered by: Coursera, Taught By: Konstantin Kontor.

Mapping with Programme Outcomes										
Cos	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	2	3	3	3	3	3	1
CO3	3	2	3	2	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC8/21 - INSURANCE PRODUCTS AND MANAGEMENT

Course Aim: This course aims to appraise the students the importance of Insurance products and management, type of insurance products and explain the strategic planning required in the insurance business.

Course Outcomes: On completion of the course, the students will be able to

CO1	Understand the concepts relating types of business, personal risks, and significance of risk management function within business organizations.	L1 & L2
CO2	Acquaint the basic knowledge of the general insurance products and methods of risk management found in strategic planning.	L2 & L3
CO3	Get knowledge on some basic principles of buying life insurance products.	L4
CO4	Appraise the managerial aspects of risk management and principles of reinsurance	L4 & L5
CO5	Facilitate the business strategic planning and application of information technology in insurance.	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Principles and Practice of Insurance: Introduction to Risk and Insurance, Types of Insurance-General and Life, Basic principles of General and Life Insurance, Insurance contracts-Regulations on investments, insurance funds with respect to shareholders funds and policy holders funds-costing and pricing of insurance products, IRDA.

Unit II: General Insurance: Products, underwriting concepts, standard conditions and warranties with respect to Fire, Marine, Motor, Engineering and Miscellaneous products;

Unit III: Life Insurance Products: Premium Plans, social security schemes, pension policies, Health Insurance, group insurance schemes and financial gerontology of superannuating policies-Principles of Actuarial valuation

Unit IV: Risk Management and Reinsurance: Economics of insurance; Managerial aspects of risk management; Reinsurance-legal principles and methods of reinsurance, Globalization of Insurance.

Unit V: Business Strategic Planning and Information Technology: Management of insurance companies, challenges of globalization and business process reengineering; Application of IT in insurance business, system controls, data warehousing, application of ERP for insurance companies, Customer relation management and supply chain management; Business Strategies in product formulation, information marketing & advisory, distribution, reinsurance and servicing.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:**Books:**

1. Agarwal, OP, 2017, *Banking & Insurance*, 4th Ed., Himalaya Publishing House, Mumbai
2. George E Rejda, 2017, *Principles of Risk Management & Insurance*, 13th Ed., Pearson Education, New Delhi
3. Harrington and Niehaus, 2014, *Risk Management & Insurance*, 2nd Edition, Tata
4. John C. Hull, 2018, *Risk Management and Financial Institutions*, 5th Edition, John Wiley & Sons, New Jersey.
5. Loomba Jatinder, 2014, *Risk Management and Insurance Planning*, PHI, New Delhi.
6. *Taxmann's Insurance Laws Manual*, 2021, Taxman Publications Pvt. Ltd.

Online Reference:

1. MOOC Material: *How to Save Money: Making Smart Financial Decisions* (edX), Created by: University of California, Berkeley, Delivered by: EdX, Taught by: Terrance Odean.
2. MOOC Material: *Finance for Everyone: Decisions*, Created by: McMaster University, Delivered by: Coursera, Taught by: Arshad Ahamed.
3. MOOC Material: *Finance for Everyone: Markets*, Created by: McMaster University, Delivered by: Coursera, Taught by: Arshad Ahamed.
4. MOOC Material: *Financial Planning for Young Adults*, Created by: University of Illinois, Delivered by: Coursera, Taught by: Nicholas Paulson.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	3	3	1
CO3	1	2	3	3	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMEC3/21 – MANAGERIAL ECONOMICS

Course Aim: The aim of this course is to study the application of microeconomic concepts and analytical tools and to use for corporate resource allocation, to assess demand and cost determination, industry positioning, and to explain the pricing mechanisms.

Course Outcome: On completing the course, the student would be able to

CO1	Gain knowledge and provide tools and techniques to make effective economic decisions under conditions of risk and uncertainly.	L2 & L6
CO2	Determine the factors such as demand and production for pricing criteria.	L1 & L3
CO3	Intend the understanding of product and factor market.	L4
CO4	Analyze the macroeconomic situations	L3 & L4
CO5	Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets.	L2 & L4
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted-Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction-Nature and Subject Matter of Economics - Classical and Modern View - Robin’s Contribution and its Critical Estimate - Economics as Positive Science, Normative science, Applied Science and Arts - Micro and Macro Economics - Relation of Economics with business.

Unit II: Producer Behaviour: Market – Demand and Supply – Determinants – Market Equilibrium – Elasticity of Demand and Supply – The Scope of Business Economics to Problems of Production - Laws of Returns and their Casual and Effectual Significance - Analysis of Cost – Short-run and Long-run Cost Function – Relation between Production and Cost Function; **Consumer Behaviour:** Theory of Consumer Choice

Unit III: Product and Factor Market: Product Market - Price Determination under Different Market Conditions – Different Market Structures – Firm’s Equilibrium and Supply – Market Efficiency – Economic Costs of Imperfect Competition – Factor Market – Land, Labour and Capital – Demand and supply – Determination of Factor Price – Interaction of Product and Factor Market – General Equilibrium and Efficiency of Competitive Markets.

Unit IV: Macro Economics: National Income and Economics welfare - Relation Between Size and Distribution of National Income and Economic Welfare - Business cycles - Theories of Business Cycle - The Problem of Unified Theory of Business Cycle

Unit V: Supply and Role of Money: Keynesian Theory of Employment - The Problem of Full Employment - Unemployment and its impact – Okun’s law – Inflation and the Impact – Reasons for Inflation – Inflation Vs Unemployment Tradeoff – Phillips curve –Supply side Policy and management- Money market- Demand and supply of money – money-market equilibrium and national income – the role of monetary policy.

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

References:

Books:

1. Christopher R. Thomas and S. Charles Maurice (2020). *Managerial Economics: Foundations of Business Analysis and Strategy*, McGraw Hill, Noida.
2. Dominic Salvatore (2018), *Managerial Economics in a Global Economy*, 1st Edition, Oxford University Press, New Delhi.
3. Dominick Salvatore and Siddhartha Rastogi (2020), *Managerial Economics: Principles and Worldwide Applications*, Oxford University Press.
4. Luke Froeb, Brian McCann, Michael Ward, Mike Shor (2015), *Managerial Economics*, 4th Edition, Cengage Learning, United States.
5. Samuelson, W. F., Marks, S. G., & Zagorsky, J. L. (2021). *Managerial Economics*. John Wiley & Sons.

Online Reference:

1. Swayam Course Material: *Managerial Economics*, Created by Bhanu Muthy, Delhi University.
2. MOOC Material: *Introduction to Managerial Economics* (edX), Created by: Indian Institute of Management, Bangalore, Delivered by: EdX, Taught by: Subhashish Gupta
3. MOOC Material: *Econ-1: Principles of Economics* (Stanford Online), Created by: Stanford University, Delivered by: Lagunita Stanford Online, Taught by: John B. Taylor
4. MOOC Material: *Principles of Economics with Calculus* (edX), Created by: Caltech, Delivered by: EdX, Taught by: Antonio Rangel

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	1	2	1	3	3	2	3	2	1
CO2	3	3	1	2	2	2	3	2	3	2
CO3	2	2	3	3	3	3	3	1	3	3
CO4	2	1	3	3	2	2	3	3	3	2
CO5	3	3	3	2	3	3	3	3	2	2

1 – Low, 2 – Medium, 3 - Strong

FMEC4/21 - AI / ML FOR FINANCIAL SECTOR

Course Aim: The main aim of the course is to gain understanding on the need and significance of Machine Learning for various technology requirements. The course also aims to identify, formulate, and implement a machine learning project. Various applications of machine learning in all business aspects would also be explored.

Course Outcomes: After completing this course, they should be able to:

CO1	Interpret the basic definition and need for machine learning.	L2
CO2	Compute the basic mathematics for machine learning.	L3
CO3	Assess the core aspects behind any machine learning project.	L5
CO4	Develop a machine learning project.	L6
CO5	Facilitate potential applications of machine learning in real time.	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted-Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit-I: Basics Concepts of Machine Learning: ML Definition- Various kind of problems tackled using ML- Some standard learning tasks- Learning Stages- Learning Scenarios- Generalization- Data, Models and Learning- Parameter Estimation- Probabilistic Modelling and Inference- Directed Graphical Models- Setting up your working Environment- Supervised vs Unsupervised Learning- Cross Validation- Evaluation metrics.

Unit-II: Advanced Concepts of Machine Learning: Fundamentals of statistical learning theory- Convergence and learnability- Kullback-Leibler Information- Model selection and the bias variance trade-off- Cross-validation- Regularization- Generative vs Discriminative models- Neural Networks- The Perceptron- Feed-Forward Neural Networks- Back-propagation and stochastic gradient descent- Regularization and drop-out-Application to investment management.

Unit-III: Supervised Learning: Linear Regression- Parametric Problems- Decision trees- Random forests- Classifications- K Nearest Neighbors- Support Vector- Naïve Bayes.

Unit-IV: Unsupervised Learning: Clustering- K-Means clustering- Dimensionality Reduction- Principle Component Analysis- Hierarchical Clustering- DBSCAN- Semi-supervised learning- Reinforcement Learning.

Unit-V: Advanced Neural Networks: Convolutional Neural Networks- Recurrent Neural Networks- Long Short-Term Memory (LSTM)-Autoencoders- Applying Learning to Real problems- Image Classification & Segmentation- Scoring Opinion and Sentiments- Recommending Products and Movies-Bitcoin Prediction- Predicting from the Limit Order Book.

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

Marks: CIA – 25 and ESE – 75 (Out of 75, 45 marks for written and 30 marks for practical)
(The ESE Theory Examination would be conducted for 75 marks and converted for 45 marks)

References:

Books:

1. Cooper, S. (2018). *Machine Learning for Beginners: An Introduction for Beginners, Why Machine Learning Matters Today and How Machine Learning Networks, Algorithms, Concepts and Neural Networks Really Work.* (n.p.): Steven Cooper.
2. Dixon, M. F., Halperin, I., Bilokon, P. A. (2020). *Machine Learning in Finance: From Theory to Practice.* Germany: Springer International Publishing.
3. Gray, W. (2019). *Machine Learning with Python: An Introduction to Data Science with Useful Concepts and Examples, Step by Step, Learning to Use Python.* United States: Amazon Digital Services LLC - KDP Print US.
4. Lopez de Prado, M. (2018). *Advances in Financial Machine Learning.* Germany: Wiley.
5. Mac Namee, B., D'Arcy, A., Kelleher, J. D. (2015). *Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies.* United Kingdom: MIT Press.
6. Mueller, J. P., Massaron, L. (2021). *Machine Learning For Dummies.* United States: Wiley.

Online Reference:

1. <https://www.kdnuggets.com/2020/03/trends-machine-learning-2020.html>
2. <https://mobidev.biz/blog/future-ai-machine-learning-trends-to-impact-business>
3. <https://venturebeat.com/2020/01/02/top-minds-in-machine-learning-predict-where-ai-is-going-in-2020/>
4. MOOC Material: *Machine Learning*, Created by: Stanford, Delivered by: Coursera, Taught by: Andrew Ng.
5. MOOC Material: *Machine Learning for Everyone*, Created by: Deeplearning.AI, Delivered by: Coursera, Taught by: Andrew Ng.
6. MOOC Material: *Introduction to Artificial Intelligence*, Created by: IBM, Delivered by: Coursera, Taught by: Rav Ahuja.
7. MOOC Material: *Artificial Intelligence*, Created by: GLS University, Delivered by: Swayam, Taught by: Bhushan Trivedi.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	3	3	3	3	3	3	2
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMSC2/21 - BUSINESS ENVIRONMENT

Course Aim: The aim of this course is to expose the students to various environment factors related to the business, develop students' understanding of the strategic issues and dilemmas that managers and organizations face when conducting business in an international setting and to give students exposure to real-world examples of situations in which these issues manifest themselves.

Course Outcomes: On completion of the course, the students will be able to

CO1	Understand the competitive and political environment facing businesses.	L1 & L2
CO2	Know the impact of the political environment on business.	L2 & L3
CO3	Analyse the impact of economic environment on business decisions.	L4
CO4	Apply the techniques such as social and technological environment in their own business.	L4 & L5
CO5	Create the venture into new business and run it successfully with the clear understanding about the legal environment.	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Self Learning and Peer learning.

Unit I: Business Environment: Dynamic factors of environment – Importance of scanning the environment – Fundamental issues captured in PESTLE– Political, Economic, Socio-cultural, Technological, Legal and Ecological environment- Opportunities and Threats as environmental issues to address by Businesses- Policy Environment: Liberalization, Privatization and Globalization (LPG).

Unit II: Political Environment: Government and Business – Political Systems, Political Stability and Political Maturity as conditions of business growth- Role of Government in Business: Entrepreneurial, Catalytic, Competitive, Supportive, Regulative and Control functions- Government and Economic planning: Industrial policies and promotion schemes – Government policy and MSME.

Unit III: Economic Environment: Phase of Economic Development and its impact- GDP Trend and distribution and Business opportunities- Monetary System and Business capital: Quantum, Types, Risk and Cost-Role of Banks; Role of Financial Institutions- Role of Central Bank- Fiscal System: Government Budget and Taxation Measures.

Unit IV: Social and Technological Environment: Societal Structure and Features- Entrepreneurial Society and its implications for business – Social and cultural factors and their implications for business- Technology Policy- Technology Trade and transfer- Technology Trends in India- Role of Information Technology – Clean Technology.

Unit V: Legal Environment: Legal Aspects of Entering Primary and Secondary Capital Markets- Law on Patents- Law on Consumer Protection- Law on Environmental Protection- Need for Clean energy and Reduction of Carbon footprint.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:**Books:**

1. Aswathappa. K, (2017), *Essentials of Business Environment*, Mumbai: Himalaya Publishing House.
2. Ferrera, Alexander, Kirschner, Wiggins, and Darrow, (2018), *The Legal and Ethical Environment of Business: An Integrated Approach*, 2nd Edition, Wolters Kluwer, New York.
3. Francis Cherunilam, (2018), *Business Environment*, Himalaya Publishing House, Mumbai.
4. Justin Paul, (2018), *Business Environment: Text and Cases, 4th Edition*, Tata Mc-Graw Hill Publications, New Delhi.
5. Larry A. Dimatteo, (2021), *International Business Law and Legal Environment A Transactional Approach*, New York: Routledge.
6. Marijs A.J and Hulleman W, (2019), *Economics and Business Environment*, United Kingdom: Taylor and Francis.
7. Mohinder Kumar Sharma, (2017), *Business Environment in India*, South Asia Books.

Online Reference:

1. MOOC Material: *Understanding Modern Business & Organizations (FutureLearn)*, Created by: University of Strathclyde, Delivered by: FutureLearn, Taught by: Viktor Dorfler.
2. MOOC Material: *International Business Environment and Global Strategy(edX)*, Created by: Indian Institute of Management, Bangalore, Delivered by: EdX, Taught by: SushilVachani.
3. MOOC Material: *The Global Business Environment: Evolution and Dynamics*, Created by: Coventry University, Delivered by: Future Learn, Taught by: AbdoulieSallah
4. MOOC Material: *International Environmental Law*, Created by: University of California, Delivered by: World Mentoring Academy, Taught by: Cymie Payne.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	2	3	3	3	3	3	1
CO3	1	2	3	2	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

CCIBE2/21 –BUSINESS PLAN AND ETHICS

The detailed syllabus for this course is given in the Regulation and Syllabus for Certification
Course on Innovation and Business Entrepreneurship

FMFC3/21 - SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Course Aim: The aim of this course is to capture the essence of modern developments in investments and provides a guided tour of the intricate and complex world of investments.

Course Outcome: On completing the course, the student would be able to

CO1	Describe the characteristics of various investment alternatives available to investors and discusses how the securities market functions and primary and secondary markets work	L1&L3
CO2	Analyse the principles of Dow Theory, Elliot Wave Theory and Efficient Market Hypothesis	L2&L3
CO3	Collaborate the analysis of financial statements - financial ratios and the strategies followed by the investment wizards of the world while sensitizing the pitfalls of the investment game	L5
CO4	Integrate the applications of modern portfolio theory and arbitrage pricing theory	L6
CO5	Articulate the knowledge on diversification and portfolio risks, equilibrium models and set of guidelines for investors with varying inclinations	L3
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted-Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Objectives of Investment Decisions-Introduction, Types of Investors – Constraints - Goals of Investors - Primary and Secondary Markets - Trading in Secondary Markets - Money Market - Repos and Reverse Repos - Bond Market - Common Stocks;

Unit II: Dow Theory and Elliot Wave Theory: Introduction and Principles of Dow Theory - Significance of Dow Theory - Problems with Dow Theory – Introduction and Fundamental Concept of Elliot Wave - After Elliot **Capital Market Efficiency**-Introduction - Market Efficiency - Departures from the EMH.

Unit III: Financial Analysis and Valuation-Introduction - Analysis of Financial Statements - Financial Ratios (Return, Operating and Profitability Ratios) - Valuation of Common Stocks - Technical Analysis

Unit IV: Modern Portfolio theory-Introduction - Diversification and Portfolio Risks - Equilibrium Models. The CAPM Multifactor Models -The Arbitrage Pricing Theory – Algorithmic trading

Unit V: Investment Management-Introduction - Investment Companies - Active vs. Passive Portfolio Management - Cost of Management - Entry/Exit Loads Fees - Net Asset Value - Classification of Funds - Other investment companies - Performance assessment of managed funds

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 70% and Problems-30%
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References:**Books:**

1. Baddeley M.C, (2017), *Investment Theories and Analysis*, United Kingdom: Palgrave Macmillan.
2. Chandra, P. (2017). *Investment Analysis and Portfolio Management*. McGraw-hill education. New York.
3. Gerald R. Jensen and Charles P. Jones, (2019), *Investment Analysis and Management*, New Jersey: Wiley.
4. Michael Dempsey, (2020), *Investment Analysis – An Introduction to Portfolio Theory and Management*, New York: Routledge.
5. NSE Academy, NCFM – *Investment Analysis and Portfolio Management Module*, Mumbai
6. Vanita Tripathi, (2020), *Taxmann’s Fundamentals of Investments*, New Delhi: Taxmann Publications.
7. Volker Then, Christian Schober, Olivia Rauscher, Konstantin Kehl, (2018), *Social Return on Investment Analysis- Measuring Impact of Social Investment*, Palgrave Macmillan.

Online Reference:

1. MOOC Material: *Securities Analysis and Portfolio Management*, Created by, IIT Kharagpur, Delivered by NPTEL and Taught by Prof.J.Mahakud
2. MOOC Material: *Portfolio and Risk Management*, Created by Indian School of Business, Hyderabad, Delivered by Coursera and Taught by Ramabhadran Thirumalai
3. MOOC Material: *Introduction to Investments (edX)*, Created by IIM, Bangalore and Taught by S.G. Badrinath
4. MOOC Material: *Investment and Portfolio Management Specialization*, Created by, Jones Graduate School of Business, Delivered by Coursera and Taught by Arzu Ozoguz and Jill Foote

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	2
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	2
CO5	3	3	3	2	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC9/21 - FOREIGN EXCHANGE MANAGEMENT

Course Aim: This course aims to understand how the foreign Exchange Market operates, to understand the principles of Currency valuation & explain techniques that can be used to hedge foreign exchange risk, to create and understanding on foreign exchange Management.

Course Outcomes: At the end of the course, the students would be able to

CO1	Describe and define the role of currency markets and its techniques	L1 & L2
CO2	Examine the organization of the exchange traded currency futures	L2 & L3
CO3	Apply the strategies of currency futures	L5
CO4	Appraise the clearing, settlement and accounting treatment of currency futures	L4 & L5
CO5	Evaluate the regulatory framework for currency derivatives	L6
L1 - Remember; L2 - Understand; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit - I: Introduction to Currency Markets: History of foreign exchange markets - Major currency pairs - Overview of international currency markets - Basics and Peculiarities of currency markets in India - Settlement or value date - Over-the-Counter (OTC) forward market - Exchange rate arithmetic - cross rate - Impact of market economics on currency prices - Economic indicators.

Unit - II: Exchange Traded Currency Futures: Currency futures - Spot price - Futures price - Contract cycle - Value date/Final settlement date - Expiry date - Contract size - Initial margin - Marking-to-market - Rationale behind currency futures - Standard items in a futures contract - Introduction of currency futures in India - Futures and forward contracts - Advantages of futures contracts - Limitations of futures contracts - Interest rate parity and pricing of currency futures.

Unit - III: Strategies Using Currency Futures: Role of speculation in futures markets - Hedging using currency futures - Concept of Arbitrage - Use of Arbitrage in Currency Futures Markets - Surveillance systems and procedures of exchanges.

Unit-IV: Clearing, Settlement, Risk Management, Accounting and Taxation in Currency Futures: Clearing entities - Clearing mechanism - Settlement mechanism - Risk management measures - Concept of margin requirements - **Accounting treatment for derivative contracts:** Taxation of derivative transaction in securities - Tax treatment of profit/loss on derivative transaction in securities

Unit-V: Regulatory Framework for Currency Derivatives: Features of Securities Contracts (Regulation) Act, 1956 [SC(R)A] - Features of Securities and Exchange Board of India Act, 1992 - Recommendations of the RBI-SEBI Standing Technical Committee on Exchange Traded currency and Interest Rate Derivatives - Regulatory framework for Clearing Corporations - Codes of Conduct and Investor Protection Measures - Grievance Redressal Mechanism for investors - Arbitration mechanism at exchanges.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 80% and Problems-20%

Reference:

Books:

1. Andley KK & Mattoo VJ, **Foreign Exchange: Principles and Practice**, Sultan Chand & Sons, New Delhi.
2. Taxmann's(2019) *Foreign Exchange Management 36th Edition*, Taxmann Publication
3. William D. Gerdes, 2018, **The Basics of Foreign Exchange Market: A Monetary Systems Approach**, 2nd Edition, Business Expert Press.
4. Williams L. Richards, 2015, **Currency: Fundamentals and Functions**, (First Edition) Design Pub.
5. Esha Sharma(2015) , *Foreign Exchange Management* Laxmi Publication.
6. Jeevanandam. C(2020) *Foreign Exchange&Risk Management* Sultan Chand & Sons

Online Reference:

1. MOOC Material: **International Finance**, Created by:[Marginal Revolution University](#), Delivered by:[MRUniversity](#), Taught by:[Alex Tabarrok](#) and [Tyler Cowen](#).
2. MOOC Material: International Business I, Created by: University of New Mexico, Delivered by: Coursera, Taught by: Doug E Thomas.
3. MOOC Material: Foreign Exchange Markets – Instruments, Risks and Derivatives, Created by: IIM Bangalore, Delivered by: Coursera, Taught by: P C Narayan
4. MOOC Material: Forex Trading for Beginners, Created by: Investoo.com, Delivered by: Investoo.com, Taught by: Cory Mitchell.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	3	3	3	3	2
CO2	3	3	3	2	3	3	3	2	3	1
CO3	3	2	3	3	1	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	1

1 – Low, 2 – Medium, 3 - Strong

FMCC10/21 - BUSINESS RESEARCH METHODS

Course Aim: The course aims to give students a broad understanding of research methodology, including qualitative and quantitative methods. The course also aims to give students skills for critical reading of research literature and for preparing them to do their main project.

Course Outcomes: At the end of course, the students would be able to

CO1	Describe the nature and scope of Business Research methods	L1 & L2
CO2	Appraise the probability and non-probability sampling methods	L2 & L3
CO3	Evaluate the various methods of primary and secondary data collection	L5
CO4	Adapt the data analysis through statistical software	L4 & L5
CO5	Devise the oral and written report preparation	L6
L1 - Remember; L2 - Understand; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Business Research: Meaning – Types of Research – Process of Research – Research Applications in Business Decisions – Features of a Good Research Study – Formulation of the Research Problem and Development of the Research Hypotheses – Research Design: Exploratory and Descriptive.

Unit II: Sampling Methods: Sampling Concepts – Sample Vs Census – Sampling Vs Non-Sampling Error – Sampling Design – Probability Sampling Design – Non- probability Sampling Design – Determination of Sample Size.

Unit III: Data Collection and Data Processing: Primary and Secondary data – Interviewing – Questionnaires – Questionnaire Design – Secondary Sources of data collection – Merits and limitations – Standard Data – Government Department Records – Organisational Records – Journals – Books – Sources of online data – RBI database – Bloomberg Database – CMIE database – Capital line Database.

Unit IV: Data Analysis Through Statistical Software: Testing of Hypotheses - Analysis of Variance – Non-Parametric Test - Multiple Regression & Correlation – Factor Analysis – Discriminant Analysis.

Unit V: Report Writing: Importance of Report Writing – Types of Research Report – Report Preparation and Presentation – Report Structure – Report Formulation – Guidelines for Effective Documentation – Oral Presentation.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:

Books:

1. Cooper, D. R. (2018), *Business Research: A Guide to Planning, Conducting, and Reporting Your Study*, United States: SAGE Publications.

2. Donald R. Cooper and Pamela S. Schindler, (2018), *Business Research Methods*, (12th Ed.), Tata McGraw Hill Publishing Company Limited.
3. Emma Bell, Alan Bryman & Bill Harley, 2015, *Business Research Method 5th Edition*, OXFORD University Press.
4. Esteban-Bravo, M., Vidal-Sanz, J. M, (2021), *Marketing Research Methods: Quantitative and Qualitative Approaches*, India: Cambridge University Press.
5. Joseph F. Hair Et al., (2015), *Essentials of Business Research Methods*, (2nd Edition), Routledge.
6. Mark Easterby – Smith, Richard Thorpe, Paul R. Jackson and Lena J. Jaspersen, (2018), *Management and Business Research*, 6th Edition, Sage Publishing.
7. Matthew J Rehart, (2021), *Writing Business Research Reports A Guide to Scientific Writing*, Taylor and Francis.
8. Schindler, P. S. (2018). *Business Research Methods*. United States: McGraw-Hill Education.

Online Reference:

1. MOOC Material: *Understanding Research Methods*, Created by: University of London, Delivered by: [Coursera](#), Taught by: J. Simon Rofo and Yenne Lee.
2. MOOC Material: *Fundamentals of Quantitative Modelling*, Created by: University of Pennsylvania, Delivered by: [Coursera](#), Taught by: [Richard Waterman](#).
3. MOOC Material: *Mastering Data Analysis in Excel*, Created by: [Duke University](#), Delivered by: Coursera, Taught by: [Daniel Egger](#) and [Jana Schaich Borg](#).
4. MOOC Material: *Introduction to Spreadsheets and Models*, Created by: [University](#) of Pennsylvania, Delivered by: Coursera, Taught by: Don Huesman.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	3	3	1	3	3
CO2	3	3	3	3	3	3	3	2	3	2
CO3	3	3	3	3	3	3	3	3	1	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	1

1 – Low, 2 – Medium, 3 - Strong

FMCC11/21 - ANALYTICS FOR FINANCE

Course Aim: The main aim of the course is to provide understanding on the need and significance of Financial Analytics for various business requirements. The course also intends to enable the students to identify, formulate, and implement a Fintech project using R and Python and to enable them to explore various applications of machine learning in all analytical aspects.

Course Outcomes: After completing this course, they should be able to:

CO1	Describe, define and apply the major components of the Financial Analytics and its importance in Fintech.	L1 & L2
CO2	Apply the financial analytics process in R.	L3
CO3	Appraise the financial analytics process in Python.	L5
CO4	Integrate the applications of Financial Analytics using R.	L6
CO5	Apply python concepts and practices to advanced financial analytics.	L3
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit-I: Introduction to Financial Analytics: Meaning and Importance of Financial Analytics Uses, Features and Documents used in Financial Analytics: Balance Sheet, Income Statement, Cash flow statement - Elements of Financial Health: Liquidity, Leverage, Profitability. Analysts: Role and Responsibilities Information and Knowledge – Methodology – Data - Required Competencies for the Analyst – Hypothesis Driven Methods-Data Mining with Target Variables-Explorative Methods-Business requirements.

Unit-II: Financial Analytics with R: R and its application - Language features: functions, Assignment, Arguments and types. Financial Statistics: Concept and mathematical expectation - Probability - Mean; SD and Variance - Skewness and Kurtosis - Covariance and Correlation - Capital Asset Pricing model. Financial Securities: Bond and Stock investments - Housing and Euro crisis - Securities Datasets and Visualization - Plotting multiple series. Time Series and Sharpe ratio: Examining and Stationary - Auto Regressive and integrated moving average Processes. Time periods and Annualizing - Ranking investment candidates - Sharpe Ratio for Income Statement growth.

Unit-III: Financial Analytics with Python: Numbers in Python: Using type with different and creating an imaginary number - Using Numbers: Using Math Operations and Number Formats. Python Ingredients: Variables, Names and Objects - Numbers: Integers - Precedence - Bases - Type. Conversion, Strings: Create Coin Quotes.

Unit-IV: Financial Analytics Applications using R: Ganging the market Sentiment: Mark or Regime Switching model - Bayesian reasoning - Beta distribution. Stimulating Trading Strategies: Foreign exchange markets - Chart analytics - Initialization and finalization - Bayesian Reasoning within Positions.

Unit-V: Prediction using fundamentals and binomial model for options: Best income statement Portfolio - obtaining Price Statistics - combining the income statement with Price statistics - Prediction using classification trees and Recursive Partitioning. Applying

Computational Finance - Risk Neutral Pricing and No Arbitrage - High Risk - Free Rate Environment.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Marks: CIA – 25 and ESE – 75 (Out of 75, 45 marks for written and 30 marks for practical)
(The ESE Theory Examination would be conducted for 75 marks and converted for 45 marks)

References:

Books:

1. Dixon, M. F., Halperin, I., Bilokon, P. A. (2020). *Machine Learning in Finance: From Theory to Practice*. Germany: Springer International Publishing.
2. Hugen, D. L., Bennett, M. J. (2016). *Financial Analytics with R: Building a Laptop Laboratory for Data Science*. United Kingdom: Cambridge University Press.
3. Lopez de Prado, M. (2018). *Advances in Financial Machine Learning*. Germany: Wiley.
4. Mac Namee, B., D'Arcy, A., Kelleher, J. D. (2015). *Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies*. United Kingdom: MIT Press..
5. Molin, S. (2019). *Hands-On Data Analysis with Pandas: Efficiently Perform Data Collection, Wrangling, Analysis, and Visualization Using Python*. United Kingdom: Packt Publishing.
6. Naik, K. (2019). *Hands-On Python for Finance: A Practical Guide to Implementing Financial Analysis Strategies Using Python*. United Kingdom: Packt Publishing.

Online References

1. <https://towardsdatascience.com/python-for-finance-the-complete-beginners-guide-764276d74cef>
2. <https://pythonforfinance.net/>
3. <https://github.com/yhilpisch/py4fi>
4. <https://github.com/wilsonfreitas/awesome-quant>
5. <https://www.incworx.com/blog/sql-server-2020>
6. MOOC Material: *Python and Statistics for Financial Analysis*, Created by: The Hongkong University of Science and Technology, Delivered by: Coursera, Taught by: Xuhu Wan.
7. MOOC Material: *Business Analytics Specialization*, Created by: Whatron Online, Delivered by: Coursera, Taught by: Eric Bradlow.
8. MOOC Material: *Introduction to Business Analytics and Information Economics Specialisation*, Created by: Illinois, Delivered by: Coursera, Taught by: Douglas B. Laney.
9. MOOC Material: *Applying Data Analytics in Finance*, Created by: Illinois, Delivered by: Coursera, Taught by: Sung Won Kim.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	3	3	3	3	2
CO2	3	3	3	3	2	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	2	3	3	3	3	3	2
CO5	3	3	3	2	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC12/21 - MANAGEMENT INFORMATION SYSTEMS

Course Aim: The aim of this course is to introduce the students to the Management Information Systems and its application in organizations. The course would expose the students to the managerial issues relating to information systems and help them identify and evaluate various options in Management Information Systems.

Course Outcomes: On completion of the course, the students will be able to

CO1	Understand the role of information technology and information systems in business	L1 & L2
CO2	Get the current issues of information technology and relate those issues to the firm	L2 & L3
CO3	Analyse the working knowledge of concepts and terminology related to information technology	L4
CO4	Calculate the effective communication with individuals, teams, and large groups	L4 & L5
CO5	Apply analytical and critical thinking skills to make an appropriate business related decisions	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit – I: Fundamentals of Information Systems: Concept of Information – Concept of System, Sub-system, system approach – Information system – Tools for information System - Meaning and Definition of MIS - MIS design, Development, Implementation and Maintenance.

Unit – II : Information Technology Concepts & Architecture: Computer Hardware - Trends in computer Hardware Computer peripherals - Computer software – system software: OS, DAMS, OOPS – Application software: spread sheet – graphic packages. Database management – File management – Database models - Database management system.

Unit–III: Telecommunications and Networks: Trends in Telecommunication– Telecommunication Network Model – Types of telecommunication networks – Telecommunication Media – Processors – Network Topologies – Network Architectures and protocols.

Unit – IV: Information system applications: Information system for Business functions- Accounting, Finance, Manufacturing and Inventory control, Marketing - Human resource Information System. e-Business Relationships, e-Procurement, e-Business Networks, e-Business Modeling, e-Business Integration.

Unit – V: Strategic Implications of Information system: Managing information system resources – TPS – Office automation – Decision support system – Executive Information System – Artificial Information system.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:**Books:**

1. Beynon-Davies, P. (2019). *Business Information Systems*. United Kingdom: Macmillan Education UK.
2. Bidgoli, H. (2020). *MIS: Management Information Systems*. United States: Cengage Learning.
3. Biswas, J. (2020). *Management Information Systems*. India: SAGE Publications, Incorporated.
4. Gupta, C. P., Goyal, K. K. (2020). *Computer Concepts and Management Information Systems*. (n.p.): Mercury Learning & Information.
5. Laudon, K. C., Laudon, J. P. (2018). *Management Information Systems: Managing the Digital Firm*. United Kingdom: Pearson.
6. Pomffyova, M. (2018). *Management of Information Systems*. United Kingdom: IntechOpen.
7. Ramesh Behl, James O'Brien, George M Marakas, (2019), *Management Information Systems*, Noida: Tata McGraw Hill Publishing Company Limited.
8. Waman S Jawadekar, 2017, *Management Information Systems*, 4th edition, Tata McGraw Hill Publishing Company Limited, Noida, UP.
9. Zenon S. Zannetos, 2018, *Management Information Systems and the Management*, Nabu Press.

Online Reference:

1. MOOC Material: *Introduction to Systems Engineering*, Created by: The University of New South Wales, Australia, Delivered by: Coursera, Taught by: Dr Mike Ryan, Dr Ian Faulconbridge.
2. MOOC Material: *Fundamentals of Management*, Created by: University of California, Delivered by: Coursera, Taught by: Dave Nagy.
3. MOOC Material: *Management Fundamentals*, Created by: University of Pennsylvania, Delivered by: Coursera, Taught by: Michael Useem and Peter Cappelli.
4. MOOC Material: *Database Management Essentials*, Created by: University of Colorado System, Delivered by: Coursera, Taught by: Michael Mannino.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	3	3	3	3	3	1
CO2	3	3	3	2	3	3	3	3	3	1
CO3	3	2	3	2	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMEC5/21 - FINANCIAL PLANNING AND WEALTH MANAGEMENT

Course Aim: The course is designed to help the students in understanding the basics of financial planning and wealth management. After the completion of course students will be able to handle investment advisory, selection and evaluation of investment products with corresponding risk and return, keeping in mind regulatory aspects of income tax etc. to maximise the return on investment for the clients. Also, learners will be capable to understand the constituents of financial planning.

Course Outcome: At the end of this course the students would be able to:

CO1	Explain the concept of Indian Financial Market and its various segments performance	L2, L3
CO2	Evaluate the various types of mutual funds and its regulatory framework	L5
CO3	Estimate risk and return and analyse the techniques of managing risk	L4
CO4	Assess the business model for financial planning, asset allocation and rebalancing strategies	L5
CO5	Appraise the regulatory, compliance, ethical issues and operational aspects of financial transactions	L4 & L5
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyse; L5 - Evaluate;		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit- I Introduction to Indian Financial Market, Segments and Performance: Introduction of macro-economic parameters of Indian Economy, Nature, Functions and Types of issues in Primary Markets, role and function of Secondary Markets, types of various Corporate Actions. working of equity markets, Interpret key equity market indicators,

Unit- II Selection and Analysis of Mutual Funds & other Investment Products: Meaning and features of a mutual fund, key terms and concepts associated with mutual funds, regulatory framework for mutual funds, Types of mutual fund products, taxation of Mutual Fund Products, investment options, macroeconomic policies and asset allocation, Behavioural biases in decision making and portfolio management.

Unit- III Managing Investment Risks and Measuring Returns: Definition of Risk, Types of Risk, Risk Measurement, Concepts of Return, Compounding in Return, Real rate of return vs. nominal return, Computation of Tax adjusted return, Computation of Risk-adjusted Returns.

Unit-IV Personal Financial, Insurance Planning, Retirement, Tax and Estate Planning: Financial planning, need for financial advisory services, scope of financial advisory services, business model for financial planning, assets, liabilities and net worth, preparation of budget, financial planning delivery process, asset classes, Portfolio construction, Practical asset allocation and Rebalancing Strategies, need for portfolio monitoring and re-balancing.

Unit- V Regulatory, Compliance, Ethical Issues and Operational Aspects of financial transactions: Provisions of the SEBI (Investment Advisers) Regulations, 2013, overall

framework of the regulatory system, roles of regulators in detail: MoF, MCA, SEBI, RBI, IRDA, PFRDA, Role of Self-regulatory organizations, provisions of PMLA, 2002, SEBI, AMFI, etc, ethical issues in providing financial advice, investor complaint redressal mechanism, PAN, KYC, Demat and Remat processes, NRI to RI and RI to NRI.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

References:

Books:

1. NISM (2019), *NISM-Series-X-A Investment Advisor (Level 1)*, Delhi: Taxmann
2. NISM (2019), *NISM-Series-X-B Investment Advisor (Level 2)*, Delhi: Taxmann
3. SundarSankaran, “Wealth Engine: Indian Financial Planning & Wealth Management Handbook”, Vision Books (2012)
4. Scott David L, “How to Manage Your Investment Risks and Returns” Vision Books
5. Mutual Funds Guide 2015, Value Research
6. SEBI Investor Grievances – Rights and Remedies

Online Reference:

1. MOOC Material: *Certification in Financial Planning & Wealth Management(NSEINDIA)* Created and Delivered by: NSE India.
2. MOOC Material; *Behavioural Finance (Coursera)* Created by: Duke University, Delivered by: Emma Rasiel.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	2	3	3	3	3	3	1
CO3	1	2	3	2	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC10/21 - FINANCIAL MODELLING

Course Aim: The major aim of the course is to familiarize the students with the concepts, principles and the role of modelling in Finance. The course would also make students skilled enough to analyze and interpret the financial health of an organization and use the same for fact-based decision making. Thus the course would prepare students for an exciting challenging and rewarding managerial career that requires forecasting finance.

Course Outcome: After completing this course, the student should be able to:

CO1	Judge the basic concepts of modelling and its perspective in analysis and auditing.	L1 & L2
CO2	Develop insights on Financial Statement and forecasting various finance parameters.	L3
CO3	Construct a financial model suitable that aids management and documentation.	L6
CO4	Integrate potential applications of Finance Models and its implementation.	L6
CO5	Practice and implement Financial modelling in the field of operations research	L3
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit-I: Principles of Modelling: A Good Model- Model Design- Selection of Model Variables and their Dependencies- Level of Detail or Aggregation-Model Structure and Planning- Model Building- Results Presentation and Other Uses of Sensitivity Analysis- Model Auditing.

Unit-II: Financial Statement, Cash Flow and Valuation Modelling: Financial Statement Modelling: Core Points and Example- Income Statement Forecasting- Sales Forecasts- Cost Forecasts- Operating Profit- Taxable Profit, Tax and Net Income- Dividends and Retained Earnings Balance Sheet Forecasting- Error Checks and Feasibility Checks-Cash Flow Statement Forecasting- Cash Flow Valuation.

Unit-III: Developing Financial Models: Financial Modelling- Basics of Design- Design process and method- Menu structure- Management reports and summaries- Development- Testing and auditing- Protection as an application- Documentation- Features and techniques - Data validation- Controls- Graphics- Sample model planning- Example model.

Unit-IV: Applications of Financial Modelling: Analyzing performance- Forecasting models- Portfolio analysis- Cost of capital-Bonds- Investment analysis- Risk- Depreciation- Leasing- Company valuation- Optimization- Risk management- Modelling checklist.

Unit-V: Financial Modelling for Operations Research: Linear Regression – Forecasting Models: Historic Forecasts, Trend lines, Data smoothing, Cyclicity and Seasonality – Linear Programming – Profit Maximisation – Probability concepts – Decision Tree Model.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

<p>Marks: CIA – 25 and ESE – 75 (Out of 75, 45 marks for written and 30 marks for practical) (The ESE Theory Examination would be conducted for 75 marks and converted for 45 marks)</p>
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References:

Books:

1. Mofkadi, T., Benninga, S. (2021). *Financial Modeling*. United States: MIT Press.
2. Day, A. (2015). *Mastering Financial Modelling in Microsoft Excel: A Practitioner's Guide to Applied Corporate Finance*. 3rd Edn, United Kingdom: Pearson Education Limited.
3. Lewinson, E. (2020). *Python for Finance Cookbook: Over 50 Recipes for Applying Modern Python Libraries to Financial Data Analysis*. United Kingdom: Packt Publishing.
4. Oluwa, S. (2019). *Hands-On Financial Modeling with Microsoft Excel 2019: Build Practical Models for Forecasting, Valuation, Trading, and Growth Analysis Using Excel 2019*. United Kingdom: Packt Publishing.
5. Rees, M. (2015). *Financial Modelling in Practice: A Concise Guide for Intermediate and Advanced Level*. United Kingdom: Wiley.

Online Reference:

1. <https://corporatefinanceinstitute.com/resources/knowledge/modeling/types-of-financial-models>
2. <https://www.wallstreetprep.com/knowledge/financial-modeling-best-practices-and-conventions/>
3. https://www.ey.com/en_nl/finance-navigator/the-ultimate-guide-to-financial-modeling-for-startups
4. MOOC Material: *Mastering Data Analysis in Excel*, Created by: Duke University, Delivered by: Coursera, Taught by: Daniel Egger and Jana Schaich Borg
5. MOOC Material: *Fundamentals of Quantitative Modelling*, Created by: University of Pennsylvania, Delivered by: Coursera, Taught by: Richard Waterman.
6. MOOC Material: *Introduction to Spreadsheets and Models*, Created by: University of Pennsylvania, Delivered by: Coursera, Taught by: Don Huesman.
7. MOOC Material: *Data, Models and Decisions in Business Analytics* (edX), Created by: Columbia University ColumbiaX, Delivered by: EdX Taught by: Costis Maglaras and Vineet Goyal.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	2
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	2	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMSC3/21 - WORKING CAPITAL MANAGEMENT

Course Aim: The course helps to appraise students with the importance of working capital and the techniques used for effective working capital management and to manage the components of working capital like cash, receivables, inventory and payables.

Course Outcomes: At the end of the Course the student would be able to

CO1	Understand the importance, components and factors influencing working capital management.	L1 & L2
CO2	Evaluate comparative working capital management policies and their impact on the firm's profitability, liquidity, risk and operating flexibility.	L3
CO3	Formulate appropriate working capital management policies to achieve corporate objectives.	L6
CO4	Apply corporate cash management, accounts receivable management, bank relations, and inventory management techniques to maximize the share holders' value	L6
CO5	Write a plan for a balanced integration of cash, credit and other short-term topics and policies.	L3
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Self Learning and Peer learning.

Unit I: Working Capital Policy: Importance of Working Capital Management, Components of Working Capital, Factors Influencing the Requirements of Working Capital, Risk-return Trade-off, Profitability-Liquidity tangle. Estimating Working Capital Requirements: Operating Cycle Method, Percent of Sales Method. Role of finance managers in working capital management.

Unit II: Financing Current Assets: Different approaches to financing current assets: Conservative, aggressive and matching approach, Sources of finance, Spontaneous source, Trade credits, Short term bank finance, Commercial papers and Public deposits, Committees on working capital finance. Factoring.

Unit III: Cash Management: Importance, The right proportion, Factors influencing cash balance, Determining optimum cash balance, Cash Budgeting, Controlling and monitoring collections and disbursements, Cash management models.

Unit IV: Receivables and Payables Management: Credit Policy variables, Credit Standards, Credit period, Cash discount and collection efforts. Credit Evaluation, Credit Granting Decision, Control of Receivables, Management of Trade Credit in India, Payables Management.

Unit V: Inventory Management: Need for inventories and the importance of its management, Techniques for managing inventory, Order Quantity, E.O.Q. Model, Order Point, Safety Stock, Analysis of Investment in inventory, Selective Inventory Control, A.B.C. analysis. Bills Payable Management

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:

Books:

1. John Tennent, 2018, *The Economist Guide to Financial Management 3rd Edition*, Profile Books Limited, London.
2. R.K. Gupta and Himanshu Gupta, , 2015, *Working Capital Management & Finance*, (1st Edition), Notion Press, Chennai.
3. Prasanna Chandra, 2004, *Financial Management - Theory and practice*, 5th Ed. Tata McGraw Hill, New York.
4. Hrishikes Battacharya, 2001, *Working Capital Management: Strategies and Techniques*, Prentice Hall of India, New Delhi.
5. Pandey I.M, 2005, *Financial Management*, Vikas Publishing House, New Delhi.
6. Joshi, R.N., 1999, *Cash Management*, New Age International Publishers.
7. Ramamurthy V.E.,1976, *Working Capital Management*, IFMR Publication, Chennai.

Online Reference:

1. MOOC Material: *Accounting and Finance (edX)*, Created by: Indian, Delivered by:EdX, Taught by:MS Narasimhan.
2. Swayam Course Material: *Financial Management*, Created by Vanitha Tripathi, Delhi University.
3. Study.com Study Material: *Principles of Finance*.
4. NPTEL Course Material: Course Name: Construction Economics & Finance, Module: *Financial Management*, Course Co-ordination: IIT Guwahati.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	2
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	2	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

CCIBE3/21 – DIGITAL MARKETING FOR ENTREPRENEUR

The detailed syllabus for this course is given in the Regulation and Syllabus for Certification
Course on Innovation and Business Entrepreneurship

FMFC4/21 - PROJECT APPRAISAL AND EVALUATION

Course Aim: The course aims at imparting to the students knowledge on the principles of processes commonly used in project management. It will cover the tools and techniques for identification, analysis, design, implementation, monitoring and evaluation of programmes and projects from the point of view of all stakeholders.

Course Outcomes: On completion of the course, the students will be able to

CO1	Understand the investment and Financing Aspects.	L1 & L2
CO2	Discover the feasibility of the project by carrying out various methods of project analysis	L2 & L3
CO3	Analyse the application of special decision situations.	L4
CO4	Evaluate the significance of Social Cost benefit analysis.	L4 & L5
CO5	Devise the techniques for the implementation of the project and carry out the review of the project	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction: Capital Expenditure, Importance and Difficulties, Objectives, Resource allocation, Criteria, Investment Strategies, Generation and Screening of Investment ideas.

Unit II: Project Analysis: Market and Demand Analysis; Technical analysis; Financial Estimates and Projections – Feasibility Analysis

Unit III: Special Decision Situations: Choice Between Mutually Exclusive Projects of Unequal Life; Optimal Timing, Determination of Economic Life; Interrelationship between Investment and Financing Aspects; Inflation and Capital Budgeting; Investment in Capabilities.

Unit IV: Social Cost Benefit Analysis: Rationale; UNIDO approach; Net Benefit in terms of Economic (Efficiency) Prices; Measurement of the Impact on Distribution; Savings Impact and its Value; Income Distribution Impact; Adjustment for Merit and Demerit Goods; Little Mirrlees Approach; Shadow Prices; SCBA by Financial Institutions.

Unit V: Implementation: Project Organization, Project Planning, Project Control, Prerequisites for Successful Project Implementation, Network techniques: Development of Project Net Work, Time Estimation, Scheduling, PERT, CPM, Network Cost System; **Project Review:** Performance Evaluation, Abandonment Analysis, Administrative aspects in Capital Budgeting.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

<p>Weightage in Question Paper: Problems-50% and Theory – 50%. Project Report at business firms should be given as Assignment for evaluation of CIA Marks.</p>
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Reference:**Books:**

1. Ambrish Gupta, 2017, *Project Appraisal and Financing*, Eastern Economy Edition, PHI Learning Pvt. Ltd, New Delhi.
2. Harold Kerzner, 2015, *Project Management 2.0*, John Wiley and Sons.
3. Jack Alexandar, 2018, *Financial Planning & Analysis and Performance Management*, Wiley Finance Series.
4. Layton, M. C., Ostermiller, S. J., Kynaston, D. J. (2020). *Agile Project Management For Dummies*. United Kingdom: Wiley.
5. Prasanna Chandra, 2019, *Projects: Planning, Analysis, Selection, Implementation & Review, 9th Edition*, Tata McGraw Hill, New Delhi.
6. Roberts, P. (2020). *Absolute Essentials of Project Management*. United Kingdom: Taylor & Francis.
7. Sanjeev Bansal and Ritu Wadhwa 2020, *Project Planning Appraisal & Control, 1st Edition*, Kojo Press , New Delhi.

Online Reference:

1. MOOC Material: *Initiating and Planning Projects*, Created by: University of California, Irvine, Delivered by: Coursera, Taught by: Margaret Meloni.
2. MOOC Material: *Fundamentals of Project Planning and Management*, Created by: Darden School of Business, University of Virginia, Delivered by: Future Learn, Taught by: Yael Grushka-Cockayne.
3. MOOC Material: *Project Management for Managers*, Created by: IIT Roorkee, Delivered by: Swayam, Taught by: Mukesh Kuma Barua.
4. MOOC Material: *Project Planning and Control*, Created by: IIT Madras, Delivered by: Swayam, Taught by: Koshy Varghese.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	3	3	1
CO3	1	2	3	3	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMCC13/21 - FINANCIAL DERIVATIVES

Course Aim: The aim of this course is to blend theory, problems and cases to introduce the basic concepts in a lucid, engaging manner. The comprehensive coverage of fundamentals along with the liberal use of examples to explain concepts makes it perfect.

Course Outcome: On completing the course, the student would be able to

CO1	Explains the history and evolution of derivatives market	L2&L3
CO2	Appraise the functioning of forwards and futures and its strategies	L5
CO3	Assess the basics of futures and its strategies	L5
CO4	Describe the trading, clearing, settlement and risk management in derivatives market	L2
CO5	Evaluate Legal and Regulatory Environment, Sales Practices, Code of Conduct and Investor Protection Measures	L5
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Basics of Derivatives and Underlying Market - Introduction to derivatives - History and evolution of derivatives market - Factors influencing the growth of derivatives market - History of Indian derivatives Market and available derivative products in India - Market participants and their roles in the derivatives markets - OTC and Exchange Traded Market - Significance and economic purpose of derivatives - Risks associated with financial derivatives.

Unit II Introduction to Forwards and Futures -Introduction to Forwards and futures contracts - Forwards and Futures on Equities - Payoff Charts for Futures contract - Futures pricing - Basic differences in Commodity, Equity and Index Futures - Exchange Traded Currency Futures - Concept of Interest rate parity and pricing of currency futures - Interest Rate Futures - Delivery aspects of IRD contracts including conversion factor, invoice amount, cheapest-to-deliver bond:

Unit III: Strategies Using Futures-Strategies using Equity Futures - Strategies for hedging, speculation and arbitrage in futures market - Strategies Using Currency Futures - Strategies Using Interest Rate Futures

Unit IV: Introduction to Options on Equities and Currencies: Basics of options - Concept of option premium - Call and Put option - Buying and selling (writing) options - European vs. American option - Moneyness of an option - Binomial and Black-Scholes option pricing models and option Greeks - Payoff charts for options - Uses of Options – Exchange Traded Currency Options.

Unit V: Option Trading Strategies – Strategies using Equity Options and Currency options- Option spreads and their payoff charts - Straddle: market view and payoff charts - Strangle: market view and payoff charts - Covered Call: market view and payoff charts - Protective Put: market view and payoff charts - Collar: market view and payoff charts - Butterfly spread: market view and payoff charts

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 20% and Problems-80%

References:

Books:

1. Bacha, O. I. (2017). *Financial Derivatives: Markets and Applications in Malaysia*. McGraw-Hill Education (Malaysia).
2. Gupta S.L (2017). *Financial Derivatives : Theory, Concepts And Problems*. PHI Learning Pvt Ltd
3. Hudson, A. (2017). *The law on financial derivatives*. Sweet and Maxwell Ltd.
4. Hull John. C. (2018). *Fundamentals of Futures and Options Markets*. Pearson
5. Kwok, Y. K. (2008). *Mathematical models of financial derivatives*. Springer.
6. Prakash Yaragol (2018). *Financial Derivatives: Text and Cases*. Vikas Publishing House

Online References

1. MOOC Material: Derivatives - Options & Futures, Created by: Interactive Brokers, Delivered by:Lagunita Stanford Online, Taught by: Jeff Praissman, Andrew Wilkinson, Lucas Deaver and Steven Levine.
2. MOOC Material: Derivatives, futures and swaps, Created by: Neyork Institute of Finance, Delivered by:Lagunita Stanford Online, Taught by: Jack Farmer, Chris Thomas

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	2
CO4	3	3	3	3	3	3	3	3	3	2
CO5	3	3	3	2	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMCC14/21 –BEHAVIORAL FINANCE

Course Aim: This course aims to investigate psychology's contribution to finance and economics and discuss the theories to enable the students to understand the decision behavior of an individual investor within a market context, which would help them have a better understanding of financial market dynamics.

Course Outcome: At the end of this course the students would be able to:

CO1	Appraise the theories of Behavioral Finance	L5
CO2	Articulate the evolution of Behavioral Finance	L2 & L3
CO3	Correlate the theories and behavioral factors in investment decision making	L5
CO4	Evaluate anomalies and market bubbles in financial markets	L4 & L5
CO5	Articulate the relevance of forensic accounting	L6
L1 - Remember; L2 - Understand; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit-I: Theories of Behavioural Finance: Introduction-Asymmetric Information-Egocentricity-Human Behavioural Theories-Heuristics-Biases-Emotional Bias-Statistical Bias-Cognitive Bias-Other Irrational Investment Behaviour-Bias-Group think Bias-Interaction between Bias-Outcomes of Biases-Dealing with Biases-Overcoming the Biases-Debiasing-Prospect Theory-Uses of Behavioural Finance.

Unit-II: Evolution of Behavioural Finance: Introduction-Assumptions of Behavioural Finance-Building Blocks of Behavioural Finance-Elimination of Uncertainty-Important Contributors-History of Behavioural Finance.**Neuro Finance:** The Brain-Neural Process during Financial Decision Making-Experiments in Neuro finance-The Future of Neurofinance.

Unit-III: Standard Finance- Introduction-Modern Portfolio Theory-Miller and Modigliani Theory-Capital Asset Pricing Model-Arbitrage Pricing Theory (APT)-The Random Walk Hypothesis- Expected Utility Theory (EUT)-Efficient Market Hypothesis (EMH). **Behaviour and Decision Making-**Foundations of Behaviour-Cognition-Emotional Bias-Gender-Behavioural Models-Perception-Causes of Behaviour Difference-Motive-Decision Making-Behavioural Decision Making-Biases in Decision Making.

Unit-IV: Financial Market Anomalies: Introduction-Fundamental Anomalies-Technical Anomalies, Calendar Anomalies-Accounting Anomalies. **Market Bubbles:** The First Known Stock Market Bubbles-Stock Market Bubbles in the Recent History-Identification of a Stock Market Bubbles-Classification of Bubbles-Behavioural Finance Explanation of Bubbles-Investor Behaviour During Bubbles-Causes of Bubbles.

Unit-V: Forensic Accounting: Introduction-Classification of Fraud-Behavioural Aspects of Fraud-Types of Fraud Perpetrators-Origin and Growth of Forensic Accounting-Forensic Auditing-Fraud Theories-Studies on Fraud Behaviour-Tools in Forensic Accounting-Anti Fraud Measure - E-Fraud-Forensic Accounting in India-Government Agencies that Combat Frauds.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Reference:

Books:

1. Constant D. Beugre, 2018, *The Neuro Science of Organisational Behavior*, Edward Elgar Publishing Limited, UK.
2. Kapoor, S., Prosad, J. M. (2019). *Behavioural Finance*. India: SAGE Publications.
3. Kent Baker H, Greg Filbeck, Victor Ricciardi, 2017, *Financial Behavior: Players, Services, Products, and Markets*, Oxford University Press.
4. Prasanna Chandra, 2020, *Behavioral Finance*, 3rd Edition, TataMc Graw Hill Education Pvt Ltd, New Delhi.
5. Ranjit Singh, 2019, *Behavioral Finance*, PHI Learning Private Limited. Delhi.
6. Richard H Thaler, 2015, *Misbehaving : The Making of Behavioral Economics*, Penguin.
7. Statman, M. (2019). *Behavioral Finance: The Second Generation*. (n.p.): CFA Institute Research Foundation.

Online Reference:

1. MOOC Material: *Behaviroal Finance*, created by: Duke University, delivered by: Coursera, Taught by: Emma Rasiel.
2. MOOC Material: *Behavioral Finance* (Coursera), Created by: Duke University, delivered by: Coursera, Taught by: Emma Rasiel.
3. MOOC Material: *Portfolio and Risk Management* (Coursera), Created by: Indian School of Business (ISB), Delivered by: Coursera, Taught by: Ramabhadran Thirumalai.
4. MOOC Material: *Applying Investment Decision Rules for Startups* (Coursera), Created by: Yonsei University, delivered by: Coursera, Taught by: Saeyeol Park

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	2	3	1
CO3	3	2	3	3	1	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	1

1 – Low, 2 – Medium, 3 - Strong

FMCC15/21 – MUTUAL FUNDS

Course Aim: The major aim of the course is to understand how mutual funds are distributed in the market-place, how schemes are to be evaluated, and how suitable products and services can be recommended to investors and prospective investors in the market. It also aims to know the basics of mutual funds, their role and structure, different kinds of mutual fund schemes and their features

Course Outcome: After completing this course, the student should be able to:

CO1	Judge the legalities, accounting, valuation and taxation aspects underlying mutual funds and their distribution	L1 & L2
CO2	Develop insights on concepts and role of Mutual Funds	L3
CO3	Describe the regulatory framework in India	L6
CO4	Integrate the various Channel management practices	L6
CO5	Get acquainted with financial planning as an approach to investing in mutual funds, as an aid for mutual fund distributors to develop long term relationships with their clients.	L3
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I - Investment Landscape and Mutual Fund: Parameters of the Indian Economy - Investors and their Financial Goals -Savings and Investment- Different Asset Classes - Classification of Investment Risks - Risk Measure and Management Strategies - Behavioral Biases in Investment Decision Making - Risk Profiling - Asset Allocation, Comparison between Do-it-yourself and Taking Professional Help - Concept of Mutual Fund - Classifications of Mutual Funds - Growth of the Mutual Fund Industry in India

Unit II - Legal Structure of Mutual Funds: Structure of Mutual Funds in India - Key constituents of a Mutual Funds - Organization Structure of Asset Management Company - Role and support functions of service providers of mutual funds - Role and Function of AMFI - Role of regulators in India -Role of Securities and Exchange Board of India - Know the Due Diligence process- Investor Grievance and Redressal standards - AMFI Code of conduct for Intermediaries

Unit III - Fund Distribution and Channel Management Practices: Mandatory Documents – Purpose - Objective and Significance - Non-Mandatory Disclosures - Role and Importance of Mutual Fund Distributors - Classification of Mutual Fund Distributors - Modes of Distribution - Pre-requisites for Mutual Fund Distributor - Revenue for a Mutual Fund Distributor, Know the Commission Disclosure - Due Diligence Process by AMCs - Nomination facilities to Agents / Distributors -Payment of Commission to Nominee - Change of Distributor

Unit IV - Mutual Fund Valuation: Fair Valuation Principles - Net Assets of a Mutual Fund Scheme and NAV - Dividends & Distributable Reserves - Entry and Exit Load - Key Accounting and Reporting Requirements - Total Expense Ratio and Pricing of Units – Tax Applicability - Capital gains (Long term & Short term) tax and Indexation - Dividend Income

and Dividend Income tax - Dividend Distribution Tax Vs Capital Gains Tax - Setting off Gains and Losses under Income Tax Act - Securities Transaction Tax - Tax benefit under Section 80C for Mutual Funds - Tax Deducted at Source (TDS) in mutual funds - Applicability of GST in mutual funds

Unit V- Investor Services and Mutual Fund Scheme Selection: NFO Process - New Fund Offer Price /On-going price for subscription - Different Types of Investment Plans and Options – Allocation of Mutual Fund Units - Content and Periodicity of Statement of Accounts - Different Types of Mutual Fund Investors -Application form for Mutual Funds - Financial Transactions with mutual funds (Purchase, Redemption and Switches) - Cut-off time and Time Stamping - KYC requirement for Mutual Fund Investors - Types of Systematic Transactions - Operational aspects of Systematic Transactions - Non – Financial Transactions in Mutual Funds - Special Investor Categories - Investor Transactions – Turnaround Times - Scheme Selection - Risk Levels in mutual fund schemes - Do’s and Don’ts while selecting mutual fund schemes.

References:

Books

1. John C. Bogle (2015), *Mutual Funds*, New Delhi: Wiley
2. Nalini Prava Tripathy, 2007, *Mutual Funds: Emerging Issues in India*, Excel Books, New Delhi.
3. NISM (An Educational Initiative of SEBI), *Mutual Fund Distributors (Level 2)*, Taxmann Publications
4. NISM (An Educational Initiative of SEBI), *Mutual Fund Foundation*, Taxmann Publications
5. NISM, *NISM Series VA- Mutual Funds Distributors Module*, Delhi: Taxmann
6. Rakesh Kumar, *Mutual Funds in India: Structure, Performance and Undercurrents*, 2016, Patridge Publishing.
7. Soheli Ghosh(2016), *Mutual Funds in India*, New Delhi: Regal Publications
8. Sundar Sankaran(2019), *Indian Mutual Funds*, New Delhi: Vision books

Websites

1. www.nism.ac.in
2. www.amfiindia.com
3. www.nseindia.com
4. www.bseindia.com
5. MOOC Course: *How to Save Money: Making Smart Financial Decisions* (edX), Created by: University of California, Berkeley and Delivered by: EdX, Taught by: Terrance Odean

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	2
CO2	3	3	3	2	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	2	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMEC7/21 - INTERNATIONAL FINANCIAL MANAGEMENT

Course Aim: The aim of the course is to study the role of international trade and investment, currency movements, international financial markets, and international agreements and institutions play in the management of multinational corporations.

Course Outcome: At the end of this course the students would be able to:

CO1	Understand the nature and scope of International financial management.	L1 & L2
CO2	Discover the functionalities in foreign exchange market	L2 & L3
CO3	Estimate the foreign exchange exposure.	L4
CO4	Evaluate the various sources of international finance.	L4 & L5
CO5	Formulate international investment decision by incorporating financial and non-financial factors	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Foundations of International Financial Management: International Business and its Mode – Nature and Scope of International Financial Management – Multi National Corporations – International Financial Management and Domestic Financial Management - **Developments in International Monetary System:** Specie Commodity Standard – Gold Standard – Bretton Woods System of Exchange Rate – Exchange Rate Regime Since 1973- International Liquidity – IMF Solution for Financial Crisis.

Unit II: Foreign Exchange Market: Features – Major Participants – Spot Market – Forward Market: **Exchange Rate Mechanism:** Exchange Rate Quotations – Nominal, Real and Effective Exchange Rate – Determination of Exchange Rate in Spot Market and Forward Market – Factors Influencing Exchange Rate – Theories of Exchange Rate Behaviour - Need for Forecasting Exchange Rates – Forecasting Techniques – Forecasting in a Controlled Regime.

Unit III: Foreign Exchange Exposure Management: Translation Exposure Meaning – Methods of Translation Exposure – Functional Versus Reporting Currency – Four Translation Methods – Measurement of Transaction Exposure – Transaction Exposure Based on Currency Variability – Managing Transaction Exposure – Currency Forwards, Futures, Options and Swaps - Measurement of Currency Variability – Transaction Exposure Vs Economic Exposure – Measuring Economic Exposure – Managing Economic Exposure – Corporate Philosophy for Exposure.

Unit IV: International Financing Decisions: Channels for Flow of Funds – Changing Structure of International Financial Market – Sources and Forms of Funds – Process of Internationalization of Banks – Financial Intermediation Function – Direction and Purpose of Lending – The Credit Creation Function – International Equities – International Bonds – Secondary Market Operations – Short Term and Medium Term Instruments - International Working Capital Policy – International Cash management – Receivables and Inventory Management - Financing of Current Assets - Interest Rate Swap, Currency Swap, Equity Swap.

Unit V: International Investment Decisions: Theories of Foreign Direct Investment – Cost and Benefits of FDI – Strategy for FDI – Control of MNCs – Evaluation Criteria in International Capital Budgeting – Computation of Cash Flow – Cost of Capital – Adjusted Present Value Approach – Sensitivity Analysis – Real Options and Project Appraisal – Evaluating M & A – Non financial factors in Capital Budgeting – Meaning and Forms of Political Risk - Evaluation of Political Risk - Management of Political Risk - Introduction to International Portfolio Investment - Benefits, Problems and Modes of International Portfolio Investment - Concept and Identification of Optimal International Investment Portfolio.

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

Weightage in the Question Paper : Theory – 70% and Problems-30%

Reference:

Books:

1. Apte, P.G., 2020, *International Financial Management*, 8th Ed., Tata McGraw Hill
2. Dora Hancock, 2018, *International Finance for Non-Financial Managers*, Kogan Page.
3. Geert Bekaert, Robert Hodrick, 2017, *International Financial Management*, 3rd Edition, Cambridge University Press.
4. Hanouna, P., Shapiro, A. C, 2020, *Multinational Financial Management*, 12th Ed., United Kingdom: Wiley.
5. Jeff Madura, 2021, *International Financial Management*, 14th Ed., Cengage Learning.
6. Maurice D. Levi, 2022, *International Finance*, 6th Ed., Routledge.
7. Resnick, B. G., Eun, C. S, 2021, *International Financial Management*, 9th Edition, United Kingdom: McGraw-Hill Education.

Online Reference:

1. MOOC Material: *International Finance*, Created by: Marginal Revolution University, Delivered by: MRUniversity, Taught by: Alex Tabarrok and Tyler Cowen.
2. MOOC Material: *International Business I (Coursera)*, Created by: University of New Mexico, Delivered by: Coursera, Taught by: Doug E Thomas.
3. MOOC Material: *Global Strategy I: How The Global Economy Works (Coursera)*, Created by: University of Illinois , Delivered by: Coursera, Taught by:, Marcelo Bucheli
4. MOOC Material: **Foreign Exchange Markets – Instruments, Risks and Derivatives**, Created by: IIM Bangalore, Delivered by: Coursera, Taught by: P C Narayan

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	3	3	1
CO2	3	3	3	3	3	3	3	3	3	1
CO3	1	2	3	3	3	3	3	2	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	1	3	3	3	3	3	2

1 – Low, 2 – Medium, 3 - Strong

FMEC8/21 - ALGORITHMIC TRADING

Course Aim: This course aims to investigate various methods implemented in trading strategies with emphasis on automated trading. The course also provides a broad view of the algorithmic trading strategies, system architecture, and its risk management.

Course Outcomes: After completing this course, they should be able to:

CO1	Recognise the trends and benefits of algorithmic trading	L1
CO2	Analyze various order types and trading strategies	L3
CO3	Appraise the system architecture for algorithmic trading	L6
CO4	Obtain knowledge related to risk management in algorithmic trading	L6
CO5	Understand the importance of audit and compliance process	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Flipped Learning, Blended Learning, Experiential Learning, Participative Learning, Case Study Method and Problem Based Learning

Unit I: Introduction to Algorithmic Trading: Evolution of Algorithmic Trading – Meaning of Algorithmic Trading - Different Trading Methodologies - Trends in Algorithmic Trading: Global and India - Benefits of Algorithmic Trading

Unit II: Order Types: Different Order Types - Execution Trading Strategies: **Trading Strategies:** Calendar Spread - Cash Future Arbitrage Strategy - Index Arbitrage - Pair Trading - News Based Trading Strategies - Conversion- Reversal

Unit III: Algorithmic Trading: System Architecture: Market Data - CEP Engine - Order Routing / Order Manager - Colocation - Smart Order Routing (SOR) - Connectivity Options

Unit IV: Risk management in Algorithmic Trading: Different Stages involved in Risk Management - Risk Management Specific to High Frequency & Algorithmic Trading

Unit V: Audit and Compliance Process - International Organization of Securities Commissions - Auditing Process and Requirements (As defined by NSE for member-broker) - SEBI Recommendations on Algorithmic Trading - Software Testing and Empanelment - Exchange Audits - Technology and System Audit - Compliance Requirements

Unit VI: Current Contours (for Continuous Internal Assessment Only): Contemporary Developments Related to the Course during the Semester Concerned.

References:

Books:

1. NCFM, NCFM-Algorithmic Trading Module, Mumbai: NSE
2. Raja Velu, Maxence Hardy and Daniel Nehren (2017), *Algorithmic Trading and Quantitative Strategies*, CRC Press Taylor and Francis Group, Florida.
3. Ghosh, S., Donadio, S. (2019). *Learn Algorithmic Trading: Build and Deploy Algorithmic Trading Systems and Strategies Using Python and Advanced Data Analysis*. United Kingdom: Packt Publishing.

4. Conlan, C. (2020). *Algorithmic Trading with Python: Quantitative Methods and Strategy Development*. United States: Independently Published.
5. Satya R. Chakravarthy and Palash Sarkar (2020), *An Introduction to Algorithmic Finance, Algorithmic Trading and Blockchain*, Emerald Publishing, Bingley.
6. Velu, R. (2020). *Algorithmic Trading and Quantitative Strategies*. United States: CRC Press.

Online Reference:

1. MOOC Material: *Trading Algorithms*, Created by: Indian School of Business, Delivered by: Coursera, Taught by: Prasanna Tantri.
2. MOOC Material: *Algorithmic Trading & Quantitative Analysis Using Python*, Created by: Manak Rasu, Delivered by: Udemy, Taught by: Manak Rasu.
3. MOOC Material: *Algorithmic Trading A-Z with Python, Machine Learning & AWS*, Created by: Alexander Hagmann, Delivered by: Udemy, Taught by: Alexander Hagmann.
4. MOOC Material: *Trading Strategies in Emerging Markets Specialisation*, Created by: Indian School of Business (ISB), Delivered by: Coursera, Taught by: Ramabhadran Thirumalai.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	1	2	3	3	3	3	3
CO3	3	3	3	2	3	3	3	3	3	2
CO4	3	3	3	2	3	3	3	3	3	3
CO5	3	3	3	2	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

FMSC4/21 - CORPORATE ETHICS, GOVERNANCE AND SUSTAINABILITY

Course Aim: The aim of the course is to enable the students acquire knowledge regarding the principles of business, ethics, governance and sustainability and to enable students develop understanding of the systems and process of governance & sustainability.

Course Outcomes: At the end of the course, the students would be able to

CO1	Understand the nature and scope of Corporate Ethics like, Attributes of Ethics, Business Ethics, Management Ethics and Organizational Ethics.	L1 &L2
CO2	Know the nature, features, objectives, benefits and models of the Corporate Governance.	L1&L3
CO3	Appraise the functioning of Corporate Board Management.	L1 &L2
CO4	Assess the principles and dimensions of sustainability reporting	L1&L3
CO5	Analyse the social accounting, auditing, and reporting	L6
L1 - Remember; L2 - Understand ; L3 - Apply; L4 - Analyze; L5 - Evaluate; L6 - Create		

Pedagogical Methods Adopted: Self Learning and Peer learning.

Unit – I: Introduction to Corporate Ethics: Approaches to Ethics – Meaning of Ethics – Major Attributes of Ethics – Business Ethics – Factors that Influence Ethics – Importance of Ethics – Ethics in Management – Organizational Ethics

Unit –II: Introduction to Corporate Governance: Meaning of Corporate Governance – Definitions – Significance – Importance – Nature of Corporate Governance – Features of Corporate Governance – Objectives of Corporate Governance – Reasons for Corporate Governance Failure – Certain New Initiatives in Governance – Benefits of Corporate Governance – Consequences of Bad Governance – Requirements to Strengthen Corporate Governance – Corporate Governance Models – Global Corporate Governance Forum

Unit – III: Corporate Board Management: Structure and Composition of the Board- Composition of Board – Size of the Board – Powers of the Board of Directors – Responsibilities- Functions of the Board – Code of Conduct for Board Members – Training for the Board of Directors – Effectiveness of the Board – Evaluation of Board’s Functioning – Corporate Democracy – Shareholders Democracy

Unit – IV: Sustainability and Corporate Governance: Sustainability Reporting – Discipline- Mission – Principles – Dimensions – Corporate Governance and National Economy – World Bank Report – Development – Why It Matters?

Unit – V: Social Accounting, Auditing and Reporting: Introduction – Social Accounting – Social Auditing – Corporate Social Reporting – Auditing the Social Reporting Process.

Unit VI: Current Contours (for Continuous Internal Assessment Only)-Contemporary Developments Related to the Course during the Semester Concerned.

Reference:**Books:**

1. Crane, A., Matten, D., Glozer, S., & Spence, L. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization*. Oxford University Press, USA.
2. Marc Georgen (2018), *Corporate Governance: A Global Perspective*, Cengage Learning.
3. Rendtorff, J. D. (2019). *Philosophy of management and sustainability: Rethinking business ethics and social responsibility in sustainable development*. Emerald Group Publishing.
4. Rezaee, Z. (2019). *Business sustainability, corporate governance, and organizational ethics*. John Wiley & Sons.
5. Thomas Clarke (2017), *International Corporate Governance: A Comparative Approach*, 2nd Edition, Roulage London New York.

Online Reference:

1. Swayam Course Material: Financial Management, Created by Vanitha Tripathi, Delhi University.
2. NPTEL Course Material: Course Name: Construction Economics & Finance, Module: Financial Management, Course Co-ordination: IIT Guwahati.
3. MOOC Material: *The Factors that Influence the Effectiveness of Boards and the Governance Process*, Created by: State University of New York, Delivered by: Coursera, Taught by: Vic Murray and Prof. Yvonne D. Harrison.
4. MOOC Material: *Basic Governance for Board Members*, Created by: Debi Peverill, Delivered by: Udemy, Taught by: Debi Peverill.

Mapping with Programme Outcomes										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

1 – Low, 2 – Medium, 3 - Strong

CCIBE4/21 – FINANCING INNOVATIONS AND NEW VENTURES

The detailed syllabus for this course is given in the Regulation and Syllabus for Certification
Course on Innovation and Business Entrepreneurship