AC – 20/05/2025
Item No. – 7.6 (N) (4a) Sem. III

As Per NEP 2020

University of Mumbai

Syllabus for Open Elective Vertical 3		
Faculty of Commerce & Management		
Board of Studies in B.Com. (Financial Management)		
Second Year Programme		
Semester	**III & IV**	
Title of Paper:	**Sem.**	**Total Credits 4**
I) Financial Management – V (Fixed Income Securities – I)	**III**	**2**
From the Academic Year		**2025-26**

Sem. - III

Syllabus
B.Com. (Financial Management)
(Sem.- III)

Title of Paper: OE in Financial Management – V (Fixed Income Securities – I)

Sr. No.	Heading	Particulars
1	**Description of the course:** **Including but not limited to:**	This comprehensive course provides learners with a thorough understanding of India's fixed income markets, covering both theoretical foundations and practical applications. The course begins by examining the structure and participants of Indian debt markets, including regulators, issuers, and credit rating agencies, while exploring various fixed income instruments from government securities to hybrid bonds. Learners will then master essential bond valuation techniques, including time value of money concepts, yield calculations (YTM, duration, convexity), and term structure analysis. Through practical exercises and real-world examples, participants develop critical skills in pricing different bond types, assessing risk-return tradeoffs, and interpreting yield curve movements. The course is particularly valuable for professionals' seeking careers in fixed income trading, portfolio management, or treasury operations, as it addresses the growing industry demand for debt market expertise. Structured into two focused modules - Foundations of Indian Debt Markets and Bond Pricing & Yield Analysis - the curriculum equips learners with both conceptual knowledge and analytical tools needed to navigate India's evolving fixed income landscape effectively.
2	**Vertical:**	Open Elective
3	**Type:**	Theory

4	**Credit**:	2 credits (1 credit = 15 Hours)
5	**Hours Allotted:**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: • To provide learners with a comprehensive understanding of India's debt market ecosystem, including its key participants, regulatory framework, and various fixed income instruments. • To develop proficiency in bond valuation techniques, including time value of money concepts, cash flow analysis, and pricing methodologies for different bond types. • To equip learners with analytical skills to evaluate yield measures, interpret yield curves, and understand term structure theories in fixed income markets. • To enable practical application of bond market concepts through numerical exercises and real-world scenarios relevant to investment and risk management decisions.	
8	**Course Outcomes**: • Learners will be able to explain the structure and functioning of Indian debt markets, including the roles of regulators, credit rating agencies, and various market participants. • Learners will be able to apply valuation techniques to price different types of bonds, calculate yields, and analyze the price-yield relationship for fixed income securities. • Learners will be able to evaluate various yield measures and interpret yield curve movements using different term structure theories. • Learners will be able to demonstrate practical skills in bond portfolio analysis and risk assessment through numerical problem-solving and case studies.	

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Modules: - **02**

Module 1: Foundations of Indian Debt Markets

- **Overview of the Indian Debt Market:** Role of the Debt Market, Importance of Debt Markets, The Bond Market Ecosystem, Role of Regulators, Role of Credit Rating Agencies, Role of Monetary Policy in Debt Markets, Evolution of Debt Markets and Market Dynamics
- **Types of Fixed Income Securities:** Classification of Fixed Income Securities based on the Type of Issuer, Maturity, Coupon, Currencies, Embedded Options and Security
- **Other Fixed Income Securities in India:** Sovereign Gold Bonds, Perpetual Bonds, AT1 Bonds, Tier-2 Bonds, Savings Bonds, High-Yield Bonds, Green Bonds, Tax-Free Bonds, Asset-Linked Bonds, Equity-Linked Note, Participatory Bonds and Income Bonds

Module 2: Bond Pricing & Yield Analysis

1. Pricing of Bonds

- **Concept of "Par Value"**
- **Time Value of Money:** Simple Interest, Compound Interest, Single Period Investment, Multi-period Investment, Present and Future Value (Basic Numerical)
- **Determining Cash Flow, Yield and Price of Bonds:** Basic Numerical on Discounting Factors using Yield and Cash Flow
- **Pricing of Different Bonds:** Bond Valuation measurement less than one year, Valuing Bonds at Non-Coupon Dates, Perpetual Bond Pricing, Treasury Bill Pricing, Discount Factors and Bootstrapping,
- **Price-Yield Relationship:** Relation between Coupon Rate, Required Rate, value and par value
- **Price Time Path of a Bond**
- **Pricing of a Floating Rate Bond**

2. Yield Measures and Total Return

- **Sources of Return:** Coupon Income, Capital Appreciation, Reinvestment Income,
- **Traditional Yield Measures:** Current Yield, Yield to Maturity (YTM), Effective Yield, Yield to Call, Yield to Put, Yield to Worst, Yield to Portfolio, Yield to Money Market and Yield to Floating Rate Bonds

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3. Term Structure of Interest Rates

- **Yield curve and Yield curve theories:** Yield Curve and Term Structure, Pure Expectation theory, Liquidity Preference theory, Market Segmentation theory and Preferred Habitat theory.
- **Relationship between Spot and Forward Rates**
- **Determinants of the Shape of the Term Structure**

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Text Books:

- Fixed Income Securities by National Institute of Securities Markets
- "Indian Financial System" by Bharati V. Pathak
- "Fixed Income Markets in India: An Introduction" by Niti Bhasin

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Reference Books:

- "Fixed Income Securities: Tools for Today's Markets" (3rd Edition) by Bruce Tuckman and Angel Serrat
- "The Handbook of Fixed Income Securities" (9th Edition) by Frank J. Fabozzi
- "Bond Markets, Analysis, and Strategies" (10th Edition) by Frank J. Fabozzi

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<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>External, Semester End Examination 60% Individual Passing in Internal and External Examination</td></tr>
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Continuous Evaluation through:

	Assessment/Evaluation	Marks
1	Class Test during the lectures. (Physical/ Online mode). (Short notes/ MCQ's/ Match the Pairs/ Answer in one sentence/ puzzles)	10
2	Participation in Workshop/ Conference/Seminar, Assignment & Viva. (Physical/Online mode)	5
3	Participation in Case Study/ Field Visit /Certificate Course. (Physical/Online mode)	5

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Semester End External – 60 Marks

Time – 2 Hours

Attempt any 2 out of 3 questions

Question No.	Questions	Marks
Q.1	Practical/ Theory	15
Q.2	Practical/ Theory	15
Q.3	Practical/ Theory	15

Note

1. Equal Weightage is to be given to all the modules.
2. 15 marks question may be subdivided into 8 marks + 7 marks, 10 marks + 5 marks and 5 marks + 5 marks + 5 marks. Internal options may be given however, it is not mandatory.

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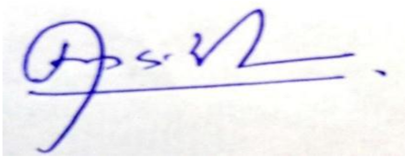
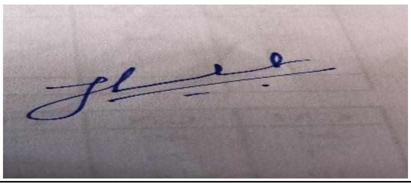
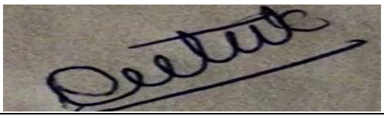
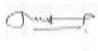
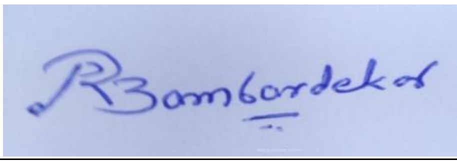
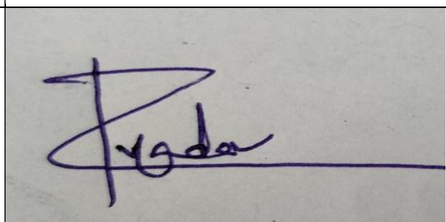
		3. Use of simple calculator is allowed in the examination. 4. Wherever possible more importance is to be given to the practical problem.

Sign of the BOS Chairman
Prof. Dr Arvind Luhar
Board of Studies in Financial Management

Sign of the Offg. Associate Dean
Prin. Kishori Bhagat
Faculty of Commerce & Management

Sign of the Offg. Associate Dean
Prof. Kavita Laghate
Faculty of Commerce & Management

Sign of the Offg. Dean
Prin. Ravindra Bambardekar
Faculty of Commerce & Management

Name	College Name	Sign
Dr. Arvind Luhar	Ismail Yusuf College	
Dr. Nishikant Jha	Thakur College of Science & Commerce	
Dr.CA Mahesh Bhiwandikar	K.M.Agarwal College	
Dr. Neetu Kapoor	Bharat College	
Dr. Suresh Tukaram Nimbalkar	N.K.Varadkar College	
Dr. Ravindra Bambardekar	Keraleeya Samaj Model College	
CS Dr Lalita Mutreja	Narsee Monjee College of Commerce and Economics, Vile Parle	
Dr.Navsin Mistry	M V Mandali's College of Commerce and Science	
Maqsood Memon	Sonopant Dandekar College of Arts, Science and Commerce	
Rajeshkumar G. Yadav	Achievers College of Commerce and Management (Night), Kalyan	
Vinayak Joshi	Centre for Distance and Online Education, University of Mumbai