

**College of Engineering, Pune**  
**Department of Mathematics**  
**( MA( MI ) 18004 ) Financial Systems**

Minor Certification in Mathematics with specialization in 'Financial Engineering' ( Semester VII )

Teaching Scheme  
Lectures : 3 hrs / week

Examination Scheme  
Internal Test 1: 20 marks  
Internal Test 2: 20 marks  
End Sem. Exam: 60 marks

**Objectives :** The student will be able to appraise the structure, functions and roles of financial markets and institutions.

**Unit I :** Introduction to the macroeconomic environment and policy players. **[3 Hrs]**

**Unit II :** Building blocks :

National income and measures, trends, real and nominal GDP, concept of the deflator, rankings of GDP across the globe in nominal and PPP terms, inflation indices, trends in inflation in India, growth-inflation trade-off. **[6 Hrs]**

**Unit III : Capital Market :** History of the Indian Capital Market.

**Primary market :** Functions, Participants and Intermediaries – Merchant Banker, Banker to an Issue, Underwriter, Primary issues: Public issue, Rights, Private placement, Bonus, Preferential issue, Process of offering new issues to the public – Book building, Green shoe option, ASBA, Online IPOs and FPOs.

**Secondary market :** Role of a stock exchange, The Stock Exchanges of India: BSE, NSE, Inter connected Stock Exchange of India Ltd., MCX-SX, United Stock Exchange, Organization, management and membership of stock exchanges – stock market indices for both NSE and BSE - Listing of securities - Trading and settlement: Rules and regulations, Circuit Breakers, trading arrangements and settlement.. Instruments in capital Market: Equity- Shares with or without differential voting rights, preference shares, Debt securities - Corporate bond, corporate debentures, PSU bonds, Dated G-Secs etc. Market Infrastructure Institutions: Clearing corporations, Depositories, Depository participants, Custodians, Registrar and Transfer Agents.

**Capital market Derivatives :** An introduction to options, futures, forward contracts.

**SEBI as a regulator :** It's working and functions. **[9 Hrs]**

**Unit IV :** Classification of financial institutions: Banks and Non-banks (NBFIs), Difference between banks and non-banks. **[3 Hrs]**

**Unit V :** Commercial banks and Cooperative banks: Detailed classification of commercial banks (ownership based): Private and Public sector, Classification as scheduled and non-scheduled,

**Public sector commercial banks :** Nationalized, State Bank Group and Special Public Sector Bank. Reasons behind nationalization of banks – Arguments for and against nationalization, Progress of banks post nationalization, Commercial banks and their functions.

**Private sector banks :** Foreign and Indian, Indian old and new private sector banks - Their progress since their inception.

**Regional Rural Banks :** Their establishment, organization, management, functions and progress.

**Local Area Banks :** Their establishment, organization, management, functions and progress.

**Cooperative credit in India :** An introduction to structure of short and long term cooperative credit - State Cooperative Banks, Central Cooperative Banks, Primary Agricultural Cooperative Credit Societies, State Cooperative Agricultural and Rural Development Banks, Primary State Cooperative Agricultural and Rural Development Banks: Their organization, functions, working and progress, Urban cooperative banks: Their organization, functions and progress. **[9 Hrs]**

**Unit VI : Non-Banking Institutions :** Types of NBFCs (For Example Micro Finance Institutions, Insurance, Brokerages, Merchant Bankers, Chits funds). **[5 Hrs]**

**Unit VII : The Reserve Bank of India,** Evolution, Organization and management, Functions as Currency authority, Banker to the Government, Bankers' bank, other promotional and regulatory functions, its subsidiary and associate institutions. **[5 Hrs]**

#### **Text Books :**

- L M Bhole & Jitendra Mahakud (2009), “ Financial Institutions and Markets” Tata McGraw-Hill Education.
- L.M.Bhole, “Financial Institutions and Markets: Structure, Growth and Innovations” Tata McGraw-Hill Education
- M C Vaish, ‘Macro Economic’ Vikas Publishing House Pvt Ltd (14<sup>th</sup> Edition), New Delhi.

#### **Reference Books :**

- Saunders, Cornett, (2011),” Financial Markets & Institutions” Tata Mc Graw Hill.
- Frederic S. Mishkin: "Financial Markets and Institutions (7th Edition)" The Prentice Hall Series in Finance.
- Suraj Bhan Gupta, “Monetary Economics” S. Chand Publications.
- Reserve Bank of India – Functions and Working (RBI publication).

- All relevant and latest Master Circulars issued by the RBI.
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**Outcomes :** Students will be able to

1. **know** and **recall** the core knowledge of the syllabus.
2. **understand** and **recall** the working of Financial Systems / Banking Systems.
3. **analyze** the changes in securities markets.
4. **reason out** the changes in securities markets.
5. **apply** core concepts to securities markets.