



## **CAIIB Syllabus**

### **Compulsory Paper - I : ADVANCED BANK MANAGEMENT**

#### *MODULE - A : Economic Analysis*

The fundamentals of Economics : Scarcity and Efficiency - Microeconomics & Macroeconomics in brief - Types of economies - Market, Command and Mixed Economies - Macroeconomics : Business cycles - Money and banking - Unemployment & inflation - Interest rate determination and various types of interest rates.

Indian Economy (a) Overview of the Indian economy including recent reforms (b) Interaction between fiscal, monetary & exchange rate policies in India - Financial Markets (i) Money Market (ii) Capital Market (iii) Foreign Exchange Market - globalisation and its impact - Challenges ahead - Banking & Finance - current issues

#### *MODULE - B : Business Mathematics*

Concept of time Value of Money - Net Present Value - Discounted Cash Flow - Sampling methods - presentation of data - analysis and interpretation of sample data - hypothesis testing - Time series analysis - mean / standard deviation - co-relation - Regression - covariance and volatility - Probability distribution - Confidence interval analysis - estimating parameters of distribution - Bond valuation - duration - modified duration. Linear programming - decision making-simulation - Statistical analysis using spreadsheets. Features of Spread sheet - Macros, pivot table, statistical and mathematical formulae.

#### *MODULE - C : HRM in banks*

Fundamentals of HRM, development of HRM in India, Relationship between HRM and HRD, Structure and functions of HRD, Role of HR professional, Human implications of organizations; training and development, attitude and soft skills development, role and impact of training, career path planning and counseling, employee behaviour, theories of motivation and their practical implications, role concepts and analysis, self development., Performance Management and appraisal systems; Reward / punishment and compensation systems., HRM and Information Technology, information and data management, knowledge management.

#### *MODULE - D : Credit Management*

Principles of Credit Management Credit Appraisal Analyzing Financial Performance - Relationship between items in Balance Sheet and Profit and Loss Account. Trend Analysis, Comparative Statement - Common size Statement, Preparation of projected Financial Statements. - Ratio analysis - Interpretation and analysis of different Ratios, Limitation of the use of ratios. Statement of Sources and Applications of Funds.

Structuring a Credit Proposal - Working Capital Concept and Management Appraisal techniques for different constituents - trade cycle - credit rating - Technical and economic feasibility studies - Credit Rating - Rating Methodology - Objectives and benefits of rating - Term Lending - Debt Service Coverage Ratio - Cash Flow Analysis - Cash Budget - Bill Finance - Deferred Payment Guarantee - Credit Scoring - Credit Delivery System - Documentation - Post sanction supervision, Control and monitoring of credit - Consortium finance, Multiple banking, Syndication of loans. Infrastructure financing.

Dealing with credit defaults, Stressed assets, Corporate Debt restructuring, SARFAESI, NPAs, recovery options, write-off. Disclosure of the list of defaulters : objectives and procedure. Appraisal methodology for different type of clients / products.

## **Compulsory Paper - II : BANK FINANCIAL MANAGEMENT**

### ***MODULE - A : International Banking***

Forex Business; factors determining exchange rates, Direct and indirect quotations, spot / forward rates, premium and discount, cross rates.

Basics of forex derivatives; forward exchange rate contracts, Options, Swaps. Correspondent banking, NRI accounts

Documentary letters of Credit - UCPDC 600, various facilities to exporters and importers.

Risks in foreign trade, role of ECGC, types of insurance and guarantee covers or ECGC. Role of Exim Bank - Role of RBI and exchange control - Regulations in India, Role and rules of FEDAI - Role of FEMA and its rules

### ***MODULE - B : Risk Management***

Risk-Concept - Risk in Banks - Risk Management Framework - Organisational Structure - Risk Identification - Risk Measurement / - Sensitivity - Basis Point Value (BPV) - Duration - Downside Potential - Value at Risk, Back Testing - Stress Testing - Risk Monitoring and Control - Risk Reporting -

Market Risk identification, Measurement and management / credit risk - rating methodology, risk weights, eligible collateral for mitigation, guarantees; credit ratings, transition matrices, default probabilities, Credit risk spreads, risk migration and credit metrics, Counterparty risk. Credit exposures, recovery rates, risk mitigation techniques, - / Operational and integrated Risk Management - Risk management and capital Management - Basel-II - Current guidelines on risk management

### ***MODULE - C : Treasury Management***

Concepts and function; instruments in the treasury market, development of new financial products, control and supervision of treasury management, linkage of domestic operations with foreign operations.

Interest rate risk, interest rate futures

Mix / Pricing of Assets, Liabilities - On-Balance Sheet Investment and Funding Strategies -

Stock options, debt instruments, bond portfolio strategy, risk control and hedging

instruments. Investments - Treasury bills, money market instruments such as CDs, CPs,

IBPs

Securitisation and Forfaiting; refinance and rediscounting

facilities. Derivatives - Credit Default Swaps / Options

### ***MODULE - D : Balance Sheet Management***

Prudential norms-Capital Adequacy. Implementation of Basel-II guidelines : RBI guidelines. Banks

Balance Sheet - Components of assets / Liabilities / ALM Implementation - RBI Guidelines - Gap

Analysis - Mechanics, Assumptions, and Limitations - Illustrations of Actual Gap Reports - The

Relationship Between Gap and Income Statement - Funding Liquidity - Trading / Managing

Liquidity - Contingency Funding - Business Strategies : Profit and profitability analysis, Asset

Classification - provisioning - effect of NPA on profitability, Shareholder value maximization & EVA

- profit planning-measures to improve profitability. Disclosure guidelines.

## **Elective Paper - I : CENTRAL BANKING**

### *Module - A : Rationale and Functions of Central Bank*

1. Evolution and Functions of Central Banking : Evolutions of Theory and Practice of Central Banking, Development of Central Banks in Developed and Developing countries.
2. Functions of a Central Bank : Banker to Government, Banker to Banks, Monetary policy Functions, Currency Issue and Management, Payment system function, Maintaining Internal and External values of currency, Regulation, Facilitation and supervision of Financial System, Promotional Functions to support growth and other National objectives, Development of Financial Markets, Institutions and communication policies.
3. Contemporary Issues : Desirability, Autonomy and independence, Credibility, accountability and transparency of a Central Bank, conflict with fiscal policies.

### *Module - B : Central banking in India*

1. Reserve Bank of India : Organisational evolution, Constitution and Governance, Major organizational and Functional Developments over time, Recent Developments, RBI Act.
2. India Specific Issues : Banking Regulation Act, FEMA, Banking Ombudsman Scheme, Financial Sector reforms, other financial regulators and division of functions. Institutions set up by RBI; NABARD, IDBI, DFHI, IRBI, UTI.
3. Glossary of Central Banking Terms.

### *Module - C : Monetary Policy and Credit Policy*

1. Monetary Policy : Objectives, Reconciling dual objectives, The Taylor Rule, Indicators of Policy, instruments of policy (Bank Rate, OMO, CRR, SLR etc.), policy Transmission mechanism and channels, transparency of policies, Lags in policy.
2. Credit Policy : Objectives, Theory and Practice, Instruments.
3. An over view of Fiscal Policy : Importance of Budgets, Union Budget, State Budget, Finances of Union and State Governments, Finance Commission.
4. Striking balance between inflation and growth through monetary and fiscal policies.

### *Module - D : Supervision and Financial Stability*

1. Indian Financial System : Constituents of Indian Financial Markets and their Regulation. Evolution of Bank Regulation and supervision.
2. Financial Stability : Financial Development Vs Financial stability, Risks to Financial stability, Early warning signals and remedial action, Liquidity Management, Regulation and supervision of Banks, Risk Management in Banks, The Basle Norms, Prudential Norms, Effect of liberalisation and Globalisation on Financial Stability, Linkage to International Financial Stability, International standards and codes. Role of Supervisor under Basel-II.

## Elective Paper - II : INTERNATIONAL BANKING

### Module - A : International Banking and Finance

- 1) International Banking
  - i) Global Trends and developments in International Banking
  - ii) International Financial Centres, Offshore Banking Units, SEZs.
  - iii) Profitability of International Banking operations
  - iv) Correspondent Banking and inter - Bank Banking
  - v) Investment Banking, Wholesale Banking, Retail Banking, Merchant Banking
  - vi) International Financial Institutions : IMF, IBRD, BIS, IFC, ADB
  - vii) Legal and regulatory aspects
  - viii) Risk Management
- 2) International Finance
  - i) Fundamental Principles of Lending to MNCs, documentation and Monitoring
  - ii) International Credit Policy Agencies and Global Capital Markets
  - iii) Raising resources : Availability features and risks of various Equity and debt products like ECBs, ADRs, ECCBs and other types of Bonds etc, Syndication of loans
  - iv) Project and infrastructure Finance : Investments both in India (FII & FDI) and abroad, Joint ventures abroad by Indian Corporates. Investment opportunities abroad for resident Indians.
  - v) Financing of mergers and acquisitions

### Module - B : Foreign Exchange Business

- i) Foreign Exchange Management Act (FEMA) and its philosophy
  - ii) Different types of Exchange Rates
  - iii) RBI and FEDAI : their role in regulating Foreign Exchange Business of Banks / other Authorised Dealers.
  - iv) Rules regarding rate structure, cover operations, dealing room activities and risk management principles, including correspondent Bank arrangements.
  - v) NRI customers and various banking and investment products available to them under FEMA.
- Remittance facilities

### Module - C : International Trade

- 1) Regulations covering international trade
  - i) Various Aspects of International Trade, Government policies, DGFT and their schemes, Customs procedures, Banks' role in implementing these policies and schemes
  - ii) WTO- its impact
  - iii) Balance of payment, balance of trade, Current account and capital account convertibility.
  - iv) Documents used in Trade : bill of exchange, invoice, Bill of lading, Airways bill, Insurance policy etc.
  - v) Role of Banks in foreign Trade
  - vi) Letters of credit; importance in international trade, various types of LCs, settlement of disputes, UCP 600, INCOTERMS.
  - vii) Exchange control relating to foreign trade. Returns required to be submitted to RBI
- 2) Import / Export Finance
  - i) Laws governing trade finance viz, FEMA, NIAAct, Indian stamp Act, EXIM policy, RBI / FEDAI guidelines
  - ii) Role of Banks, including EXIM Bank, in financing Foreign Trade, various facilities to Exporters and importers including project finance, Forfaiting and Factoring
  - iii) Risks involved in foreign trade finance : Country risk, Currency risk, Exchange risk, legal risk etc, Role of ECGC.

### Module - D : Derivatives

1. Treasury operations of banks and corporates
2. Derivatives as hedging instruments, types of instruments available in Indian Market.
3. RBI rules and guidelines regarding derivatives
4. Mathematics of derivative valuation and pricing
5. Risk assessment of derivatives, Lessons from recent crisis in derivatives market.

### **Elective Paper - III : RURAL BANKING**

#### *Module - A : Rural India*

Demographic features; Population, occupation, literacy, socio-economic development indicators, health, nutrition and education, - urban migration.

Characteristics of Rural Society; Caste and power structure - rural social stratification, Economic Features; Economic life of rural people, share in National income -Trends in per capita income, rural money markets, rural indebtedness, rural poverty - main causes and methods of measuring rural poverty.

Rural infrastructure; Transport, Power, Markets and other services.

Agriculture Economy; Structure and characteristics of Indian agriculture, Role of agriculture in economic development, agriculture-industry linkages, Resources and technical changes in agriculture, constraints to agriculture development, Emerging issues in Indian Agriculture.

Rural Development Policy; Govt. policies and programmes for rural farm and non-farm sectors. Economic reforms and its impact on rural economy.

Rural Issues; Development issues, Management Issues, Marketing issues, Pricing issues,

#### *Module - B : Financing Rural Development*

Regulation of Rural Financial Services; Function and policies of RBI in Rural Banking, NABARD-Main functions, role, refinance support. Lead bank approach, State level and District level Credit committees.

Rural Credit Institutions; Co-operative Credit Societies and Banks, Land Development Banks, Regional Rural Banks, Commercial Banks. Role of Information and communication technologies in rural banking-Models, Financial inclusion & inclusive growth for rural development banking, rural insurance micro insurance scheme, concept of Business Facilitators and Business Correspondents in rural financing.

Financing agriculture / allied activities; Crop Loans-Assessment, Sanction, Disbursement, rephasing. Term loans for irrigation, Farm mechanization, Godowns / cold-storage facilities etc. Financing allied agriculture activities like Horticulture, Fisheries, Social forestry, etc. Finance against Warehouse / cold storage receipts

Financing Rural Non-Farm Sector (RNFS); Importance of RNFS, Segments in RNFS, Role of Development and Promotional Institutions in RNFS

SME Finance; Definition of SME .Importance to Indian economy. Financing of SME and small enterprise Refinance from SIDBI. Project funding techniques and requirement assessment. Cluster based approach and joint finance with SIDBI.MSMED Act 2006, CGTMSE, Working capital assessment of SMEs. Risk rating of SME proposals, role of rating agencies and rating methodology. Revival of sick units; revival package and implementation, Stressed assets under rehabilitation. Debt restructuring mechanism for SMEs.

#### *Module - C : Priority Sector Financing and Govt initiatives*

Components of priority sector. RBI guidelines.

Government initiatives; Poverty alleviation programmes / Employment programmes / Production oriented programmes-rationale and philosophy, progress and impact, problems and deficiencies. Rural housing and Urban housing schemes under priority sector, their refinance, Educational loans

#### *Module - D: Problems and prospects in Rural Banking*

Role of rural banking.

Problems of Rural branches of Commercial banks - transaction costs and risk costs. Technology based Financial Inclusion.

Emerging trends in rural banking-financing poor as bankable opportunity, Micro Credit, Self Help Groups / NGOs, linkages with banking, latest guidelines of GOI and RBI.

## **Elective Paper - IV : FINANCIAL ADVISING**

### ***MODULE - A : Introduction to Financial Advising***

Indian financial and investment industry, participants in the Indian finance system, Indian economic and social environment, Role of Regulators viz., RBI, SEBI etc.

Financial counseling- Essentials in financial counseling, Profile of effective counselor, Basic communication principles, Elements of non-verbal behavior, Attending and Listening skills, Counselor leading responses, understanding and meeting client's needs through financial planning, evolution of financial planning as a profession. Marketing of financial services.

Fundamental Investment concepts, The Time Value of Money, Risk-Reward Trade-Off,

Diversification -Spreading Risk, Investment Timing,

Direct Investment - What Are They and Who Uses Them?

### ***MODULE - B : FINANCIAL PLANNING***

Financial Planning, Role of a Financial planner, Fundamental investment concepts, Asset classes, Asset allocation towards a financial plan, working with clients, gathering initial / additional information from the client, understanding investor's risk appetite, meeting the client's objectives, Asset Allocation, Good practices in financial planning, Content of a comprehensive financial plan, Recommending financial planning strategies to investors, Asset allocation the strategic tool - Selection of Investment and Insurance Products, Implementation, ongoing Service, Using stop loss, understanding market behaviour.

### ***MODULE - C : FINANCIAL INVESTMENT PRODUCTS***

Financial investment products - Portfolio analysis & selection, Efficient markets, Securities markets - Primary market, Secondary market, Depository & investment process, regulatory framework, fundamental and technical analysis-basic philosophies and underlying assumptions - Bond and Money markets, Indian debt markets - Securities traded in debt market, Commodities Market, Insurance products, Pension products, Mutual fund industry-products & services, Banking products, Investment in Real estate. Cash generation and return on investment.

Statutory provisions regarding starting of business / industrial units by NRIs / MNCs.

### ***MODULE - D : TAXATION***

Income Tax law, important definitions-person, Assessee, Agriculture income, capital / Revenue receipts / expenditure, Gross total income, Total income, residential status, Heads of income viz. salaries, income from house property, profits and gains of business or profession, Capital gains, income from other sources, Income exempt from tax, Permissible deductions from gross total income, income tax return, tax deducted at source

Tax planning strategies- House wife, Salaried person, Businessman, persons having income from more than one source, Retirement planning and taxation, Tax triggered investments Estate Planning, Will, Administration of an estate, Passing of an asset, Tax planning through wills and trusts, Taxation of Terminal benefits.

## **Elective Paper - V : CORPORATE BANKING**

### ***MODULE - A : Corporate Banking and Finance***

Corporate Banking : Meaning and importance, various services provided viz., Cash Management, Salary Payment, Debt Management, Factoring and Forfeiting, Trusteeship, Custodial services, Business advisory, Off shore services, Trade services, Forex Management, etc.

Corporate Deposits : Importance of Institutional deposits vis-a-vis retail deposits

Corporate Finance : Working capital finance, Fund and Non fund based limits and Import-Export finance. Corporate Debt Restructuring.

### ***MODULE - B : Investment Banking***

- 1) Meaning and scope of Investment Banking, Evolution, overview of current state of Investment Banking in India.
- 2) Merchant Banking : Advisory services for equity / debt issues, Management, placement and distribution of equity / debt.
- 3) Mergers and Acquisitions, Divestitures : Identification, Structuring, Negotiation and Execution, arranging finances etc.
- 4) Corporate advisory services : Capital restructuring, Project advisory, Private equity and Venture capital, Loan Syndication etc.

### ***MODULE - C : Project and Infrastructure Finance***

Characteristics of Project Finance - Technology selection, Assessment of technical collaborator - Market Analysis : International competitiveness and SWOT analysis - Assessing the project cost - Means of financing projects - Estimation of project cash flows - Use of free and equity cash flow valuation for assessing projects - Financial Analysis : Break-even point analysis, Decision tree, Scenario analysis and Internal Rate of Return, Sensitivity analysis Common risks in projects - Risk mitigation methodologies in projects - Securitisation as a tool for risk mitigation - Project planning - Network techniques for project implementation - Disbursement, supervision and follow up of project by lender - Infrastructure financing cash flow deal agreement with parties involved - SPV - Monitoring and follow-up of the project

## **Elective Paper - VI : RETAIL BANKING**

### *MODULE - A : Introduction*

History and definition, role within the bank operations, Applicability of retailing concepts distinction between Retail and Corporate / Wholesale Banking

### *MODULE - B : Retail Products*

Retail Products Overview - Customer requirements, Products development process, Liabilities and Assets Products / Description of Liability products, Description of Asset Products, Approval process for retail loans, Credit scoring.

Important Asset Products -

Home Loans - Eligibility, Purpose, Amounts, Margin, Security, Disbursement, Moratorium, Prepayment issues, Repayments / Collection.

Auto / Vehicle Loans - Eligibility, Purpose, Amounts, Margin, Security, Disbursement, Moratorium, Prepayment issues, Repayments / Collection.

Personal Loans Eligibility, Purpose, Amounts, Security, Disbursement, Moratorium, Prepayment issues, Repayments / Collection.

Educational Loans Eligibility, Purpose, Amounts, Security, Disbursement, Moratorium, Prepayment issues, Repayments.

Credit / Debit Cards - Credit Vs Debit Cards, Eligibility, Purpose, Amounts, Margin, Security, Process of using the cards, Billing Cycle, Credit Points.

Other Products / Remittances / Funds Transfer

### *MODULE - C : Marketing / Selling of retail products, MIS and Accounting*

Retail Strategies; Tie-up with Institutions for Personal loans / Credit cards / Educational loans, with OEMs / Authorised Dealers for Auto / Vehicle loans, and with Builders / Developers for Home loans

Delivery Channels - Branch, Extension counters, ATMs, POS, Internet Banking, M-Banking. Selling Process in retail products-Direct Selling Agents.

Customer Relationship Management - Role and impact of customer relationship management, Stages in customer relationship management process.

Regulations and compliance

Technology for Retail Banking - Static information, Account opening, basic loan origination data etc. Updated information like income details at different frequencies. Transaction information from disbursement till final settlement of the loan amount. Analytics / Alerts.

Accounting entries - Loan process and the relevant accounting including EMI Computation.

### *MODULE - D : Other issues related to Retail Banking*

Securitisation, mortgage based securities.

Trends in retailing - New products like Insurance, Demat services, online / Phone Banking, Property services, Investment advisory / Wealth management, Reverse Mortgage - Growth of e-banking, Cross selling opportunities.

Recovery of Retail Loans - Defaults, Rescheduling, recovery process. SARAFESI Act, DRT Act, use of Lok Adalat forum. Recovery Agents - RBI guidelines.



## **Elective Paper - VII : CO-OPERATIVE BANKING**

### *MODULE - A : Principles and Laws of co-operative Banking Law and rules relating to Co-op Banks*

Principles of Co-operation - brief overview of structure of co-operative credit institutions - Membership - Legal aspects of banking operations - Banking related laws - Provisions of Bankers Book Evidence Act - Special features of Recovery of Debts Due to Banks and Financial Institutions Act, 1993 -Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002-The Consumer Protection Act, 1986 - Banking Ombudsman

### *MODULE - B : Co-operative Banking Operations*

Deposits, Credit & Investment Management

Different Deposit Products - Deposit Policy - Credit Management Loans and advances - Priority sector lending - MSME financing - Personal Finance - Banker - Customer relations - Garnishee orders and Attachment orders, Bankers' right of lien, set-off and appropriation

Indemnities and Bank Guarantees; Loan Policy - Management of NPA - Investment Management - CRR / SLR Management - Financial Markets - guidelines of RBI / NABARD in regard to investment - Money Market - Call money - Repos and Reverse Repos - Foreign Exchange Market - Debt market - Bancassurance - Meaning and Scope of Investment Policy

### *MODULE- C : Technology, Risk management*

Technology Banking - Electronic Payment systems / core banking solutions - Electronic funds transfer systems - RTGS - Risk Management - Exposure limits-Asset Liability Management - Capital Adequacy - Basel-II - Profit and Profitability - Approach of Banks to profitability - Effects of NPA on profitability - A profitability Model

### *MODULE- D : Supervisory and Regulatory aspects*

Banking Regulation Act (As applicable to Co-op. Banks) - Role of R.B.I. -Supervision and control - Branch licensing-Inspection / audit-Statutory / Reserve requirements - R.B.I. guidelines on Deposits, Advance, Priority sector lending, Weaker section lending, Control Returns - Recommendations of Marathe Committee, Madhav Rao Committee and Vaidyanathan committee - Role of Directors and Corporate Governance Best Practices - Management Information System.

## **Elective Paper - VIII : HUMAN RESOURCES MANAGEMENT**

### *Module - A : Human Resources Management*

- 1) Concepts, Policies and Practices : Fundamentals of HRM; Importance of Human Capital, Management of transformation, New insights into HR Management and contemporary issues, Relationship between HRM and HRD; Structure and Functions, Policies and Practices, Role of HRD professional, Development of HRM in India.
- 2) Behavioural Dynamics in organizations; Person - Job Fit, Group Dynamics, Group Problem Solving and effectiveness, Leadership and Team building, Change Management, Human Response - Implications of benchmarking; TQM, BPR, ISO 9000 Series and other techniques for Organizational improvement and Management of Service Industry; Quality Circles. Six Sigma and its implication in organizational development.
- 3) Organizational Change and Development; Responsibility Charting, Conditions for Optimal Success, Role of Change Agent and Managing Change.
- 4) HRM in Banks : Traditional Role of Human Resources Department in Banks, Expectations from HR Department, Conflict of new initiatives with work culture and capacity, Major HRM challenges facing Banks, Core Banking and HR challenges,
- 5) Knowledge management in Banks; Need for Knowledge Management Officer, Role in the Banks, HRM and Information Technology, Information and Database Management, Preparation and updation of Manuals and job cards, Linkage with Educational Institutions.

### *Module - B : Building an HR strategy*

- 1) Strategy Formulation and implementation; Need for a distinctive HR strategy, Formulating the strategy; connecting strategy to organization, aligning HR Systems with decision framework, Relationship between Sustainable strategic success and performance of the organization, Execution of strategy : Role of CEO, Executive team, and line Managers, Succession Planning, HRD Audit, Effectiveness of HRD, Best HR practices in banks.
- 2) Organizational Communication; Barriers to Communications, Steps for effective communication in the organisation
- 3) Manpower Planning; Recruitment, Selection, Placement and Promotion. Recruitment Vs Outsourcing : Concept and Feasibility of Outsourcing, advantages, disadvantages and constraints, Compensation; incentive system linked to productivity, dealing with attrition.
- 4) Performance Management and Appraisal Systems : Performance Appraisal System, Role of P A S, Emerging Trends, 360 degree performance Appraisal, Appraisal Vs Feedback, Competency Mapping, Key Performance Areas (KPA)

### *Module - C : Motivation, Training and Skill Development*

- 1) Human implications of Organisations; Learning and instructions, Learning Processes, Employee Behaviour, Theories of Motivation and their practical implications, Motivational strategies, Reward and Incentive schemes, job enrichment, job rotation. Employee Development strategies and Techniques.
- 2) Training and Development; Attitude development, Role and impact of training, Career Path Planning and Counseling, Changing face of Banking, Future of Bank Education, Identification of Training Needs.
- 3) Training Methodology; subject matters of Training, Training infrastructure in Banks, outsourcing of Training, On - the job training, Management of conflict between Training and operations due to manpower constraints, Development of soft skills and communications. Developing competencies through e-learning, virtual learning and self directed learning. Training measurement and impact.

### *Module - D : Personnel Management and Industrial Relations*

- 1) The personnel functions : Legal aspects of personnel functions, trade unionism and Industrial Relations; Industrial Relations and Negotiations in the Indian Banking Industry, Collective Bargaining Concepts; Bipartite Settlements in Banking, Employee Welfare; Policies and Schemes.
- 2) Grievance Redressal and Discipline; Mechanism and Processes, Discipline Management including Domestic Enquiry, Role of Management and Functions, Conflict Management and Resolution, Frauds in Banks, Risks attached to Delegation of Financial Powers; Precautions and Controls, Need for a vigilance Dept in Banks, Diversity and Gender Issues, Dealing with the cases of Sexual harassment.
- 3) Workers' Participation in Management, Experience of Employee Participation in Indian banking industry.

## **Elective Paper - IX : INFORMATION TECHNOLOGY**

### *Module - A : Introduction to Information Technology*

Impact of IT on Banking : Changing Financial Environment and IT as a Strategic

Response Hardware (H / W) - Software : (S / W)

System Software :

Operating Systems (Desktop OS / Server OS) Windows (Desktop / Server) / UNIX (H. P. Unix, Sun Solaris, Linux, IBM AIX)

Computer Languages - 1st Generation Languages (Assembly), 2nd Generation (Fortran, Algol, Cobol), 3rd Generation (C, C++, C# and JAVA etc.) and 4th Generation Languages (Clipper, Power Builder, SQL etc.) and 5th Generation Languages (Logic Programming Languages)

Database Management System and Relational Database Management Systems (Oracle10g, MS SQL-2005, MySQL)

Application Servers (Oracle 10AS, BeWeblogic, WebSheare

) Web Servers (IIS, Apachi etc.)

Web Browsers (IE 7.0, Firefox etc.)

Application Software : Packaged Software, Custom built Software

etc. Computer Networks, Equipment & Data Communication:

Computer Networks : Network Layers, Topologies, Protocols, IP Address Mechanisms, LAN, WAN, VLAN, Intranet, Extranet, Internet,

Network Equipments : Cables (BNC, Twisted Pair, Fibre Optics), Connectors, I/Os, Patch Panel, Jack Panels, Network Racks.

Data Communication : CLL, Leased Lines, MPLS, VPNS, ISDN, Satellite Links, Wi Fi, Wi Max., Network / Security Equipments: Modems, Hubs, Switches, Bridges, Routers, Firewalls, NIDS, HIDS, IPS

### *Module - B : Systems and Design*

Systems Design & Analysis(Data modeling, Entity Relationships, Generic Data Modeling, Semantic Data modeling Normalization( from 1st to 3rd and BCNF, 4th & 5th level of normalization)

Software Development Life Cycle (SDLC) - Various phases of SDLC, In-house / Out-

sourcing, Software Project Management, Computer Aided Software Engineering (CASE)

Tools. System Architecture : Clients (Hardware / Software), Servers (Hardware / Software).

Client Server Architecture, 3 Tier Architecture, N-Tier Architecture etc.

Data Warehousing - Data Mining tools

MIS and Organization Support Systems - DSS, EIS, GDSS, Groupware and

Multimedia Business Intelligence - Expert Systems, Artificial Neural Networks (ANN)

Grid Computing, Virtualization and Consolidation.

### *Module - C : Applications in Banking*

Centralized Banking System / Core Banking System / System Administration, Database Administration, Application Server and Application Administration, Network Administration, Domains, ISPS, Hosting, Data Downloads / Uploads, Band widths, Data Centre, Data Storage Devices, Data Backups / Restoration, Disaster Recovery Centre

Delivery Channels - ATM, EFTPOS, Phone Banking, Internet Banking, SMS Banking,

Mobile Banking, Credit / Debit Cards, Smart Cards

E-Mails, SMS alerts

E-Commerce - Secure Electronic Transfer (SET), Payment Gateways (Credit card / Debit cards), Authentication of payments etc.

PKI - CCA, CA, RA, Digital Certificate, Digital Signature, Non-repudiation of Origin, Non-repudiation of Receipt.

Service - Level Agreement

### *Module - D : Security, Controls and Guidelines*

Threats to Information System : i) Physical (Insiders / outsiders) ii) Viruses, Worms, Trojan horse, Malwares, Software bombs, Phishing, Spoofing, Spamming, denial of service attacks etc.

Information System Security Measures, Policy, controls, ISO, 17799, BS7799, IS4477, IS Audit, BCP / DRP, IT Act 2000, Basel guidelines for E-banking, Various RBI Committee Reports on Information Systems.

*IT Service Delivery & Support* : Service level management practices, Operations management - work load scheduling, network services management, Preventive

maintenance, Systems performance monitoring process tools, techniques, Functionality of hardware, software, data base. Drafting of RFP, system specifications, SLAs, Capacity planning & monitoring, Change management processes / scheduled, emergency in configuration of production systems, application of patches, releases etc., Incident & problem management practices, System resiliency tools and techniques - fault tolerance, elimination of single point of failure, clustering.

## **Elective Paper - X : Treasury Management**

### *Module - A : An overview*

1. Financial markets
2. Treasury
  - Objectives of Treasury
  - Structure and organization
  - Functions of a Treasurer
  - Responsibility of a Treasurer

### *Module - B : Treasury operations*

1. Liquidity Management - CRR / CCIL / RTGS
  - Objectives, sources and deployment
  - Internal control, Netting
2. Cost centre / Profit centre, integrated treasury, Planning & control, Risk analysis
3. Treasury instruments

### *Module - C : Treasury & International Banking*

- Global scenario and treasury operations
- Exchange rate mechanism
- Dealing and trading operations : control and orderly conduct, moral and ethical codes, checks and balances
- Revaluation : Mark to market and profit calculations, VaR (Value at risk)
- Components of multi-currency balance sheet

### *Module - D : Risk Management*

- Treasury and investment policy
- Structure : Front office, Back office and Mid office
- Accounting, valuation and exposure norms
  - A. Role of information technology in treasury management
  - B. Regulation and compliance
  - C. Internal & External audit

## Elective Paper - XI : Risk Management

### Module - A : An overview

- a) Risk definition / policies
  - Risk Process-Risk Organization
  - Key risks-Credit risk, market risk, operational risk, liquidity risk, legal risk, interest rate risk and currency risk
- b) Asset Liability Management
  - ALM Concept
  - ALM organization
  - ALCO techniques / tools
  - Simulation, Gap, Duration analysis, Linear and other statistical methods of control
- c) Risk measurement & Control
  - Calculation
  - Risk exposure analysis
  - Risk management / mitigation policy
  - Risk immunization policy / strategy for fixing exposure limits
  - Risk management policy and procedure
  - Risk adjusted return on capital
  - Capital adequacy norms
- d) Risk management
  - Capital adequacy norms
  - Prudential norms
  - Exposure norms
  - Concept of Mid office
  - Forwards
  - Futures
  - Options
  - Strategies and Arbitrage opportunities
  - Regulatory prescriptions of risk management

### Module - B : Credit Risk Management

- Introduction
- Basel-I
- Three pillars of Basel-II and Capital for Operational risk
- Frame work for risk management
- RBI guidelines on risk management
- Risk rating and risk pricing
- Methods for estimating capital requirements
- Credit risk - standardized approach
- Credit risk - advanced approach
- Credit rating / credit scoring and rating system design
- Credit Bureaus
- Stress test and sensitivity analysis
- Internal Capital Adequacy Assessment Process (ICAAP)
- Introduction to structured products

### Module - C : Operational Risk

- Introduction, Basel-I & II
- RBI guidelines
- Likely forms of operational risk and causes for significant increase in operational risk
- Sound Principles of Operational Risk Management (SPOR)
- SPOR - organizational set up and key responsibilities of ORM
- SPOR - policy requirements and strategic approach for ORM
- SPOR identification, measurement, control / mitigation of operational risks
- Capital allocation for operational risk, methodology, qualifying criteria for banks for the adoption of the methods
- Computation of capital charge for operational risk

*Module - D : Market risk*

- Introduction and definition
- Prescriptions of Basel-I & II
- Liquidity risk
- Interest rate risk
- foreign exchange risk
- Price risk (Equity)
- Commodity risk
- Treatment of market risk under Basel
  - a) Standardized duration method
  - b) Internal measurement approach - VaR

*Module - E : Risk Organization and Policy*

- Risk Management Policy
- Inter - linkages to - Treasury
  - Credit
  - ALCO