



**Hindi Vidya Prachar Samiti's
Ramniranjan Jhunjhunwala College
of Arts, Science & Commerce
(Empowered Autonomous)**

**Affiliated to
UNIVERSITY OF MUMBAI**

**Syllabus for the T.Y.B.VOC F.M.S.
Program: BVOC.
Program Code: RJCUBVOC
National Education Policy (NEP 2020)
(CBCS 2025-2026)**

THE PREAMBLE

Why BVOC?

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF. The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs along with broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

B.VOC. in Financial Markets & Services is a 3-year undergraduate course in Financial Markets, divided across 6 semesters. Financial Markets are typically defined as having transparent pricing, regulations on trading, costs and fees, and market forces determining the prices of securities in trade. A Financial Market relates to a mechanism, which enables people to trade financial securities such as bonds, stocks, and commodities in the market. The course involves an advanced study of:

- ☐ Financial assets, markets, and institutions
- ☐ Debt & Equity markets
- ☐ Foreign exchange market and
- ☐ Financial Management
- ☐ Commodity & derivatives

Why BVOC at R J College?

The department of bvoc of R J College started in 2014-15, since then has remained as the centre of academic activities for the subject. Field trips, projects, hands on training sessions, lectures, , lecture-based learning, industry visits etc. motivate students to explore more in terms of applications of the subject. Under autonomy, the department has made curriculum more robust by incorporating skill-based learning and value added course that imparts practical knowledge of the subject to the students. The main objective of the course is to provide judicious mix of skills relating to a profession and appropriate content of General Education & to ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme. The programme relies on innovative learning methodologies, relevant Indian and global business research, strong industry linkages to provide a unique learning experience. The B.Voc(FMs) programme is a career oriented degree which provides foundation in various areas of trade, commerce and industry

PROGRAM OUTCOMES OF GENERAL UNDERGRADUATE DEGREE PROGRAMS

Students of all undergraduate degree programme at the time of graduation will be benefited will be able to

Critical Thinking

Comprehend the matter they come across and be capable to take a sound viewpoint about things which will highlight their intellectual acumen as well as enable them to look at the world through multiple lenses

Effective communication

Listen, speak, read and write. They should communicate properly by conveying their thoughts. They will use technology for communication. They will be able to network with people with all available channels. They will be developing communication skills in English, Hindi and a local language would be an added advantage.

Social Interaction

Respect each other and should be able to resolve conflicts and help in reaching amicable solution. They should be able to work in diverse teams. They should be able to distinguish when and what is socially acceptable.

Responsible citizen

Contribute to Nation development through social service. Being empathetic and sympathetic to fellow beings.

Honesty and Integrity, Ethics

Recognize different values and systems and respect them. In decision making moral values should be given prime importance.

Environmental and Sustainability

Environmental issues would be considered and problem solving with sustainable development would be chosen.

Life Long learning

Enjoy learning in every situation.

Programme Specific Outcome

Programme outcome refers to the overall characteristic an individual is supposed to acquire on the completion of the three year degree program in Bachelor of Vocation (B.Voc.). The knowledge and skills acquired, while pursuing the course is applicable beyond the discipline and also applicable in various practical aspects of life. After successful completion of the course, students will be able to enhance their

PO 1: Ability to integrate knowledge of Financial Markets gained during the curriculum to take practical decision.

PO 2: Perform a critical thinking analysis to make important strategic business decisions.

PO 3: Ability to use information and knowledge efficiently to safeguard smooth functioning of the organization.

PO 4: Engage in lifelong learning and continuing professional development.

PO 5: Analyse the global impact of business developments on individuals, organizations, and society.

PO 6: Develop ability to understand professionalism, ethics, law, security and social issues and responsibilities regarding to it.

PO 7: An ability to function effectively in teams and individually to accomplish a common goal.

PO 8: Understand complex compliances in the financial world in easier way through which student can achieve the desired results.

BVOC SUBJECTS

Semester V

Sr No	Course Code	Subjects	Credit	Topic
1	RJDSCBVOCFMS351	Financial Risk Management	4	1: Introduction to Financial Risk Management 2: Market Risk, Credit Risk, Operational and Liquidity Risk 3: Enterprise Risk Management & Regulatory Framework 4: Technological Innovations in Risk Management
2	RJDSCBVOCFMS352	Fixed Income Securities	4	1: Introduction to Fixed Income Markets 2: Bond Pricing and Fixed Income Risk Management 3: Government & Corporate Bonds and Securitization & Structured Finance 4: Innovations & Trends in Fixed Income Markets

Semester VI

Sr No	Course Code	Subjects	Credit	Topic
1	RJDSCBVOCFMS36 1	Global Financial Markets & Forex Management	4	1: Overview of Global Financial Markets 2: International Capital Flows & Instruments 3: Forex Markets and Exchange Rate Mechanisms 4: Forex Risk Management 5: Recent Trends & Case Studies
2	RJDSCBVOCFMS36 2	Advanced Equity Research & Valuation	4	1: Introduction to Equity Research 2: Fundamental Analysis AND Equity Valuation Techniques 3: Technical Analysis AND IPO Valuation & Market Sentiment 4: Report Writing & Presentation
3	RJDSCBVOCFMS36 3	Ethical Finance & Corporate Social Responsibility	2	1: Introduction to Ethics in Finance 2: Principles of Ethical Investment 3: Corporate Social Responsibility (CSR) Framework 4: Ethical Issues in Financial Markets

SEMESTER	:	V
TITLE OF THE SUBJECT /COURSE	:	Financial Risk Management
COURSE CODE	:	RJDSCBVOCFMS351
CREDITS	:	4
DURATION (Hours)	:	60

SYBMS	SEMESTER V
RJDSCBVOCFMS351 Financial Risk Management	Course Outcomes: 1. To Understand and Classify Financial Risks. 2. To Analyze and Apply Tools for Risk Measurement and Mitigation. 3. To Evaluate Enterprise Risk Management and Regulatory Frameworks. 4. To Explore Technological Advancements in Risk Management.

CO Nos.	On completing the course the student will be able to	PSO Addressed	Blooms Level
CO1	Understand the concept and classification of financial risks, Recognize the need and scope of risk management in businesses and Develop risk-conscious thinking in financial decision-making.	1,2,3,4	1,2,3
CO2	Analyze and classify different types of risks, Apply tools for measuring and mitigating key financial risks and Interpret risk scenarios and assess potential losses.	1,2,3,4	3,4,5
CO3	Understand how ERM provides a holistic approach to risk, Familiarize with global and Indian regulatory frameworks and Evaluate the organizational governance and compliance structure.	1,2,3,4	4,5,6
CO4	Explore how digital tools are transforming risk management, Apply technological insights to modern financial risk scenarios and Identify emerging risks in the digital financial landscape.	1,2,3,4	5,6

SEMESTER V		L	Cr
Subject: Financial Risk Management	Paper Code: RJDSCBVOCFMS351	60	4
UNIT I		10	
Introduction to Financial Risk Management			
Meaning and importance of risk in finance, Types of financial risks: Market, Credit, Operational, Liquidity, Risk vs. Uncertainty, Risk-return tradeoff and its implications, Role of financial risk management in corporate decision-making, Evolution of risk management practices globally and in India, Roles of Chief Risk Officer (CRO), Risk Committees, Tools and techniques for identifying financial risk			
UNIT II		20	

Market Risk, Credit Risk, Operational and Liquidity Risk		
Market Risk: Definition and types (Interest rate risk, Equity risk, Commodity risk, Currency risk), Tools to measure market risk: Value at Risk (VaR), Stress Testing, Sensitivity Analysis, Risk mitigation through derivatives (futures, options, swaps) Credit Risk: Meaning and types (Default risk, Counterparty risk, Concentration risk), Credit risk assessment and credit scoring, Basel Norms on credit risk, Use of credit derivatives: Credit Default Swaps (CDS) Operational Risk: Meaning, sources (internal/external), and impact, Operational risk indicators and loss data collection, Risk mitigation strategies (Insurance, Process control) Liquidity Risk: Types: Funding liquidity risk vs. Market liquidity risk, Liquidity ratios and gap analysis, Managing liquidity in banks and financial institutions		
UNIT III	15	
Enterprise Risk Management & Regulatory Framework		
Enterprise Risk Management (ERM): Concept and need for ERM, ERM frameworks: COSO and ISO 31000, Risk appetite, risk tolerance, and risk culture, Risk mapping and heat maps, Integrating risk management with strategic planning Regulatory Framework: Basel III guidelines overview, Role of SEBI, RBI in risk regulation, Credit rating agencies and their role in risk management, Corporate governance and risk oversight, Internal audit and compliance in risk control		
UNIT IV	10	
Technological Innovations in Risk Management		
Role of FinTech in risk identification and control; Use of Artificial Intelligence (AI) and Machine Learning (ML) in predictive risk analysis; Blockchain and its application in reducing transaction and settlement risk; Cybersecurity risks in financial institutions; InsurTech and innovations in managing operational and fraud risks; Use of data analytics in real-time risk monitoring; Regulatory Technology (RegTech) for compliance automation		

References:

1. **Financial Risk Management** by R. K. Arora **Publisher:** Wiley India
2. **Financial Risk Management** by Vivek P. N. Asthana **Publisher:** Himalaya Publishing House
3. **Credit Risk Management for Indian Banks** by B. V. Pathak **Publisher:** SAGE Publications
4. **Enterprise Risk Management** by A. V. Vedpuriswar **Publisher:** Vision Books
5. **Financial Risk Management** by Dr. J. V. Vaishampayan **Publisher:** Himalaya Publishing House

SEMESTER	:	V
TITLE OF THE SUBJECT /COURSE	:	Fixed Income Securities
COURSE CODE	:	RJDSCBVOCFMS352
CREDITS	:	4
DURATION (Hours)	:	60

SYBMS	SEMESTER V
RJDSCBVOCFMS352 Fixed Income Securities	Course Outcomes: 1. Understand the structure and classification of fixed income securities in financial markets 2. Analyze bond pricing mechanisms and manage associated risks effectively 3. Differentiate between government and corporate bonds, including securitization practices 4. Explore recent innovations and evolving trends in the fixed income market 5. Apply knowledge to practical scenarios involving fixed income investment decisions

CO Nos.	On completing the course the student will be able to	PSO Addressed	Blooms Level
CO1	Develop a clear understanding of the structure, types, and functioning of fixed income markets, particularly within the Indian financial system.	1,2,3,4	1,2,3
CO2	Acquire analytical skills to price bonds, understand yield calculations, and manage interest rate and credit risks using duration and hedging strategies.	1,2,3,4	3,4,5
CO3	Able to differentiate between government and corporate bonds and comprehend the process and risk management techniques related to securitization and structured finance.	1,2,3,4	4,5,6
CO4	Understand contemporary innovations in the fixed income sector, including new financial instruments and technology-driven changes.	1,2,3,4	5,6

SEMESTER V		L	Cr
Subject: Fixed Income Securities	Paper Code: RJDSCBVOCFMS352	60	4
UNIT I		15	
Introduction to Fixed Income Markets			
Definition and scope of fixed income securities; Features and characteristics: coupon, maturity, par value, yield; Types of fixed income securities- Government securities (G-Secs, T-bills, Bonds); Corporate bonds (Debentures, Convertible Bonds, Zero-Coupon Bonds); Municipal bonds, Mortgage-backed securities (MBS), Asset-backed securities (ABS); Market participants: investors, issuers, brokers, regulators; Primary and secondary fixed income markets; Fixed income trading platforms: NDS-OM, CCIL			
UNIT II		15	

Bond Pricing and Fixed Income Risk Management		
Bond Pricing: Time value of money concepts; Price-Yield relationship; Yield to Maturity (YTM), Yield to Call (YTC), Yield to Worst (YTW); Pricing of zero-coupon and coupon-bearing bonds; Duration and convexity: measurement and interpretation; Modified duration and Macaulay duration Fixed Income Risk Management: Interest rate risk, credit risk, reinvestment risk, liquidity risk; Credit rating and default risk: Role of CRISIL, ICRA, CARE; Immunization strategies and interest rate swaps; Hedging with interest rate futures and derivatives		
UNIT III	15	
Government & Corporate Bonds and Securitization & Structured Finance		
Government Bonds: G-Sec issuance process by RBI; T-Bills and their role in liquidity management; Sovereign Yield Curve and bond auctions Corporate Bonds: Credit spreads and factors affecting corporate bond yields; Debenture Trustee roles and covenants; Credit enhancements and bond insurance Securitization & Structured Finance: Concept and process of securitization; Mortgage-backed securities (MBS) and asset-backed securities (ABS); Collateralized Debt Obligations (CDOs); Legal framework and accounting standards related to securitization; Case studies: IL&FS and DHFL bond defaults		
UNIT IV	15	
Innovations & Trends in Fixed Income Markets		
Recent trends: Green bonds, Social impact bonds, Masala bonds; Inflation-linked bonds (ILBs) and perpetual bonds; Sukuk (Islamic bonds) in the Indian context; Technological advancements: Blockchain in bond issuance; Emerging market debt instruments; Impact of monetary policy changes on fixed income securities; Recent RBI policies affecting fixed income markets		

References:

1. Fixed Income Securities – *Sunil Parameswaran*- McGraw Hill Education
2. Fixed Income Securities and Derivatives – *Moorad Choudhry*- Elsevier
3. Investment Analysis and Portfolio Management – *Prasanna Chandra*- Tata McGraw Hill
4. Financial Markets and Institutions – *L. M. Bhole & Jitendra Mahakud*- Tata McGraw Hill
5. Fixed Income Markets and Their Derivatives – *Suresh Sundaresan*- Academic Press

SEMESTER VI

SEMESTER	:	VI
TITLE OF THE SUBJECT /COURSE	:	Global Financial Markets & Forex Management
COURSE CODE	:	RJDSCBVOCFMS361
CREDITS	:	4
DURATION (Hours)	:	60

SYBMS	SEMESTER VI
RJDSCBVOCFMS361 Global Financial Markets & Forex Management	Course Outcomes: 1. Explain the structure and function of global financial markets 2. Assess the nature and tools of international capital flows and investments 3. Interpret forex quotes and analyze exchange rate dynamics 4. Recommend appropriate hedging tools to manage forex risks& critically evaluate contemporary trends and issues in global financial and forex markets.

CO Nos.	On completing the course the student will be able to	PSO Addressed	Blooms Level
CO1	Understand the components, functioning, and global interlinkages of financial markets.	1,2,3	1,2,3
CO2	Understand the dynamics of international capital flows and the tools available for cross-border financing.	1,2,3	3,4
CO3	How forex markets operate, how currencies are quoted, and how exchange rates are determined.	1,2,3	3,4
CO4	Identify forex risks and recommend suitable hedging strategies using derivatives and analyze emerging trends and critically evaluate real-world scenarios related to forex and international finance.	1,2,3	5,6

SEMESTER VI		L	Cr
Subject:	Paper Code:	60	4
UNIT I		12	
Overview of Global Financial Markets			
Introduction to global financial systems; Classification: Money Market, Capital Market, Derivatives Market; Role of major international institutions: IMF, World Bank, BIS; Major global financial centers: New York, London, Tokyo, Hong Kong; Role of central banks in global liquidity; Linkage of Indian financial markets with global markets			
UNIT II		12	
International Capital Flows & Instruments			

Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI); External Commercial Borrowings (ECBs), Eurobonds, and Depository Receipts (ADRs/GDRs); Capital account convertibility; Factors affecting capital flows: interest rate differentials, macroeconomic stability; India's capital inflow policies and regulatory bodies (RBI, SEBI); Role of sovereign ratings and global investors		
UNIT III	12	
Forex Markets and Exchange Rate Mechanisms		
Forex market structure and participants; Spot, forward, swap, futures, and options in forex; Quoting conventions: direct, indirect, cross rates, and arbitrage; Exchange rate regimes: fixed, floating, managed float; Factors influencing exchange rates: inflation, interest rate parity, purchasing power parity; Indian rupee exchange rate policy		
UNIT IV	12	
Forex Risk Management		
Types of forex risk: transaction, translation, and economic; Measuring exposure and assessing impact; Hedging tools: forward contracts, futures, options, swaps; Speculation vs. hedging in forex; RBI regulations on foreign exchange management		
UNIT V	12	
Recent Trends & Case Studies		
Trends in forex reserves, capital flows, and currency volatility; Case study- Asian currency crisis, 2008 global crisis, COVID-19 impact on forex markets; GIFT City and India's role as a global financial hub; Use of technology in forex trading (AI, blockchain, algo trading); Cryptocurrency and central bank digital currencies (CBDCs); Role of fintech in international currency transfers		

References:

1. **International Financial Management** – *P. G. Apte*– Tata McGraw Hill
2. **Forex Management** – *A. V. Rajwade*– Tata McGraw Hill
3. **International Financial Management** – *V. A. Avadhani*– Himalaya Publishing House
4. **Global Financial Markets and Institutions** – *N. D. Vohra*– McGraw Hill Education
5. **Financial Management: Theory and Practice** – *I. M. Pandey*– Vikas Publishing House

SEMESTER	:	VI
TITLE OF THE SUBJECT /COURSE	:	Advanced Equity Research & Valuation
COURSE CODE	:	RJDSCBVOCFMS362
CREDITS	:	4
DURATION (Hours)	:	60

SYBMS	SEMESTER VI
RJDSCBVOCFMS362 Advanced Equity Research & Valuation	Course Outcomes: 1. Understand the process and tools used in equity research 2. Perform fundamental and financial analysis for equity valuation 3. Apply technical indicators and market sentiment tools to analyze stocks 4. Evaluate and value IPOs based on prospectus and market data and Prepare and present a professional equity research report with justified recommendations

CO Nos.	On completing the course the student will be able to	PSO Addressed	Blooms Level
CO1	understand the process, purpose, and tools of equity research, and how analysts contribute to investment decisions.	1,2,3	1,2,3
CO2	gain hands-on skills in assessing company performance and estimating the fair value of stocks using various models.	1,2,3	3,4
CO3	evaluate short-term price trends using technical tools and assess IPO opportunities and market moods.	1,2,3	3,4
CO4	develop skills in writing professional-grade equity reports and presenting findings to stakeholders using analytical justification.	1,2,3	5,6

SEMESTER VI		L	Cr
Subject: Advanced Equity Research & Valuation	Paper Code: RJDSCBVOCFMS362		
UNIT I		12	
Introduction to Equity Research			
Definition and scope of equity research; Equity research process and objectives; Buy-side vs. Sell-side research; Sources of information: primary and secondary; Role of equity analysts; Industry overview and sectoral research basics; Use of financial portals, stock screeners, and databases			
UNIT II		18	
Fundamental Analysis & Equity Valuation Techniques			
Fundamental Analysis: Company analysis: Business model, SWOT, competitive advantage; Financial statement analysis: P&L, Balance Sheet, Cash Flow; Ratio analysis: Liquidity, profitability, leverage, valuation; Management quality and corporate governance analysis			

Equity Valuation Techniques: Intrinsic vs. relative valuation; Dividend Discount Model (DDM); Discounted Cash Flow (DCF) model; Relative valuation: P/E, P/BV, EV/EBITDA, PEG Ratio; Sensitivity analysis and scenario building		
UNIT III	15	
Technical Analysis, IPO Valuation & Market Sentiment		
Technical Analysis: Basics of price charts: candlestick, line, bar charts; Trend analysis, support and resistance; Technical indicators: RSI, MACD, Bollinger Bands; Moving averages and chart patterns IPO Valuation & Market Sentiment: IPO pricing mechanisms: Fixed price, book-building; Grey market premium, listing gain analysis; IPO prospectus analysis; Sentiment indicators and behavioral aspects in equity pricing		
UNIT IV	15	
Report Writing & Presentation		
Elements of an equity research report: Executive summary, investment thesis, risk factors; Formatting and structure of a professional research report; Use of data visualization tools (charts, ratios, graphs); Citing sources and disclaimers; Peer review and ethical practices; Presenting investment recommendations with confidence		

References:

1. **Equity Research and Valuation** – *S. R. Vishwanath*– PHI Learning
2. **Investment Analysis and Portfolio Management** – *Prasanna Chandra*– Tata McGraw Hill
3. **Security Analysis and Portfolio Management** – *Punithavathy Pandian*– Vikas Publishing
4. **Fundamental Analysis for Investors** – *Raghu Palat*– Vision Books
5. **Technical Analysis Explained** – *M. H. Ranganathan & L. Madhumathi*– Pearson Education

SEMESTER	:	VI
TITLE OF THE SUBJECT /COURSE	:	Ethical Finance & Corporate Social Responsibility
COURSE CODE	:	RJDSCBVOCFMS363
CREDITS	:	2
DURATION (Hours)	:	30

SYBMS	SEMESTER VI
RJDSCBVOCFMS363 Ethical Finance & Corporate Social Responsibility	Course Outcomes: 1. Explain the significance of ethics and ethical conduct in financial decision-making 2. Evaluate investment opportunities from an ESG and ethical lens 3. Interpret CSR laws and assess real-world CSR practices of Indian companies 4. Analyze ethical issues and misconduct in financial markets with the help of case studies

CO Nos.	On completing the course the student will be able to	PSO Addressed	Blooms Level
CO1	develop an understanding of the ethical foundation of financial decision-making and recognize how ethical lapses affect institutions and society.	1,2,3	1,2,3
CO2	earn the rationale, tools, and challenges of ethical and responsible investing, particularly in the Indian context.	1,2,3	3,4
CO3	interpret legal CSR obligations, evaluate corporate CSR strategies, and assess their impact on stakeholders.	1,2,3	3,4
CO4	critically assess ethical risks in various financial sectors and understand the role of regulators and governance in preventing misconduct.	1,2,3	5,6

SEMESTER VI		L	Cr
Subject: Ethical Finance & Corporate Social Responsibility	Paper Code: RJDSCBVOCFMS363	30	2
UNIT I		8	
Introduction to Ethics in Finance			
Definition and importance of ethics in finance; Ethical principles: honesty, integrity, fairness, accountability; Ethical dilemmas in financial decision-making; Stakeholder vs. shareholder approach; Codes of conduct in finance (SEBI, RBI, CFA Institute); Ethical violations: scams, insider trading, misreporting of financials			
UNIT II		7	
Principles of Ethical Investment			
Concept of Ethical Investment and ESG (Environmental, Social, Governance); Socially Responsible Investing (SRI) vs. Traditional Investing; Screening methods: positive,			

negative, and exclusionary; Role of ESG ratings and agencies in India; Green finance and sustainable bonds; Ethical fund performance and challenges		
UNIT III	8	
Corporate Social Responsibility (CSR) Framework		
Concept and evolution of CSR; CSR under Companies Act, 2013 – Section 135; CSR expenditure rules and governance; CSR policy formulation and reporting; CSR vs. corporate philanthropy; Case studies of CSR practices in Indian corporates (e.g., Tata, Infosys, ITC)		
UNIT IV	7	
Ethical Issues in Financial Markets		
Ethical challenges in stock markets, mutual funds, and banking; Insider trading, front-running, misrepresentation, churning; Role of whistleblowers and financial journalism; Case studies: Harshad Mehta scam, Satyam fraud, DHFL crisis; Regulatory safeguards by SEBI and RBI; Ethical risk management and corporate governance		

References:

1. **Business Ethics and Corporate Social Responsibility** – C. S. V. Murthy– Himalaya Publishing House
2. **Ethics in Finance** – John R. Boatright, adapted by P. K. Pandey– Pearson (Indian adaptation)
3. **Corporate Governance, Ethics and CSR** – A. C. Fernando– Pearson Education India
4. **Corporate Social Responsibility: Concepts and Cases – The Indian Experience** – C. V. Baxi and Ajit Prasad– Excel Books

EVALUATION AND ASSESSMENT
EVALUATION METHOD

Internal Assessment

1. Major Courses: 25 Marks & all other Courses except Co-Curricular Course: 20 Marks

2. **Mode of Evaluation:**

- Presentation (Group wise 10 min each group; criteria for marking: On the basis of Presentation skills, Communication, PPT file, Attire, Report)
- Written (Duration: 30 Min)
- Lab Practical (Duration: 30 Min)
- Assignment (Hand Written/Typed)

Written Question Paper Pattern
Internal Assessment

Marks: 20

Duration: 30 min

Q.1) Multiple choice questions. (1 marks each)

(05 Marks)

- 1.
- 2.
- 3.
- 4.
- 5.

Q.2) Explain the following concepts. (1 marks each)

(05 Marks)

- 1.
- 2.
- 3.
- 4.
- 5.

Q.3) Answer the questions. (Any TWO)

(10 Marks)

- 1.
- 2.
- 3.

Semester End Exam

Marks: 30

Duration: 1 Hr

Q.1) Answer the question.

(10 Marks)

OR

Q.1) Answer the question.

(10 Marks)

Q.2) Answer the question.

(10 Marks)

OR

Q.2) Answer the question.

(10 Marks)

Q.3) Answer the question.

(10 Marks)

OR

Q.3) Answer the question.

(10 Marks)

Semester End Exam

Marks: 60

Duration: 2 Hrs

Q.1) Answer the question.		(10 Marks)
	OR	
Q.1) Answer the question.		(10 Marks)
Q.2) Answer the question.		(10 Marks)
	OR	
Q.2) Answer the question.		(10 Marks)
Q.3) Answer the question.		(10 Marks)
	OR	
Q.3) Answer the question.		(10 Marks)
Q.4) Answer the question.		(10 Marks)
	OR	
Q.4) Answer the question.		(10 Marks)
Q.5) Answer the question.		(10 Marks)
	OR	
Q.5) Answer the question.		(10 Marks)
Q.6) Answer the question.		(10 Marks)