

# **Bachelor of Business Management**

(Semester Scheme, 3 years Degree Course)

1. **Eligibility for Admission:**

A candidate passing Senior Secondary Examination (10+2) from Board of Secondary Education Rajasthan or equivalent, securing at least 48 per cent marks in aggregate shall be eligible for admission to the BBM Programme through Entrance Test.

2. **Course of study:**

Structure of course of study covered shall be as follows:

<b>Semester-I</b>	<b>Paper No.</b>	<b>Title</b>
	101	Principles of Management
	102	Business Communication and Soft Skills
	103	Financial Accounting
	104	Business Mathematics
	105	Economic Environment of Business

  

<b>Semester-II</b>	<b>Paper No.</b>	<b>Title</b>
	201	Business Regulatory Frame Work
	202	Business Statistics
	203	Managerial Economics
	204	Office Management & Automation
	205	Cost Accounting
	206	General Hindi

  

<b>Semester-III</b>	<b>Paper No.</b>	<b>Title</b>
	301	Corporate Accounting
	302	Entrepreneurship Development
	303	Indian Financial System
	304	International Trade and Finance
	305	Income Tax

  

<b>Semester-IV</b>	<b>Paper No.</b>	<b>Title</b>
	401	Organisational Behaviour
	402	Research Methodology
	403	E-Commerce
	404	Financial Management
	405	General English
	406	Comprehensive Viva

  

<b>Semester-V</b>	<b>Paper No.</b>	<b>Title</b>
	501	Production Management
	502	Auditing
	503	Human Resource Management
	504	Project Management
	505	Accounting for Managers

  

<b>Semester-VI</b>	<b>Paper No.</b>	<b>Title</b>
	601	Banking Law and Practices in India
	602	Company Law & Secretarial Practice
	603	Marketing Management
	604	Operation Research
	605	Project and Viva-Voce
	606	Environmental Studies

3. **Attendance**

A candidate shall be required to attend minimum 75% of the classes held in each paper including the tutorials and practicals, if any. A candidate failing to satisfy the above mentioned requirement of attendance in one or more papers shall be detained from appearing at the examination.

4. **Medium**

Medium of instruction and examination shall be English.

5. **Scheme of Examination**

Each paper shall have maximum marks as 100, to be evaluated both internally and externally. Distribution of marks paper-wise shall be as follows:

* For paper No. 605	100 marks External Examination
* For remaining papers	25 marks Internal Assessment 75 marks External Examination

External examinations shall be held at the end of each semester preferably during December and May. The pattern of question paper in external examination shall be as follows:

Q. No. 1	Containing 10 questions	max. 20 words for each answer
Q. No. 2 to Q. No. 6	Two questions from each unit, any one to be attempted from each unit	max. 250 words for each answer
Q. No. 7 to Q. No. 10	One question each from any four units, any two questions to be attempted	max 500 words for each answer

Minimum pass percentage in individual papers shall be 40, and in aggregate 50 in each Semester.

6. **Use of Calculators.**

Candidates shall be permitted to use simple battery operated 12 digit 2 memory 6 functions noiseless and cordless calculators during examination.

7. **Project Report and Viva Voce:**

Paper No. 605 (Project Report and Viva Voce) shall be examined by a Board appointed by the University at its own level centrally on the basis of Summer Training. Students will complete their summer training programme in the IV and V Semesters as per his convenient during vacations and will submit certificate provided by institutions or companies where they have performed the summer training.

# DETAILED COURSE CONTENTS

## 101 : Principles of Management

1. Nature of Management-Nature, Importance, Functions of management roles of manager, Development of Management Thoughts.
2. Planning: Nature, importance, type, steps, limitations. Decision Making, strategy & strategic formulation, Components & process types of start. Management by objectives and overview.
3. Organizing: Concept, Nature, Process, Purpose and Significance Authority and Responsibility. Delegation of Authority, Centralization and Decentralization, Departmentalisation, bases of Departmentalisation.
4. Staffing & Directing: Meaning and importance of recruitment and selection, training and development. Motivation-meaning & nature. Leadership-meaning and styles communication-nature, process and barriers.
5. Control: Concept and process. Effective control system, Techniques-traditional and modern.

### Suggested Readings:

1. Ansoff H. I: Corporate Strategy: McGraw Hill, New York..
2. Drucker Peter F: Management Challenges for the 21<sup>st</sup> Century; Butterworth Heinemann, Oxford.
3. Fred Luthans: Organizational Behaviour; McGraw Hill, New York.
4. Hampton, David R: Modern management; McGraw Hill, New York.
5. Hersey Paul and Blanchard Kenneth: Management of Organizational Behaviour - Utilizing the Human Resources: Prentice Hall of India, New Delhi.
6. Ibancevish J. M. and Matleson M.T: Organizational Behaviour & Management; Irwin Homewood, Illionis.
7. Louis A. Allen: Management and Organisation; McGraw Hill, New York.
8. Maslow Abraham: Motivation and Personality; Harper & Row, New York, 1954.
9. Stoner and Freeman: Management: Prentice-Hall, New Delhi.
10. Weihrich and Koontz, et al: Essentials of Management; Tata McGraw Hill, New Delhi.

## 102 : Business Communication & Soft Skills

1. Business Communication: Meaning, Definition, Features Scope, Process and Importance of Business Communication. Essentials of affective Communication-7 Cs of Communications, Types of Communication & Barriers to Communication with suggestion to overcome barriers.
2. Writing & Oratory Skills: Audience Analysis: Writing Communication-merits, demerits, types of written communication. Planning and writing Business message. Report Writing and essentials of good reporting.  
  
Oratory Skills: Affective Oral Communication points for Consideration. Presentation Skills- using audio-visual aids.
3. Preparing CV and interview Skills: Preparing CV-Type o& forms of D.V. Guidelines for Drafting C.V. , Job Applications its types, forms and Contents.  
  
Interview: Preparing for interview-guidelines to interviewee and interviewer. Conducting & facing interviews. Mock Interview & GD
4. Body Language & Mannerism: Body language-Postures, Positive body Language moves, Gestures & Expression. Do's & Don'ts. Mannerism-Table manners & etiquettes, phone & internet manners.
5. Soft Skills: Analytical skills, working in team, initiative & leadership skills, stress and anger management, time management skills and banning the skills through management games & fricative.

### Suggested Readings:

1. Alter Peasee -Body Language
2. Asha Kaul- Business Communication
3. Bovee- Business Communication
4. Chundawat, Khicha & Jain Business Communication
5. Jennifer & Mike Rotondo- Presentation Skills for Managers
6. Lesiker Petit- Business Communication
7. M.J. Mathews- Business Communication
8. MA RizVI- Effective Technical Communication

### 103 : Financial Accounting

1. Meaning and Scope of Accounting: Need, development, and definition of accounting; Book-keeping and accounting; Persons interested in accounting; Branches of accounting; Objectives of accounting.  
Accounting Principles: Accounting standards in India. (Setting Process, names).  
Accounting Transactions: Accounting Cycle: Journal: Rules of debit and credit: Compound Journal entry; Opening entry; Relationship between journal and ledger; Rules regarding posting; Trial balance; Sub division of journal and preparation of final accounting.
2. Capital and Revenue: Classification of Income; Classification of expenditure: Classification of receipts.  
Final accounts; Manufacturing account; Trading account; Profit and loss account; Balance sheet; Adjustment entries.  
Rectification of errors: Classification of errors; Location of errors and their rectification, Suspense account; Effect on profit.
3. Depreciation Provisions and Reserves: Concept of depreciation; Elementary knowledge of AS-6 Causes of depreciation; Depreciation, depletion, amortization, Methods of Accounting for depreciation; SLM, WDV, Annuity Method and S.F. Method.  
Sectional Balancing System: Self Balancing System, including rectification of errors.
4. Special Accounting Areas: Consignment Accounts: Important terms; Accounting records; Valuation of unsold stock and treatment of Losses.  
Joint Venture Accounts:  
  
Insurance claims; Fire Insurance claim for loss of stock and loss of profit.
5. Partnership Accounts: Essential characteristics of partnership; Partnership deed; Final accounts; Adjustments after closing the accounts; Fixed and fluctuating capital; Goodwill; Joint Life Policy; Change in Profit sharing Ratio.  
Reconstitution of a partnership firm Admission of a partner; Retirement of a partner; Death of a partner; Dissolution of a partnership firm-Modes of dissolution of a firm; Insolvency of partners; Sales of firm to a company; Gradual realization of assets and piecemeal distribution.

#### Suggested Readings:

1. Agarwal A. N., Agarwal K. N.: Higher Sciences of Accountancy: Kitab Mahal, Allahabad.
2. Anthony, R. N. and Reece, J. S. : Accounting Principles: Richard Irwin Inc.
3. Compendium of Statement and Standards of Accounting: The Institute of Chartered Accountants of India, New Delhi.
4. Gupta, R. L. and Radhaswamy, M : Financial Accounting; Sultan Chand and Sons, New Delhi.
5. Monga J. R., Ahuja Girish, and Sehgal Ashok : Financial Accounting; Mayur Paper Bock, Noida.
6. Shukla, M. C., Grewal T.S., and Gupta, S.C.: Advanced Accounts; S. Chand & Co. New Delhi.

## 104 : Business Mathematics

1. Arithmetic, Geometric and Harmonic Progressions including series. Permutation and Combination.
2. Matrices and Determinants: Types of Matrices, Addition, Subtraction multiplication of Matrices. Determinants of order two and three. Matrix inversion, solution of systems of linear equations by matrix inversion as well as pivotal method.
3. Logarithms:  
Differential Calculus: Functions (Algebraic and Simple Trigonometric) Limits, Continuity, differentiability. derivatives by the first principle.
4. Differentiation of Simple cases and standard forms. Successive differentiation Maxima and Minima of functions upto second order Applications of Maxima and Minima in Business problems.
5. Integral Calculus: Integration of some standard forms. Integration by substitution, by parts and by partial fraction. Definite integrals under some standard forms.

### Suggested Readings:

1. Gorakh Prashad: Text book on Differential Calculus, Pothishala Private Limited, Allahabad.
2. Gorakh Prashad: Text book on Integral Calculus, Pothishala Private Limited, Allahabad.
3. Saha S.: Business Mathematics, New Central Book Agency, Calcutta.
4. Sancheti D.C. and Kapoor V.K.: Business Mathematics, Sultan Chand & Sons, New Delhi.
5. Shanti Narayan: A Text Book of Matrices, S.Chand & Co. New Delhi.

## **105 : Economic Environment of Business**

1. Business environment: Definition, components of environment, External Environment-Social, Economic & Political environment, Regulatory environment, Market environment Technological environment: Internal environment Economic system: Capitalism, socialism & Mixed economy, Economic role of Government.
2. National Income: Concept and measurement (GND, GDP, NNP, NI etc) India's national Income estimation, growth and structure, problems in estimating national income (Specially in Under developed economies like India)
3. Indian Economy: Basic characteristics, Profile of Agriculture-Importance, production and productivity problems of agriculture Sector, Agriculture policy. Industrial profile, role and pattern of industrialization, public and private sector, industrial sickness.
4. Economic policies:- Monetary policy & fiscal policy- objectives, tools and implications, Economic reforms- Policy of liberalization, privatization and globalization-concept & critical appraisal.
5. Foreign Trade: Growth, trend and composition of exports and import balance of trade & balance of payment (Elementary concepts), Foreign trade policy & WTO, Globalization & Role of foreign capital.

### **Suggested Readings:**

1. Agrawal Raj & Diwan Parag: Business Environment, Excel Books
2. Fancies Cherunilum: Business Environment, (Himalaya Publication)
3. Ghosh, Biswanath: Economic environment of Business; (Vikas publication (P) Ltd.)
4. Mishra & Puri: Economics environment of Business
5. Mukherji, Sampat Economics Environment of Business, New Central Books Agency (P) Ltd. Kolkata

## **201 : Business Regulatory Framework**

1. Law of contract (1872): Nature of Contract; Classification; Offer and acceptance; Capacity of Parties of contract, Free consent; Consideration. Legality of Object: Agreement declared void.
2. Special Contracts: Indemnity, Guarantee; bailment, Pledge.
3. Sale of Goods Act 1930: Formation of Contract of sale; Goods and their classification, conditions and Warranties. Transfer of Property in goods.
4. The consumer Protection Act 1986: Salient Features: overview of consumer Redressal machinery.  
  
Foreign Exchange management act 2002: Definition and main provisions.
5. Factories Act, 1948: main provisions.

### **Suggested Readings:**

1. Chandha P. R.: Business Law: Galgotia. New Delhi
2. Desai T. R.: Indian Contract Act, Sales of Goods Act and Partnership Act; S.C. Sarkar & Sons Pvt. Ltd., Kolkata.
3. Kapoor N. D; Business law; Sultan Chand & Sons, New Delhi.
4. Khergamwala J. S.: Negotiable Instruments Act: N. M. Tripathi Pvt. Ld. Mumbai.
5. Kuchal M. C: Business Law; Vikas Publishing House, New Delhi.
6. Singh Avtar The Principles of Mercantile law; Eastern Book Company, Lucknow.

## 202 : Business Statistics

1. Statistics: Meaning, Definition, Importance with reference to Business and Management, Statistical Investigation, Collection of Data. Classification and Tabulation of Data: Measures of central tendency: Median, Mode, A.M., G.M, H.M. and Weighted Means. Partition values.
2. Measures of Dispersion: Ranges, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of variation, Lorenz curve. Skewness: Karl Pearson's and Bowley's measures. Interpolation and Extrapolation: Binomial Expansion, Newton's forward and backward Interpolation formula and Lagrange's methods.
3. Correlation & Regression: Bivariate Linear correlation & Regression from grouped & ungrouped data. Probable error, Coefficient of determination & non-determination. Spearman Rank correlation. Association of Attributes: Two Attributes.
4. Index Number: Concept, Utility, methods of construction-aggregate, price relative & chain base methods. Cost of living index number, requisites of an ideal index number. Base shifting, splicing & deflating. Analysis of Time Series: Trend, Seasonal variations.
5. Probability: Fundamental concepts. Addition, Multiplication and conditional laws of Probability. Bayes Rule. Mathematical Expectation. Elements of Theoretical distributions- Binomial, Poisson and Normal distributions with their properties and applications.

### Suggested Readings:

1. Gupta S. P. : Statistical Methods, Sultan Chand & Sons, N. Delhi.
2. Gupta B. N.: Statistics
3. Gupta S. C. and Gupta Indira: Business Statistics, Himalaya Publishing House, Mumbai.
4. Hoel & Jessen: Basic Statistics for Business and Economics; John Wiley and Sons, New York.
5. Hooda, R.P.: Statistics for Business and Economics; Macmillan, New Delhi.
6. Lewin and Rubin: Statistics for Management; Prentice-Hall, New Hall.
7. Sancheti, D.C. and Kapoor V. K. : Statistics (Theory, Methods and Applications) Sultan Chand and Sons Delhi:
8. Ya-Lun Chou: Statistical Analysis with Business and Economic Applications, Holt; Rinehart & Winster, New York

## 203 Managerial Economics

1. Introduction; Economics - Definition, Contents, Fundamental problems of an economy, Micro and Macro Analysis, Managerial Economics - Meaning Nature and scope, techniques of analysis in managerial economics - opportunity cost, Discounting, marginal cost, incremental cost and Time perspective; Objectives of the firm - profit Maximisation, Firms' value Maximisation, Size maximisation.
2. Demand Analysis : Demand ; Definition, factors determining demand, demand law, ordinal and cardinal concepts of consumer behaviour, Price effect, Income effect, substitution effect, elasticity of demand, elasticity and nature of commodity. Types of demand - Direct and indirect demand, Derived and autonomous demand, demand for durables and non-durables, firm and industry demand, Total market and market segment, Demand forecasting - meaning and techniques.
3. Production and cost Analysis - Production function, returns to a factor, returns to scale, isoquants least cost combination of inputs, economies and diseconomies of scale. Cost concepts, Short run and Long-run Cost-output relationship, Break-even Analysis.
4. Market Analysis : Characteristics of different types of markets, Price and output decision under perfect competition, monopoly, monopolistic competition and oligopoly (kinked demand model, Cournot's model, cartel and collusion, Price leadership).
5. Product Pricing & Factor Pricing : Product pricing - Pricing methods, product line pricing, specific pricing problems; factor pricing - marginal productivity theory of factor pricing, Modern theory of wages & rent, Liquidity preference theory of interest.

### Suggested Readings:

1. Ahuja H. L.: Business Economics; S. Chand & Co., New Delhi.
2. Dwivedi D.N.: Managerial Economics
3. Ferguson P. R. and Rothschild R., and Ferguson G. J.: Business Economics; Macmillan, Hampshire.
4. Koutsoyianni A. : Modern Microeconomics; Macmillan, New Delhi.
5. Maheshwari Yogesh : Managerial Economics
6. Nellis & Parker: The Essence of Business Economics; Prentice Hall, New Delhi.
7. Peterson & Lewis: Managerial Economics; (Prentice Hall)
8. Varshney & Maheshwari : Managerial Economics

## **204-Office Management and Automation**

1. Office management: Meaning, Definition, Function and Importance of Office Management. An Introduction to office department, tools, equipments. Filing and filing process.
2. Introduction to basic computing: Input, Output device, Various part of Computer. Understanding operating system. Windows/XP/Vista.
3. Word Processing, working in worksheet-MS-Excel, working with MS Power Point. Data Base Management.
4. Exploring Internet: E-Mail-Complete understanding and drafting, sending & receiving e-mail. Search engines, blogspost social networking site.
5. MIS: Meaning, concept, scope importance & functions. Understanding of decision support system, tools & techniques An introduction to e-governance.

### **Suggested Readings:**

1. MIS-D.P. Goyal
2. O Level IT tools & Bus system- Module I satish Jain BTB Publication.
3. P.C. Software for window- R.K. Taxai, Tata McGraw
4. Professional office Procedures- Susan H. Cooperman, Prentice Hall
5. Technology & Procedures for administrative Pwtessionals- Patsy Fulton-Calkias, Thomsonleain.

## 205 : Cost Accounting

1. Introduction: Nature and scope of cost accounting; Cost concepts and classification; Methods and techniques; Installation of costing system.  
Accounting for Material: Material control; Concept and techniques; Pricing of material issues; Treatment of material losses.
2. Accounting for Labour: Labour cost control procedure; Labour turnover; Idle time and overtime; Methods of wage payment-time and piece rates; Incentive schemes. (Individual and group both)  
Accounting for Overheads: Classification and departmentalization; Absorption of overheads; Determination of overhead rates; Under and over absorption, and its treatment. Concept of Activity Based Costing.
3. Methods of Costing: Unit costing; Job, and contract costing; Operating costing; Process costing- including, Valuation of WEP inter process profits, and joint and by-products.
4. Budgeting and budgetary control System: Essentials of Effective System, Installation of Budgetary Control System, Operating and Flexible Budgets and Master Budget, Different Philosophies: Programme Budgeting performance budgeting and Zero Base Budgeting, Preparation of functional budgets, master budget and cash budget.
5. Marginal Costing: including decision Making, Standard Costing including calculation of Material, labour and overhead variances.

### Suggested Readings:

1. Anthony Robgert, Ree-ce, et al: Principles of Management Accounting: Richard D. Irwin Inc. Illinois.
2. Arora M. N: Cost Accounting- Principles and Practice; Vikas, New Delhi.
3. Horngren, Charles, Foster and Datar: Cost Accounting-A Managerial Emphasis: Prentice-Hall of India, New Delhi.
4. Jain S.P. and Narang K. L : Cost Accounting; Kalyani, New Delhi.
5. Kaplan R.S. and Atkinson A. A.: Advanced Management Accounting; Prentice India International.
6. Khan M. Y and Jain P. K: Management Accounting; Tata McGraw Hill.
7. Tulsian P.C: Practical Costing; Vikas, New Delhi.

1. "गद्य वीथी" पुस्तक से संक्षेपण एवं 'कथादशक' पुस्तक से पल्लवन संबंधी ज्ञान।  
दोनों पुस्तकों से सामान्य तथ्यात्मक प्रश्नों का ज्ञान।
2. शब्द ज्ञान  
शब्द पर्याय और विलोम शब्दों का ज्ञान  
अनेकार्थी एवं समश्रुत शब्दों का ज्ञान
3. पत्र लेखन और पत्रों के प्रकार सम्बन्धी ज्ञान  
अंग्रेजी से हिन्दी अनुवाद का ज्ञान  
हिन्दी में पदनाम संबंधी ज्ञान (अंग्रेजी से हिन्दी पदनाम)
4. मुहावरे-लोकोक्तियां  
शब्द-शुद्धि और वाक्य-शुद्धि  
पारिभाषिक शब्दावली  
अनेक शब्दों के लिए एक शब्द
5. देवनागरी लिपि की विशेषताएँ  
देवनागरी लिपि एवं वर्तनी का मानकरूप  
कम्प्यूटर में हिन्दी का अनुप्रयोग: प्रारम्भिक परिचय

अंक योजना: यह प्रश्न पत्र 100 अंक का होगा, जो तीन खण्ड -अ, ब, स में विभक्त होगा, जिसका अंक विभाजन इस प्रकार रहेगा-

खण्ड-अ

10 अंक

इस खण्ड में एक-एक अंक के विकल्प रहित दस वस्तुनिष्ठ लघु उत्तरात्मक प्रश्न होंगे। प्रत्येक इकाई से दो प्रश्न होंगे।

खण्ड-ब

50 अंक

इस खण्ड में दस-दस अंक के दस प्रश्न होंगे, जिनमें से पांच प्रश्न करने होंगे। प्रत्येक इकाई से एक एक प्रश्न अवश्य पूछा जाएगा। 'गद्य वीथी' और 'कथादशक' पर आधारित संक्षेपण और पल्लवन सम्बन्धी प्रश्न संख्या एक और दो करना अनिवार्य होगा। इस खण्ड के प्रश्नों के उत्तर लगभग 250 शब्दों तक दिये जा सकते हैं।

खण्ड-स

40 अंक

इस खण्ड में बीस-बीस अंक के चार प्रश्न होंगे, जिनमें से दो प्रश्न करने होंगे। इनका उत्तर लगभग 500 शब्दों में देना होगा। इन प्रश्नों में एक प्रश्न के दो भाग भी हो सकते हैं।

पाठ्य पुस्तकें:

1. डॉ. ओम प्रकाश शर्मा, गद्य-वीथी, प्रकाशक: माया प्रकाशन मंदिर, जयपुर
2. डॉ. परमानंद पांचाल, कथा दशक, प्रकाशक: राजस्थान प्रकाशन, जयपुर
3. डॉ. हरिचरण शर्मा, हिन्दी भाषा ज्ञान, प्रकाशक: अनुभा प्रकाशन, जयपुर

### **301 : Corporate Accounting**

1. Issue of Share forfeiture and re-issue of share, Redemption of preference share
2. Issue and Redemption of debenture, Valuation of goodwill, value of share.
3. Final Accounts of companies, Divisible Profit, issue of bonus share, managerial Remuneration.
4. Liquidation of companies: List 'B' Contributions, Liquidation final statement of account, Statement of affairs and deficiency account.
5. Amalgamation, absorption and External re-construction excluding Inter. company holdings.

#### **Suggested Readings:**

1. Gupta B.L. Corporate Accounting
2. Jain Nareng: Advance Accounts
3. Jain, Khandelwal parik: financial Accounting
4. R.L. Gupta: Advance Accounts
5. Rao, Heda & Gupta: Corporate Accounting.
6. Shiukla M.C. & Grewal T.S. Advance Accounts

### **302 : Entrepreneurship Development**

1. Introduction: The entrepreneur; Definition; Emergence of entrepreneurial class; Theories of entrepreneurship; Role of socio-economic environment; Characteristics of entrepreneur.
2. Promotion of a venture: Opportunities analysis; External environmental analysis-economics, social, and technological; Competitive factors; legal requirements for establishment of a new unit.
3. Raising of funds; Venture capital sources and documentation required, Social responsibility.
4. Entrepreneurial Development Programmes (EDP): EDP, their role, relevance, and achievements: role of Government in organizing EDPs; Critical evaluation.
5. Role of Entrepreneur: Role of an entrepreneur in economic growth as an innovator, generation of employment opportunities, complimenting and supplementing economic growth, bringing about social stability and balanced regional development of industries; Role in export promotion and import substitution.

#### **Suggested Readings:**

1. Holt: Entrepreneurship-New Indian Experience; Prentice Hall of India
2. Pandey I. M: Venture Capital-The Indian Experience: Prentice Hall of India.
3. Prasanna Chandra: Project Preparation, Appraisal, Implementation; Tata McGraw Hill, New Delhi.
4. Siner A David: Entrepreneurial Megabucks; John Wiley and Sons, New York.
5. Srivastava S.B: A Practical Guide to Industrial Entrepreneurs; Sultan Chand and Sons, New Delhi.
6. Tandon B. C: Environment and Entrepreneur; Chugh Publications, Allahabad.

### 303: Indian Financial System

1. Financial System: Meaning, significance, and components; Composition of Indian financial system.  
Reserve Bank of India: Organization; Management; Functions – credit creation and credit control; Monetary policy.
2. Commercial Banks: Meaning; Functions; Development of Commercial Banking in India, Recent trends in Indian commercial banks.  
Development Banks: Concept, objectives, and functions of Development Banks. IFCI, IDBI, IRBI, ICICI, STDBI, NABARD, EXIM, State Level Development Banks:  
  
State Level Development Banks: Objectives, function, and role of state level banks; State financial corporations; Development banks in industrial financing.
3. An overview of financial markets in India.  
Money Market: Indian money market's composition and structure; (a) Acceptance houses, (b) Discount houses, and (c) Call money market; Recent trends in Indian money market.
4. Capital Market: Security market –(a) New issue market, (b) Secondary market; Functions and role of stock exchange; Listing procedure and legal requirements; Public issue-pricing and marketing; Stock exchanges- National Stock Exchange and over-the counter exchanges.
5. Financial Services: Depository System, Merchant banking –functions and role; SEBI: Objective and Function; Credit rating –concept, functions, and types.

#### Suggested Readings:

1. Bhole L. M: Financial Markets and Institutions; Tata McGraw-Hill Publishing Company, New Delhi.
2. Chandra Prasanna: Financial Management: Theory and Practice; Tata McGraw Hill, New Delhi.
3. Gupta Suraj B: Monetary Economics; S. Chand and Co., New Delhi.
4. Khan M. Y : Financial Services; Tata Mcgraw Hill, New Delhi.
5. Khan M. Y: Indian Financial System: Theory and Practice; Vikas Publishing House, New Delhi.
6. Machiraju H.R: Indian Financial System; Vikas, Delhi.
7. Sengupta A. K. and Agarwal M. K: Money Market Operations in India; Skylark Publication, New Delhi.
8. Srivastava, R. M: Management of Indian Financial Institutions; Himalaya Publishing House, Mumbai.
9. Mathur M, Indian Financial System Himanshu Publications, Udaipur

### **304: International Trade and Finance**

1. Need, Importance and problems of International trade, advantages and disadvantage of International trade, Free trade V/s protection trade, Tariff, quota and dumping.
2. Foreign Aid-Problems & Future prospects in Indian Economic Development, India's Foreign Trade-Introduction, Trends of Exports and Imports of India, Composition of India's Foreign Trade, Direction of India's Foreign Trade.
3. Balance of payment- Concept of BOT and BOP, Components, Importance, Causes of Disequilibrium and measures for correction. Meaning of Foreign Exchange Types, Importance and determination of Foreign Exchange Rate, Fixed and Flexible Exchange rates-merits and demerits.
4. Institutional set up for Export Promotion-Export promotion measures, Export, Promotion Councils, Commodity Board, ECGC,IIFT, Export House.
5. Institutional set up for Export Promotion-Export promotion measures, Export, Promotion Councils, Commodity Boards, ECGC, IIFT, Export house.

#### **Suggested Readings:**

1. Andley K.K.: Foreign Exchange Trade and Foreign Exchange
2. C.T. Kindelberger.: International Economics
3. Francis Cheamilan: International Trade and Export Management
4. Kuppu Swami: ABC of Foreign Exchange.
5. Lal. G.S.: Financing of foreign Trade and Foreign Exchange
6. P.T. Ellsworth: International Economics
7. Trivedi, I.V. & Sharma M.K: International Trade & Finance (Hindi)
8. Varghese, S.K.: Foreign Exchange and Financing of Foreign Trade

### **305 : Income Tax**

1. Income Tax: Specific Terminology of Income Tax: Income P.4, A4., Person: Assesses, Agricultural Income, Exempted Incomes. Incidence of tax and residential status.
2. Computation of income under the head  
- Salaries and Income from house property
3. Computation of Income under the head  
Income from Business and Profession, capital gains, income from other sources.
4. Set off and carry forward of Losses deductions under section 80 Rebates from Tax.
5. Assessment of Indivisibles, Deductions of Tax at source, Advance payment of Tax

#### **Suggested Readings:**

1. Agrawal N and Jain CM, Jain OP: Income Tax Ramesh Book Depot. Jaipur
2. Mehrotra, H. C.: Income tax law & Accounts Sahitay Bhawan
3. Singhania, Vinod K : Student Guide to Income tax, Tax Mann's

## **401 : Organizational Behaviour**

1. O.B. Nature & Importance, Determinants Individual & group behaviour-Meaning, Importance, Understanding Personality, Perception & Attitude
2. Group Dynamics and Team Development: Group dynamics-definition and importance, types of groups, group formation, group development, group composition, Conflict-concepts, types & Management of Conflict.
3. Motivation-Meaning, Importance, basic idea of various theories of motivation, Relationship of Incentive, Job satisfaction & moral with productivity.
4. Leadership-Meaning, styles of leadership Different approaches & Theories-Trait, Behaviour & Situational.
5. Change- Resistance to change, management of change, organizational culture and climate.

### **Suggested Readings:**

1. Griffin, Ricky W: Organisational Behaviour, Houghton Mifflin Co., Boston.
2. Hellreigel, Don, Johan W. Slocum, Jr., and Richard W. Woodman: Organizational Behaviour, South Western College Publishing, Ohio.
3. Hersey, Paul, Kenneth H. Blanchard and Dewey E. Johnson: Management of Organisational Behaviour: Utilising Human Resources, Prentice Hall, New Delhi.
4. Ivancevich; John and Micheol T. Matheson: Organisational Behaviour and Management, Business Publication Inc., Texas.
5. Koontz, Harold, Cyril O'Donnell, and Heinz Wehrich: Essentials of management, Tata McGraw-Hill, New Delhi.
6. Luthans, Fred: Organizational Behaviour, McGraw-Hill, New York.
7. Newstrom, John W. and Keith Davis: Organizational Behaviour: Human Behaviour at Work, Tata McGraw-Hill, New Delhi.
8. Robbins, Stephen P, and Mary Coulter: Management, Prentice Hall, New Delhi.
9. Robbins, Stephen P: Organizational Behavior, Prentice Hall, New Delhi.
10. Steers, Richard M. and J. Stewart Black Organizational Behavior, Harper Collins College Publishers, NewYork.
11. Sukla, Madhukar: Understanding Organisations: Organisation Theory and Practice in India, Prentice Hall, New Delhi.

## **402 : Research Methodology**

1. Research: Meaning, objectives Significance, Types of Research, Research Process. Research Problem: Meaning, Need of Defining, Technique involved in defining.
2. Research Design: Meaning, Need and features of good research design, Different Research Designs. Measurement and scaling Techniques: Measurement scales . Test of sound measurement. Scaling-meaning and classification Bases Important scaling Techniques.
3. Sampling Theory: Population and samples, Random sampling, parameter, statistic and standard error of statistic.  
Testing of Hypothesis: Basic concepts and procedure. Hypothesis Testing of means and Difference between means Hypothesis Testing of Proportions and Difference between Proportions. Estimation of Parameters. Chi-square Test: Characteristic and Assumptions, Test of Goodness of Fit and independence of attributes.
4. Analysis of variance: Concept, Basic Principle short-cut method and coding method for one-way ANOVA, Two-way ANOVA. Non-parametric Tests: Uses. Run Test, Sign Test, Median Test, Signed Rank Test.
5. Marketing Research: Concept, Applications, Limitations. Applications of Research - sales research, Product research, Motivational research, Advertising research, market segmentation, Physical distribution research.

### **Suggested Readings:**

1. Kothari, C. R.: Research Methodology Methods & Techniques, Wiley Eastern, New Delhi.
2. Sharma, K. R.: Research Methodology, National Publishing House, Jaipur.
3. Beri, G. C.: Marketing Research
4. Gupta, S.C.: Fundamentals of Statistics, Himalaya Publishing House, Mumbai.
5. Gupta, S. P.: Statistical Methods, Sultan Chand & Sons, New Delhi.

### 403: E-Commerce

1. Internet and Commerce: Business operations; E-commerce practices vs traditional business practices; concepts b2b, b2c, c2,c, b2g, g2h, g2c; Benefits of e-commerce to organization, consumers, and society; Limitation of e-commerce: Management issues relating to e-commerce.
2. Operations of E-commerce; Credit card transaction; Secure Hypertext Transfer Protocol (SHTTP); Electronic payment systems; Secure electronic transaction (SET); SET's encryption; Process; Cybercash; Smart cards; Indian payment models.
3. Applications in B2C: Consumer's shopping procedure on the internet; Impact on dis-intermediation and re-intermediation; Global market; Strategy of traditional department stores; products in b2c model; Success factors of e-brokers; Broker based services online; Online travel tourism services; Benefits and impact of E-commerce on travel industry; Real estate market; Online stock trading and its benefits; Online banking and its benefits; Online financial services and their future; E-auctions-benefits, implementation, and impact.
4. Applications in B2B: Applications of b2b; Key technologies for b2b; Architectural models of b2b; Characteristics of the supplier oriented marketplace, buyer-oriented marketplace, and intermediary oriented marketplace; Benefits of b2b on procurement reengineering; Just In Time delivery in b2b; Internet based EDI from traditional EDI; Integrating EC with back-end information systems; Marketing issues in b2b.
5. Introduction to M-Commerce: Concept of WAP; Technological foundations of WAP; WAP vs e-commerce; WAP vs traditional business operations; Global growth projections.  
Applications in Wireless-Internet environment: Location based applications-independent applications, business applications; Advantages of mobile commerce.

#### Suggested Readings:

1. Agarwala Kamlesh. N. and Agarwala Deeksha; Bridge to Online Storefront; Macmillan India, New Delhi.
2. Agarwala Kamlesh. N. and Agarwala Deeksha: Business on the Net-Introduction to the E-commerce; Macmillan India New Delhi.
3. Agarwala Kamlesh. N. and Agarwala Deeksha: Bulls, Bears and The Mouse: An Introduction to Online Stock Market Trading; Macmillan India New Delhi
4. Tiwari Dr. Murli D.: Education and E-Governance; Macmillan India New Delhi
5. Minoli Daniel, Minoli Emma: Web Commerce Technology Handbook; Tata McGraw Hill, New Delhi.
6. Minoli Daniel: Internet & Intranet Engineering; Tata McGraw Hill, 1999
7. Bhatnager Subhash and Schware Qbert (Eds); Information and Communication Technology in development; Sage Publications India, New Delhi.
8. Amor, Daniel: E-business (r) evaluation, The: Living and Working in an interconnected World; Prentice Hall US.
9. Afuah, A., and Tucci, C: Internet Business Models and Strategies; McGraw Hill, New York.
10. Agarwala Kamlesh. N. : Internet Banking; Macmillan India New Delhi.
11. Parag Diwan ans Sunil Sharma: E-Commerce A Managers Guide to E-Business, Excel Books, New Delhi.
12. Agarwala Kamlesh N. and Agarwala Prateek: M-Commerce; Macmillan India Ltd. new Delhi.

## 404 : Financial Management

1. Financial management: Financial goals; profit vs wealth maximization; financial functions-investment, financing, and dividend decisions; Financial planning.
2. Capital Budgeting: Nature of investment decisions, investment evaluation criteria, payback period, accounting rate of return, net present value, internal rate of return profitability index; NPV and IRR comparison.
3. Cost of Capital: Significance of cost of capital; Calculating cost of debt; Preference shares, equity capital, and retained earnings; combined (Weighted) cost of capital.  
Operating and Financial Leverage: Their measure; Effects on profit, analysing alternate financial plans, combined financial and operating leverage.
4. Capital Structure : Theories and determinants  
Dividend Policies: Issues in dividend policies; Walter's model; Gordon' model; M.M. Hypothesis, forms of dividends and stability in dividends, determinants.
5. Management of Working Capital: Nature of working capital, significance of working capital, operating cycle and factors determining of working capital requirements; Management of working capital-cash, receivables, and inventories.

### Suggested Readings:

1. Van Horne J.C: Financial management and Policy; Prentice Hall of India, New Delhil.
2. Van Horen J. C: Fundamentals of Financial Management; Prentice Hall of India, New Delhil.
3. Khan M. Y. and Jain P. K: Financial management, Text and Problems; Tata McGraw Hill, New Delhi.
4. Prasanna Chandra: Financial Management Theory and Practice; Tata McGraw Hill, New Delhi.
5. Pandey I. M: Financial Management: Vikas Publishing House, New Delhi.
6. Brigham E. F., Gapenski L. C., and Ehrhardt M.C: Financial management-Theory and Practice: Harcourt College Publishers, Singapore.
7. Bhalla V. K. : Modern Working Capital Management, Anmol Pub, Delhi.
8. Rao, Singh Rao Financial management Apex Publishing, Udaipur

## 405 : General English

Distribution of Marks:	Marks
1. Current English for Language Skills: Short answer question (5 out of 10) Each carrying 1 mark-5 marks  General question (2 out of 4) Each carrying 4 marks= 8 marks  Question on vocabulary= 2marks	15
2. Animal Farm or A vendor of Sweet: Two question (out of4) Each questions carrying 5 marks= 10 marks	10
3. Grammar: Tense - 3 marks Modal Auxiliaries - 2 marks Phrasal Verbs - 3 marks Clause (Nominal, Adjectival, Adverbial) - 2 marks Use of Non-finite Verbs - 3 marks (Gerunds, Participles & Infinitives)	13
4. Comprehension and Composition: Précis Writing Essay (about 300 world) on One Topic out of Four Topics	12 5 7

### Suggested Readings:

1. Pit Corder: An Intermediate English Grammar
2. Thompson and Martinet: A Practical English Grammar (ELBS-Oxford University Press)

### **406- Comprehensive Viva**

Paper No. 406- Comprehensive Viva shall be examined by an external Examiner and one Internal Examiner at college level. External examiner shall be appointed by the university.

## **501- Production Management**

1. Overview – Introduction, Objectives in production management, systems concept in production management, types of production systems.
2. Production Management Decisions- Site & Facility location selection, Facility layout.
3. Materials management- Material Handling, Purchasing Management.
4. Job design- Introduction, design factors- environmental factors, organizational factors behavioral dimensions, Socio-technical approach & An Overview of Work Study.
5. Quality control- Economics of Quality, Statistical Quality Control process control, Construction of Control charts for variable and attributes, Acceptance Sampling, operating characteristic Curve..

### **Suggested Readings:**

1. Buffa Elwood, Production Management
2. Chunawala and Patel, Production Management

## 502: Auditing

1. Introduction: Meaning and Objectives of Auditing, Types of Audit, Internal Audit.  
  
Audit Process: Audit Programme, Audit and Books, Working Papers and Evidences, Consideration for Commencing an audit: Routine checking and test checking.
2. Internal Cheek System: Internal Control.
3. Audit of Limited Companies:  
Company Auditor- Appointment, Powers, Duties & Liabilities.  
Divisible Profits and Dividend  
Auditor's Report- Standard Report and Qualified Report.  
Special Audit of Banking Companies.  
Audit of Educational Institutions  
Audit of insurance Companies.
4. Investigation: Audit of Non-profit Companies  
Where Fraud is suspected, and  
When a running a business is proposed
5. Recent Trends in Auditing: Nature and Significance of Cost Audit, Tax Audit, management Audit.

### Suggested Readings:

1. Gupta Kamal: Contemporary Auditing, Tata mCGraw Hill, New Delhi
2. Jain, Khandelwal: Auditing(Hindi), Ramesh Book Depot, Jaipur
3. Jagdish prasad: Auditing(Hind)
4. Pagare Dinkar: Principles and Practice of Auditing, Sultan Chand, New Delhi.
5. Sharma, T.R.: Auditing principles and Problems, Sahitya Bhawan,Agra
6. Shukla, S.M.: Auditing (Hindi)
7. Tandon, B.N.: Principles of Auditing, S.Chand& Co. New Delhi
8. Jain, C.M., Jain, O.P. & Kadunia Hemant, Apex Publications, Udaipur

### **503 : Human Resource Management**

1. Human Resource Management:- Meaning Definition, Nature, Importance, Scope and Concept of HRM. Micro & Macro approaches to HRM.
2. Human Resource Planning:- Concept of HRP, HR Accounting, Assessment of Human Resource Requirement, HR forecasting, Job Analysis, Drafting for Recruitment advertising.
3. HRM Mechanism:- Basic concepts of recruitment, selection, induction, Training & Development; Performance appraisal, Transfer, Promotion, Separation.
4. Emerging HRM Dimensions: - HRM practices in India in Competitive era with latest trends. International HRM- Meaning & concept approaches to international HRM.
5. Challenges of HRMN: Work cultural diversity, Impact of Technology, Innovation & R&D on HRM, Talent Management, Global practices and Bench marking of HRMN strategies.

#### **Suggested Readings:**

1. Arun Monappa & Sayadin- pers. Mgt.-Tat McGraw
2. Dessler-HRM-EEE, Prentice Hall
3. E.B. Flippo-Personnel Management-Tat MCGraw
4. P.L. Rao-International Human Resource
5. Pates Dowling, Watch & Schuller0International HRM-South Western College Pub. Cinechinati.
6. Pattanaik-HRM-Himalay.
7. T.N. Chabra-HRM-Dhanpat Rai & Co.

## **504 : Project Management**

1. Project Management: Introduction, Project, Plan, Programme and Scheme, Characteristics of a project, Type of Projects, , Public Sector Projects-Problems and challenges, Project Life cycle, Detailed, Project report-Background, objectives, Features, Cost, Sources of funds, Implementation details of Project.
2. Stakeholders, Types of Appraisal - Technical, Management, Marketing, Financial, Economics, Environmental and Social Aspects. Appraisal of Risk and uncertainty in project, Appraisal of Social Cost & benefits of aq project.
3. Project planning and organization: Project Planning, Types of plans, Essentials of project planning, Time planning and scheduling including PERT & CPM. Selection of project Personnel
4. Project Monitoring and control: A project, MIS for projects, Project Performance Reports, control of projects, Types of Control for projects, Budgeting and budgetary Control of projects.
5. Project follow up & Evaluation of A project : meaning and stages in follow-up objectives, follow-up objectives, Follow up origination and Techniques, Channels for Follow up. Evaluation meaning, Objectives, Types and Methodology with Scope.

### **Suggested Readings:**

1. N.P. Agrawal: Project Management
2. Prassanna Chandra: Project Management

## 505 : Accounting for Managers

1. Management Accounting: Meaning Definition Financial Statements Analysis: Meaning and Definition, Objectives, Importance. Type of Financial Analysis. Tools and Techniques of Financial Analysis Limitations of Analysis of Comparative Financial Statement and Common-size Statement.
2. Ratio Analysis: Meaning and Definition, Forms, Importance, Objective and precaution Limitations., General Safety levels of Ratios classification, Calculation and Interpretation of financial Ratios.
3. Analysis of Working Capital: Meaning, Definitions., Concepts, Type, Components, Determinants, Analysis of Working Capital, Estimation of Working Capital requirements, Operating Cycle Method, Forecasting Method, Projected Balance Sheet Method, P&L Adjustment Method and Cash Forecasting Method.
4. Funds Flow Analysis: Concept, Meaning and Definitions of Funds, Flows and Funds Flow Statement, Objectives, Importance and Limitations of Funds Flow Statement, Difference between Funds Flow Statement and Financial. Sources and Uses of Funds, Preparation and Interpretation of Changes in working capital statement and statement of Sources and uses of Funds. Preparation of cash Flow statement and AS-3.
5. Capital Budgeting: Comparative study of conventional and discounted cash flow methods.  
Analysis of Value Addition: Concept of Value –Addition, Meaning and Definition, Value Added Statement, Calculation of Value Added Ratios, Preparation and Interpretation of Value Added Statement.

### Suggested Reading:

1. Anthony, Robert: Management Accounting, Tarapore-Wala, Mumbai.
2. Horngren, C.T., Gary L. Sundem, and William O. Stratton: Introduction to Management Accounting, Prentice Hall, Delhi.
3. Khan, M. Y. and Jain, P. K. : Management Accounting Tata McGraw Hill, New Delhi.
4. Pandey, I. M: Essentials of Management Accounting, Vikas publishing House Pvt. Ltd.

## **601: Banking Law & Practice in India**

1. Banking Legislations in India: Reserve Bank of India Act, 1948: Banking (Regulation) Act, 1949: Banking Companies (Acquisition of undertaking and Transfer) Act, 1970
2. Banker customer Relationship: Definition of the term banker and customer: General and special relationship, termination of relationship, pass-book, types of accounts and their operations, Types of Customers (Practical Problems)
3. Negotiable instruments: concepts and Elements, types, cheque, bills, promissory notes, crossing, endorsement, presentation (elementary knowledge), paying and collecting banks (rights, duties, protections and precautions: practical problems.)
4. Investments & lending of Bank Funds : Non-profitable and profitable investment in funds, (Cash reserve, statutory reserve, Securities), secured and unsecured loans- pledge hypothecation, cash credit, overdraft, discounting of bills and clean advances, appraisal of loan applications, Tandon committee and Chore Committee Reports, Narshiman Committee report.
5. Meaning, Characteristics, nature of L/C (letters of credit), types of letters of Credits, personal letters of Credit and Commercial Letters of Credit, Procedure of Opening L/C (letters of Credit), Precaution in making payments of L/C (Letters of Credit), frauds in Banks: Types and its prevention.

### **Suggested Readings:**

1. Mehra Dalip, Commercial Banking today, Arvind Vivek Prakashan, Agara
2. Srivastava P.K, Banking Theory & Practice, Himalya Publication New Delhi
3. Varshney P.N., Banking Law & Practice, Ramesh Book Depot, Jainpur

## **602 : Company Law & Secretarial Practice**

1. Meaning and Nature of Company, classification of companies, formation of company.  
Memorandum of Association, Articles of Association.
2. Prospectus, Introduction & Contents  
Winding-up of Companies-different modes, oppression & Mis management.
3. Appointment, rights, Duties & Liabilities of Directors, Managing Director and Manager.  
Introduction to share capital: SEBI Guidelines on listing of shares.
4. Company Secretary- Definition, appointment, qualities, position and duties.  
The work and duties of company secretary with reference to
  - (a) Issue and Allotment of shares
  - (b) Calls in Shares
  - (c) Forfeiture of Shares
  - (d) Transfer of shares
  - (e) Declaration and payment of Dividend
5. General Procedure of Meetings, notice, agenda, chairman, quorum, motions and resolution, methods of voting, minutes etc. company meeting: statutory, annual general, extraordinary and Board Meeting.

### Suggested Readings:

1. Agarwal & Khatri : Company Law & Secretarial Practice
2. Chundawat & Khicha: Company Law & Secretarial Practice
3. Kuchhal, S.C. : Secretarial Practice
4. Mathur & Navlakha : Company Law & Secretarial Practice
5. Mittal & Agarwal : Company Law & Secretarial Practice
6. Sharlekar : Secretarial Practice
7. Shukla : Company Law & Secretarial Practice
8. Upadhyaya, Chaturvedi : Company Law & Secretarial Practice

### **603 : Marketing Management**

1. Introduction: Nature, Scope and function of marketing; Importance of Marketing: Marketing Concepts- Traditional and Modern: Selling Vs. Marketing: Marketing Environment.
2. Consumer Behaviour and Market Segmentation: Nature, Scope, Process and Significance for Consumer behaviour: Market segmentation concept and importance: Base for Market Segmentation.
3. Marketing Mix: Basic Concept & Scope, Product-Concept 7 Types of Product, Product Life Cycle., Price-Concept and Factors Affecting Price, Promotion-Personal Selling, Advertising and Sales Promotion., Latest Trends in Marketing:- Retail, Rural, Green and e-marketing.
4. International Marketing: nature, definition and scope of International Marketing: Domestic Marketing VS International Marketing: International Marketing environment-External and internal.
5. Export policy and practice in India: Eximpolicy and overview: Trends in India's foreign trade; Steps in starting and export business, Export procedure.

#### **Suggested Readings:**

1. Bose Chandra:- Modern Marketing
2. Chundawat: Marketing Management
3. Govin Rajan: Marketing management
4. Kothari K.K., Jain P.C. : International Marketing, Ramesh Book Depot, Jaipur.
5. Philip Kotler: Marketing Management Engle wood clilts: Prentice Hall, NJ.
6. Shrinivasan Prentice Hall: International Marketng, Prentice Hall
7. Shrivastava P.K.: Marketing (Hindi)
8. Stanton W.J. Etzel-Michael J., and Walkerker Bruce J: Fundamentals of Marketing: MCGrawhllill. New Yourk

## **604: Operation Research**

1. Operations Research: Concept and Significance of operations research; Evolution of operations research; Steps in designing operations research studies; Operations research models.
2. Linear Programming and its Applications: Graphic method and simplex method; Duality problem; Transportation problem; Assignment problem.
3. Introduction to other Types of Programming: Goal programming; Integer programming; Dynamic programming; Non-linear programming (introductory only).  
Waiting Line Models: Waiters and services; Mathematical distribution of queues; Basic models of queuing theory and applications.
4. Inventory Control: Deterministic models and probabilistic models  
Game Theory: Zero sum game; Pure and mix strategies; Criteria of sharing strategies.
5. Simulation: Application of simulation techniques; Monte-Carlo approach.  
Net-Work Analysis: Introduction to PERT and CPM; Application areas of PERT and CPM

### Suggested Readings:

1. Agrawal, J. D. and Sagarika Ghosh: Quantitative Techniques for Financial Analysis, Indian Institute of Finance, New Delhi.
2. Billy, E. Gillett: Introduction to Operations Research – A Computer oriented Algorithmic Approach, Tata McGraw Hill Publishing Ltd., New Delhi.
3. Lucey, T: Quantitative Techniques, D. P. Publications, London.
4. Sharma, K. R: Quantitative Techniques and Operations Research: Kalyani Publication, Ludhiana.
5. Taha, Hamdy A: Operations Research – An Introduction, Prentice Hall, Delhi.
6. Vazsonyi, Andrew and Herbert F. Spriner: Quantitative Analysis for Business, Prentice Hall, New Delhi.
7. Vohra, N. D: Quantitative Techniques in Management, Tata McGraw-Hill, New Delhi.
8. Wanger, H. M: Principles of Operations Research, Prentice Hall, Delhi.
9. Wastman, Terry J. and Parramor Keith: Quantitative Methods in Finance, International Thompson Business Press.
10. Sharma SC, Sehenoy GV, Srivastava VK: Quantitative Techniques for Managerial Decision Making; Wiley Western Ltd, New Delhi.

### **605: Project Report and Viva Voce**

Each student shall undergo a 6 weeks Summer Training after Completion of Second year IV semester and work on a project during the training. Before completion of VI Semester, a Project Report in duplicate shall be submitted by the student. The evaluation of Project Report and Viva Voce shall be conducted along with the examination of VI Semester, centrally by a board at the University level.

The project report should be signed and forwarded by a supervisor who should be from amongst the faculty member of the institution.

The project report should normally comprise of the following

- (i) Declaration by the candidate that the report has been originally written by him/her and where Secondary information has been used a proper reference has been given
- (ii) Supervisor's certificate that the report has been prepared under his/her supervisor and is being forwarded for examination
- (iii) A certificate from business/industry that 6 weeks training was imparted.
- (iv) Introduction of Concepts
- (V) Profile of Business unit
- (Vi) Methodology
- (Vii) Findings and Conclusions
- (ix) Appendices questionnaire etc
- (x) Bibliography

## 606 Environmental Studies

1. The Multidisciplinary Nature of Environmental Studies and natural Resources. Definition, Scope and Importance: need for public Awareness.
2. Renewable and non-renewable resources: Natural resources and associated problems.
  - a) Forest Resources: Use and over-exploitation, deforestation, case studies. Timber extraction mining, dams and their effects on forests and tribal people.
  - b) Water Resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefit and problems.
  - c) Mineral Resources: Use and exploitation, environmental effects of extracting and using minerals resources, case studies.
  - d) Food Resources: World food problems, changes caused by agriculture and overgrazing, effect of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
  - e) Energy Resources: Growing energy trends, renewable and non renewable energy sources, use alternate energy sources Case studies.
  - f) Land Resources: land as a resource kind degradation, man induced landslides, soil erosion and desertification.
    - \* Role of an individual in conservation of natural resources.
    - \* Equitable use of resources for sustainable lifestyles.
3. Ecosystem
  - \* Concept of an ecosystem
  - \* Structure and function of an ecosystem
  - \* Producers, consumers and decomposers.
  - \* Energy flow in the ecosystem
  - \* Ecological Succession.
  - \* Food Chains, Food webs and Ecological Pyramids.
  - \* Introduction, types, characteristic features, structure and function of the following ecosystems:- (a) Forest Ecosystem (B) Grassland Ecosystem (c) Desert Ecosystem (d) Aquatic Ecosystems (Ponds, Streams, Lake, Rivers, Oceans, Estuaries)
4. Biodiversity and Its Conservation
  - Introduction-Definition: genetic, species and ecosystem diversity
  - Value of biodiversity: consumptive use, productive use social ethical, aesthetic and option value
  - Biodiversity at global, national and local levels
  - India as a mega-diversity nation
  - Hot-spots of biodiversity
  - Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts
  - Endangered and endemic species of India
  - Conservation Of Biodiversity: In-Situ Ex-Situ Conservation Of Biodiversity

## 5. Environmental Pollution

### Definition

- Cause effect and control measures of: a) Air pollution; b) Water pollution; c) Soil Pollution d) Marine pollution e) Noise Pollution F) Thermal Pollution, g) Nuclear Hazards
- Solid waste Management: Causes, effects and control measures of urban and industrial wastes
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: Floods, earthquakes, cyclones and landslides

## 6. Social Issues and the Environment

- From Unsustainable to sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problem and concerns. Case studies
- Environmental ethics: issues and possible solution
- Climatic change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust Case studies.
- Waste and reclamation
- Consumerism and waste products
- Environment Protection Act
- Air (Prevention and Control of Pollution) Act
- Water (Prevention and Control of Pollution) Act
- Wild life protection Act
- Forest Conservation Act
- Issues involved enforcement of environment legislation
- Public awareness

## 7 Human Population and the Environment

- Population growth, variation among nations
- Population explosion-Family Welfare Programme
- Environment and Human health
- Human rights
- Value Education
- HIV/AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies

## 8 Human Population and the Environment

- Visit to a local area to document environmental assets- river/forest/grassland/hill mountain
- Visit to a local polluted site- Urban/Rural/Industrial/Agricultural
- Study of Common plants, insects, birds
- Study of simple ecosystems- pond, river hill slopes etc.

### Suggested Readings:

1. Chaudhary B.L. and J. Pandey: Environmental Studies (In Hindi) Apex Publishing House, Udaipur
2. Purohit, S.S., Q.J. Shammi and A.K. Agrawal, A Text Book of Environmental Sciences ( In English), Student Edition, Jodhpur)