

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management

PAPER – II		Subject Code
S. No	Subject	
1	1. Business Research Design and Analysis	1313101

PAPER – III		Subject Code
S. No	Subject	
1	Advertising and Brand Management	1313201
2	Retail Marketing	1313202
3	Marketing Management	1313203
4	Services Marketing	1313204
5	International Marketing	1313205
6	Sales and Distribution Management	1313206
7	Security Analysis and Portfolio Management	1313207
8	Financial Institutions and Services	1313208
9	Financial Derivatives	1313209
10	Financial Management	1313210
11	International Financial Management	1313211
12	Strategic Investment and Financing Decisions	1313212
13	Performance Management	1313213
14	Human Resource Management	1313214
15	Organizational Behavior	1313215
16	Global HRM	1313216
17	Management of Industrial Relations	1313217
18	Strategic HRM	1313218
19	E- Commerce	1313219
20	Technology Management	1313220
21	Data Base Management Systems	1313221
22	Data Ware Housing and Data Mining	1313222
23	Systems Audit	1313223
24	Decision Support Systems	1313224

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management

PAPER – II

Business Research Design and Analysis:

The objective of the course is to introduce the basic methods of conducting research, explore ideas in formulation research objectives and hypothesis and sample framework for undertaking research studies through well designed and structured questionnaires. Also it is intended to facilitate for the development of an insight into different statistical tools for data analysis, interpretation and presentation of reports in different functional areas of management.

1. **Research Design:** Introduction, Survey of Literature, Research Gaps, Research Questions, Objectives of the Study, Hypotheses, Scope of the Study, Period of the Study, Sample, Data Collection-Primary Data, Secondary Data, Limitations of the Study.
2. **Sampling Design and Sampling Procedure:** Defining-Non Probability and Probability Sampling- Determination of appropriate Sample size, Sample Size Calculator.
3. **Qualitative Data and Quantitative Data:** Qualitative Research Tools, Design of Questionnaire, Demographics, Types of Questions, Common Techniques used in Qualitative Research, Chron Bach's Alpha, Types of Scaling Techniques.
4. **Report Writing:** Express with clarity of thought, Logical Continuity, Writing in Third person. Referencing styles, plagiarism, Data Analysis and Discussion of Results, Conclusion and Scope for Further Research.
5. **Interpretations of results I:** Chron bach's alpha, Time Series Analysis, Mechanisms of central tendency, Standard Deviation, Correlation and regression, regression equation
6. **Interpretation of Results II:** Test of hypotheses, Factor Analysis, Duncan Analysis.

References:

1. Zikmund, Babin, Adhikari Et al, "Business Research Methods" 8e, Cengage Learning, 2012
2. P N Arora, Sumeet Arora "Statistical Methods". Chand, 4e, 2012.
3. C RF Kothari "Research Methodology" New Age Publications, 4e, 2012.
4. Donald R Cooper "Business Research Methods" TMH, 11e, 2012.
5. S L Gupta "Business Research Methods" TMH, 2012.

PAPER III

Advertisement and Brand management

1. **Advertising:** Changing concept, role of advertising in a developing economy, a critical appraisal, types of advertisement consumer, industrial, institutional, retail, trade and professional, advertisement in marketing mix.
2. **Organizing for Advertising:** Advertising department and advertisement manager, objectives and functions - Role of advertisement agencies functioning of advertisement agencies. Advertising agency skills and service, client agency relationship.
3. **Advertisement budgets:** Types, determining optimal expenditure, decision models, sales response and decay, communication, state, competitive share.
4. **Advertisement media:** Characteristics, media selection, optimizing and non optimizing approaches, media scheduling, media research- Sources of themes: Adapting presentation to medium campaign, USP, brand image, positioning, purchase proposition and creative interpretation, insertions, contract.
5. **Advertisement:** Visual layout, art work, production traffic copy, effective use of words, devices to get greater readership interrelation - Advertisement effectiveness: Pre-testing, post testing, experimental designs.
6. **Competition and Brand-** Concept of Brand- Brand Evaluation –Brand Positioning – Brand and consumers - Brand equity – Brand Inside and Outside, Brand Extensions - Brand over Time – Stages of concept Management –Challenges facing Brands – Brand Revitalization and Elimination – Brand and Firm – Brand valuation.

References:

1. Sangeetha Sharma: Advertising, PHI Learning, New Delhi, 2009
2. Shhkazmi: Advertising and sales promotion, Excel Books, New Delhi, 2010
3. Larry percy: Strategic Advertising Management, Oxford University Press, New Delhi, 2009
4. Shimp: Advertising and Promotion, Cengage Learning, New Delhi, 2008
5. Shah, Alan D Souza: Advertising and Promotion, TMH, New Delhi, 2009
6. Ronald Lane: Advertising Procedure, Pearson Education, New Delhi, 2008
7. S.A.Chunawalla: Foundations of Advertising,. Himalaya Publishing House, New Delhi, 2010
8. S.L.Gupta: Brand Management, Himalaya Publishing House, New Delhi, 2010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management

Retailing Management

1. Introduction to the world of Retailing: Advent of retailing -Functions of retailing - Types of retailing -Customer buying behavior. Retailing in India: The present Indian retail scenario – Factors affecting retailing in India – Region-wise analysis of Indian retailing
2. Retailing Strategy: Target market & Retail format - Growth strategies - Strategic retail planning process - Factors to be considered for retail planning. prompt delivery, customer satisfaction after sales service etc.
3. Human resources & Administrative Strategy: Designing the organizational structure for retail firm- Retail organization structures. Factors affecting the demand for a region or trade area
–Factors affecting the attractiveness of a site.
4. Merchandize Management: Merchandize planning - Sources of merchandize -Category Management - Buying systems to stores - Allocation of merchandize. Retailing opportunities in India. CRM in retail management,
5. Pricing and Communication Strategies in Retailing: Retail pricing strategies –Approaches for setting pricing – Pricing adjustments – Using price to stimulate retail sales – Promoting the merchandise – Implementing an advertising plan.
6. Store Management : Objectives of a good store design –Store design – Store layout – Space planning – Merchandise presentation techniques and atmospherics. Location strategies: Shopping centers –Freestanding sites – Location and retail strategies-

References

1. Levy & Weitz, Retailing Management ,5th Ed, TMH, 2003.
2. A.J.Lamba, The art of Retailing,1st Ed, TMH, 2003.
3. Andrew J Newmann & Petes cullen, 1st Ed, Thomson Learning, 2003.
4. George H Lucas, Robert P Bugh & Larry G. Gresham 1997 1st, AIPD.
5. Barry Berman Joel &R Evans, Retailing Management-A Strategic Approach,8th Ed, Pearson Education,2002.
6. Gilbert : Retail Marketing Management, Pearson Education

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Marketing Management

1. Introduction to Marketing: Needs, Wants, Demands, Products, Exchange, Transactions, Market, Marketing, Production Concept, Product Concept, Sales Concept, Marketing Concept, Societal Marketing Concept, Indian Marketing Environment. Role and functions of marketing department.
2. Market Research: Concepts in Demand, Market research – Forecasting and Measurement – Market data analysis.
3. Functions of Marketing: Market Segmentation and Targeting – Posing functional strategies – Identification of Market segments - marketing strategies.
4. Product Management: Product Life Cycle, Product mix and line – Branding and classification. New Product Development - Market Testing, Commercialization.
5. Pricing Strategy: Objectives, Methods and processes of pricing, Factors influencing the pricing. Adopting price, initiating the price cuts, imitating price increases, Responding to Competitor's price changes.
6. Distribution Management and Sales Promotion: Sales Techniques for Consumer/Industrial clientele-Channel Function and Flows, Channel Levels, Channel Management Decisions - The growth and trends in Wholesaling - Sales force Management – Promotional mix – communication strategies.

References:

1. Phillip Kotler: “*Marketing Management*”, 11/e, Pearson Publishers, New Delhi, 2003
2. Boone and Kurtz: “*Principles of Marketing*“, Cengage Learning, New Delhi.
3. Rajan Saxena: “*Marketing Management*, 2/e, Tata McGraw Hill, New Delhi, 2008.
4. Tapan K Panda: “*Marketing Management Text and Cases*”, Excel Books, New Delhi.
5. VS Ramaswamy, S.Namakumari:, “*Marketing Management*”, 3/e, Macmillan, New Delhi, 2003
6. Karunakaran: “*Marketing Management*”, Himalaya Publishing House, Mumbai.
7. M.Govindarajan: “*Marketing Management, Concepts, Cases, Challenges and Trends*”, PHI Private Limited, New Delhi, 2007.
8. T.N.Chhabra, SK.Grover: “*Marketing Management*”, Dhanpat Rai and Co., New Delhi,2009.
9. paul Baines, Chris Fill, Kelly Page: “*Marketing*”, Oxford University Press, New Delhi, 2009.
10. Arun Kumar, Meenakshi N: “*Marketing Management*”, Vikas Publishing House Private Ltd., 2008.

Services Marketing:

1. **Understanding services marketing:** Introduction, services in the modern economy, Classification of services, marketing services Vs. Physical services, services as a system.
2. **Customer Relationship Marketing:** Relationship Marketing, the nature of service consumption, understanding customer needs and expectations, Strategic responses to the intangibility of service performances.
3. **Services market segmentations:** The process of market segmentation, selecting the appropriate customer portfolio, creating and maintaining valued relations, customer loyalty. Service promotion: The role of marketing communication. Implication for communication strategies, setting communication objectives, marketing communication mix.
4. **Creating value in a competitive market:** Positioning a service in the market, value addition to the service product, planning and branding service products, new service development.
5. **Pricing strategies for services:** Service pricing, establishing monetary pricing objectives, foundations of pricing objectives, pricing and demand, putting service pricing strategies into practice.
6. **Planning and managing service delivery:** Creating delivery systems in price, cyberspace and time. The physical evidence of the service space. The role of intermediaries, Marketing plans for services: The marketing planning process.

References

- 1 Rajendra Nargundkar: Services Marketing, TMH, New Delhi 2010.
2. Christian Gronroos: Service Management and Marketing, Wiley India, New Delhi,2010
3. Govind Apte: Services Marketing, Oxford University Press, New Delhi,2009
4. Vasanthi Venugopal: Services Marketing, Himalaya Publishing House, 2010
5. Nimith Chowdhary: Marketing of Services, MacMillan Publishers, New Delhi, 2009
6. Douglas Hoffman K: Marketing of Services, Cengage learning, New Delhi, 2010
- 7 Harsh V. Verma: Services Marketing, Pearson Education, New Delhi. 2009

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

International Marketing

- 1. International Marketing:** Scope and Significance of International Marketing, - Difference between international and domestic marketing. Need for international trade, trends in foreign trade. International market environment: International environment, International Social & culture Environment, the political legal environment and regulatory environment of international marketing. Technological Environment, Business Customs in International Market.
- 2. Canalizing and targeting international market opportunities:** regional market Characteristics, Marketing in transitional economies and third world countries, international market segmentation and targeting .
- 3. International Market Entry Strategies:** Indirect Exporting, Domestic Purchasing, Direct Exporting , Foreign Manufacturing Strategies Without Direct Investment, Foreign Manufacturing Strategies With Direct Investment. Entry Strategies of Indian Firms.
- 4. International product management:** International product positioning, Product saturation Levels in global Market, International product life cycle, Geographic Expansion–Strategic Alternatives. New products in Intentional Marketing, Product and culture, brands in International Market.
- 5. International Marketing Channels:** channels –Distribution Structures, Distribution Patterns, Challenges in Managing An international Distribution Strategy Selecting Foreign Country Market intermediaries. The management of physical distribution of goods.
- 6. Pricing and Promotion for international Markets:** Environmental influences on Pricing Decisions ,Grey Market goods, Transfer pricing, Global Pricing – Policy Alternatives. Global Advertising and brandy, - Export Marketing: Export Policy Decisions of a firm, EXIM policy of India. Export costing and pricing, Export procedures

References

- 1.Czinkota: International Marketing, Cengage Learning, New Delhi, 2009
2. Philip R. Cateora, John L. Graham, International Marketing 11/e, Tata McGraw-Hill Co. Ltd., 2002.
3. R.Srinivasan: International Marketing, Prentice-Hall of India Pvt. Ltd., 2010
4. U.C Mathur: International Marketing Management, Sage Publications, New Delhi 2008
5. Sak Onkvisit: International Marketing, Routledge Publications, New Delhi, 2009
6. Jeffrey Edmund Curry: International Marketing, University Science Press, New Delhi, 2010
7. Kotabe, Peloso: International Marketing, Wiley India, New Delhi, 2020

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Sales and Distribution Management

1. **Introduction:** Evolution of Sales Department- Marketing, Sales Management and Marketing Management – Objectives of Sales Management - Exchange Process – Sales Management cycle – Responsibilities of Sales Manager – Interdependence of Sales and Distribution.
2. **Sales Strategy Formulation** – Steps in Market Analysis – Transaction Cost analysis – Designing Sales strategy - Determination of Sales Force – Personnel Selling – Strategies used by Salesmen – Diversity of Selling Situation – Process of Personal Selling – Theories of Personal Selling – Sales organization.
3. **Recruitment of Sales personnel** – Selection and Placement of Sales personnel – Training of Sales personnel – compensating of Sales personnel- Motivating Sales personnel – Monitoring and Performance evaluation – Sales Displays.
4. **Sales Forecasting** - Sales quotas and Territory Management – Managing Sales Expenses – Sales Budgets – Sales Promotion budget and evolution - Ethics in Sales Management – International Sales Management – Advanced International Selling
5. **Channels of Distribution** – Retailing and Wholesaling – Physical Distribution Management – Designing Channel Systems – Channel Management – Channel Information System. Physical Distribution Management – Elements of distribution logistics – Cost and physical distribution – Customer service and physical distribution – New techniques in managing distribution.
6. **International Sales and Distribution Management** – Nature of International Markets – Selling in International Markets – Legal and Social aspects in International Sales – Pricing and Payment of International Trade – Role of Logistics companies.

References

1. Richard R Still: Sales Management, Pearson Education, New Delhi,
2. Tapan K Panda: Sales and Distribution Management, Oxford University Press, New Delhi, 2009
3. Tony Carter: Sales Force Management, Jaico Publishing House, New Delhi, 2008
4. S.A.Chunawala: Sales and Distribution Management, Himalaya Publishing House, New Delhi, 2009
5. S.L.Gupta: Sales and Distribution Management, Excel Books, New Delhi, 2009
6. Havaladar: Sales and Distribution Management, TMH, New Delhi, 2009
7. Hair, Anderson: Sales Management, Cengage Learning, New Delhi, 2010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Security Analysis and Portfolio Management

1. **Investments:** The investment environment, classification and functions of financial markets and financial instruments. Securities trading – types of orders, margin trading, clearing and settlement procedures. Regularity systems for equity markets.
2. **Portfolio Theory:** Concept of Risk, measuring risk and returns, Portfolio risk – measurement and analysis, mean – variance approach, business risk and financial risk and treatment in portfolio management.
3. **Equilibrium in Capital Market:** The Capital Asset Pricing Model, Single-index model, Arbitrage Pricing theory, Market Efficiency. - Bond Analysis: Bond Pricing Theorems, Convexity, duration, bond immunization, active bond management and passive bond management.
4. **Equity Valuation Model:** Discounted Cash-flow techniques: Balance sheet valuation, Dividend discount models, Intrinsic value and market price, earnings multiplier approach, P/E ratio, Price/ Book value, Price/sales ratio, Economic value added (EVA).
5. **Security Analysis:** Macroeconomic and industry analysis and company analysis. Derivatives: Option markets, option strategies and option valuation, Futures markets, strategies and pricing. Stock index futures, interest rate futures, Swaps using caps and floors in investment management.
6. **Active Portfolio Management:** Mutual Funds Growth of mutual funds in India, Structure. Performance evaluation of mutual funds, conventional theory, performance measurement with changing portfolio composition.

References

1. Thomas S Y Ho: Security valuation, Oxford University Press, New Delhi, 2009
2. S. Kevin: Security Analysis and Portfolio Management, PHI Learning, New Delhi, 2009
3. Punithavathy Pandian: Security Analysis and Portfolio Management, Vikas Publishing House, New Delhi, 2009
4. Robert A Strong: Portfolio Management, Jaico Publishing House, New Delhi, 2001
5. Sudhendra Bhat: Security Analysis Portfolio Management, Excel Books, New Delhi, 2009.
6. Shashi K Gupta: Security Analysis Portfolio Management, Kalyani Publishers, New Delhi, 2010
7. William F. Sharpe, Gordon J. Alexander and Jeffery V. Bailey: Investments, Prentice Hall, 2002.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Financial Institutions and Services

1. **The Basic Theoretical Framework:** The financial system and its technology; The factors affecting the stability of the financial system; Development finance vs. universal banking; Financial intermediaries and Financial Innovation; RBI-Central Banking.
2. **The Financial Institutions:** A brief historical perspective. An update on the performance of IDBI, ICICI, IFCI and SFCs, LIC & GIC. Insurance: The Economics of Insurance; Life Insurance; Reinsurance; The Insurance Industry and its regulation. Efficiency and the Structure of the Insurance Industry; Pension funds; Pension plans today.
3. **The banking Institutions:** Commercial banks – the public and the private sectors – structure and comparative performance. The problems of competition; interest rates, spreads, and NPAs. Bank capital – adequacy norms and capital market support.
4. **The Non-banking financial institutions :** Evolution, control by RBI and SEBI. A perspective on future role. Unit Trust of India and Mutual Funds. Reserve bank of India Framework for/Regulation of Bank Credit . Commercial paper: Features and advantages, Framework of Indian CP Market, effective cost/interest yield.
5. **Financial services:** Asset/fund based Financial services – lease finance, consumer credit and hire purchase finance, factoring definition, functions, advantages, evaluation and forfeiting, bills discounting, housing finance, venture capital financing. Fee-based / Advisory services: Stock broking, credit rating.
6. **Merchant Banking:** Functions and activities, underwriting, bankers to an issue, debenture trustees, portfolio managers. The regulatory framework: SEBI and Regulation of Primary and Secondary Markets, Company Law provisions.

References

1. R.Shanmugham: Financial Services, Wiley India, New Delhi, 2010
2. M.Y.Khan , Financial Services, Tata McGraw-Hill, New Delhi, 2004.
3. Harsh V.Verma, Marketing of Services, Global Business Press, 2002
4. Bhole : Financial Institutions and Markets, TMH, New Delhi, 2009
5. Meir Kohn: Financial Institutions and Markets, Oxford University Press, New Delhi,2009
6. Sames L .Heskett, Managing In the Service Economy, Harvard Business School Press, Boston, 2001.
7. Bharti V Pathak: The Indian Financial System, Pearson Education, New Delhi, 2010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

FINANCIAL DERIVATIVES

Unit – I : Introduction to Financial Derivatives – Meaning and Need – Growth of Financial Derivatives in India – Derivative Markets – Participants – Functions – Types of Derivatives – Forwards – Futures – Options – Swaps – The Regulatory Framework of Derivatives Trading in India.

Unit – II : Features of Futures – Differences Between Forwards and Futures – Financial Futures – Trading – Currency Future – Interest Rate Futures – Pricing of Future Contracts – Value at Risk (VaR) – Hedging Strategies – Hedging with Stock Index Futures – Types of Members and Margining System in India – Futures Trading on BSE & NSE.

Unit – III : Options Market – Meaning & Need – Options Vs futures – Types of Options Contracts – Call Options – Put Options – Trading Strategies Involving Options – Basic Option Positions – Margins – Options on stock Indices – Option Markets in India on NSE and BSE.

Unit – IV : Option Pricing – Intrinsic Value and Time Value - Pricing at Expiration – Factors Affecting Options pricing – Put-Call Parity Pricing Relationship – Pricing Models – Introduction to Binominal Option Pricing Model – Black Scholes Option Pricing Model.

Unit – V: Swaps – Meaning – Overview – The Structure of Swaps – Interest Rate Swaps – Currency Swaps – Commodity Swaps – Swap Variant – Swap Dealer Role – Equity Swaps – Economic Functions of Swap Transactions – FRAs and Swaps.

Unit VI: Case Studies from each Unit are Compulsory

Suggested Books:

1. Hull C.John, “options, Futures and Other Derivatives”, Pearson Educations Publishers.
2. David Thomas. W & Dubofsky Miller. Jr., Derivatives Valuation and Risk Management, Oxford University, Indian Edition.
3. N.D.Vohra & B.R.Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.
4. Red Head: Financial Derivatives: An Introduction to Futures, Forward, Options” Prentice Hall of India.
5. David A. Dubofsky, Thomas W.Miller, Jr.: Derivatives: Valuation and Risk Management, Oxford University Press.
6. Sunil K.Parameswaran, “Futures Markets: Theory and Practice” Tata-McGraw-Hill Publishing Company Ltd.
7. D.C.Parwari, Financial Futures and Options, Jaico Publishing House

Financial Management

1 The Finance Function – Objective: Profit or Wealth Maximization and EPS

Maximization, An overview of Managerial Finance functions- Time value of money. present value, future value of money and the basic valuation models.

2. Investment decisions: Nature of Capital Budgeting decisions - techniques of capital budgeting: Pay back method, Average rate of return and Time-Adjusted methods: IRR and NPV, profitability index, and excess present value index. Advanced problems and cases in capital budgeting.

3. Cost of Capital: Concept and measurement of cost of capital, Debt vs. Equity, cost of equity, preference shares, equity capital and retained earnings, weighted average cost of capital and marginal cost of capital. Importance of cost of capital in capital budgeting decisions.

4. Capital structure Decisions: Capital structure vs financial structure - Capitalisation, financial leverage, operating leverage and composite leverage. EBIT-EPS Analysis, Indifference Point/Break even analysis of financial leverage, Capital structure theories –The Modigliani Miller Theory –A critical appraisal.

5. Dividend Decisions: Dividends and value of the firm - Relevance of dividends, the MM hypothesis, Factors determining Dividend Policy-dividends and valuation of the firm-the basic models. Declaration and payment of dividends. Bonus shares. Rights issue, share-splits, Walter Model and Gordon Model.

6. Working Capital Management, components of working capital, gross vs. net working capital, determinants of working capital needs, the operating cycle approach. Planning of working capital, Financing of working capital through Bank finance and Trade Credit. Basic strategies for cash management, cash budget, cash management techniques/processes. Marketable securities.

References

1. Brigham and Ehrhardt: “*Financial Management Text and Cases*”, Cengage Learning, New Delhi.
2. I.M Pandey: “*Financial Management*”, 9/e, Vikas Publishing, 2004
3. M.Y Khan, P K Jain: “*Financial Management-Text and Problems*”, Tata McGraw Hill, New Delhi. 2003
4. James C.VanHorne: “*Financial Management and Policy*”, Pearson Education, 2004
5. Srivatsav, RM: “*Financial Management*”, Himalaya Publishing House, Mumbai.
6. Chakraborty, Bhattacharya, Rao and Sen: “*Financial Management and Control*”, Macmillan India Limited, 2003
7. John J. Hampton: “*Financial Decision Making-Concepts, Problems and Cases*”, Prentice Hall .2003

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

International Financial Management

1. **International Financial Management:** An overview, Importance, nature and scope, Theories of International business, International Business Methods, Recent changes and challenges in IFM. International Flow of Funds: Balance of Payments (BoP), Fundamentals of BoP, Accounting components of BOP,
2. **International Monetary System:** Evolution, Gold Standard, Bretton Woods system, the flexible exchange rate regime, the current exchange rate arrangements, the Economic and Monetary Union (EMU).
3. **Foreign Exchange Market:** Function and Structure of the Forex markets, major participants, types of transactions and settlements dates, Foreign exchange quotations, process of arbitrage, speculation in the forward market.
4. **Currency Futures and Options Markets:** Overview of the other markets – Euro currency market, Euro credit market, Euro bond market, International Stock market.
5. **Exchange Rates:** Measuring exchange rate movements, Factors influencing exchange rates. Government influence on exchange rates – exchange rate systems. International arbitrage and interest rate parity. Relationship between inflation, interest rates and exchange rates – Purchasing Power Parity – International Fisher Effect. Long term Asset –Liability Management: Foreign Direct Investment, International Capital Budgeting.
6. **Long term Asset-Liability Management, Short-term Asset–Liability Management:** Foreign Direct Investment, International capital Budgeting, International Cash management, inventory management. Payment methods of international trade, trade finance methods, EXIM policy, regulations and guidelines.

References

1. Vyuptakesh Sharan: International Financial Management, PHI Learning, New Delhi, 2010..
2. Thomas J O'Brien: International Finance, Oxford University Press, New Delhi, 2009.
3. P.G.APTE: International Financial Management, TMH, New Delhi, 2009
4. Shailaja G: "International Finance", Universities Press(India) Privte Limited, Hyderabad, 2008
- 5 David K. Eiteman, Arthur I.Stonehill and Michael H.Moffeth, Multinational Business Finance, 10th edition, Pearson Education 2004.
7. P.K Jain, Josette Peyrard and Surendra S. Yadav, International Financial Management, Macmillan Publishers, 2001.

Strategic Investment and Financing Decisions

1. **Investment decisions:** Project Investment Management vs. project management-introduction to selection of profitable projects. Evaluation of investment opportunities, basic issues, replacement decisions, traditional methods of appraisal and discounted cash flow techniques, equivalence of NPV and IRR, The case of intangible benefits and costs. Profitability Index and Excess present value Index.
2. **Investment decisions under conditions of uncertainty:** Discussion on risk and uncertainty. Risk Analysis in Investment Decisions. Risk adjusted rate of return, certainty equivalents, probability distribution of cash flows, decision trees, sensitivity analysis and Monte Carlo Approach to Simulation.
3. **Types of Investments and disinvestments:** Project abandonment decisions, Evidence of IRR. Multiple IRR, Modified IRR, Techroin, Robichek and Mordalbasso (TRM) solution in dealing with pure, simple and mixed investments.
4. **Critical analysis of appraisal techniques:** Discounted pay back, post pay back, surplus life and surplus pay back, Bail-out pay back, Return on Investment, Equivalent Annual Cost, Terminal Value, single period constraints, multi-period capital constraint and an unresolved problem, NPV mean variance analysis,
5. **Investment Decisions under capital constraints:** Capital Rationing Vs. Portfolio. Portfolio Risk and diversified projects. Strategic Analysis of selected investment decisions: Lease Financing, Leasing Vs. Operating Risk, borrowing vs. procuring. Hire purchase and Installment decisions.
6. **Financing Decisions:** International Capital Structure: Modigliani Miller Model: Hamada Model of Market Risk: The Miller Model: The Trade-Off Models and Agency Costs: Capital Structure Theory –the Signaling Model. Financial Distress: Consequences, Issues, bankruptcy, settlements, reorganization and Liquidation in Bankruptcy.

References

1. M.Ranganadham: Investment Analysis and Portfolio Management , Pearson Education, New Delhi, 2009
2. Preeti Singh: Investment Management, Himalaya Publishing House, New Delhi, 2009
3. Prasanna Chandra , Projects: Planning, Analysis, Financing Implementation and Review, 5/e TMH, New Delhi, 2003
4. V.K. Bhalla, Financial Management and policy., Anmol Publications Pvt. Ltd.,
5. I.M. Pandey, Financial Management, Vikas Publishing House,2003.
6. V. K. Kapoor, Operations Research, Sultan Chand & Sons, New Delhi, 2003
.Richard Pike & Bill Neale: Corporate Finance & Investment—Decisions and Strategies, 2/e, PHI, New Delhi, 2002.
7. Alexander : Fundamentals of Investment 3/e Pearson Education, New Delhi,

1. **Performance Management :Introduction** – Definition, concepts and scope – Foundations of Performance Management - Performance appraisal Vs performance management – performance management Vs Human resource management - processes for managing performance –critical appraisal- Performance Audit
2. **Performance Management Planning:** Importance-Methods- process- Goal Setting-Linkages to Strategic Planning- Competency mappy- Career Development- Monitoring Performance Planning- Barriers to Performance Planning
3. **Performance Management System:** objectives – Functions- Performance Management Cycle- Competency based Performance Management Systems- Reward based Performance Management Systems- Electronic Performance Management Systems- HR Challenges
Performance Management Tools: Importance- Traditions and Modern Techniques-Balanced Score Card- 360 Degree Performance Appraising- Merit Rating- MBO- BARS
4. **Performance Monitoring and Counseling:** Introduction- Supervision- Objectives and Principles of Monitoring- Monitoring Process- Periodic reviews- Problem solving-engendering trust- Role efficiency- Coaching- Counseling and Monitoring- Concepts and Skills
5. **Appraising for Recognition & Reward:** Purpose of Appraising – Methods of appraisal – appraisal system design – Implementing the appraisal system – Appraisals and HR decisions. Organisational effectiveness
6. **Performance management skills** – Operationalising change through performance management. High Performing Teams: Building and leading High performing teams – team oriented organizations – developing and leading high performing teams- Role of Leadership

References

1. Prem Chadha: Performance Management, Macmillan India, New Delhi, 2008.
2. Michael Armstrong & Angela Baron, Performance Management: The New Realities, Jaico Publishing House, New Delhi, 2010.
3. T.V.Rao, Appraising and Developing Managerial Performance, TV Rao Learning Systems Pvt Limited, Excel Books, 2003.
4. David Wade and Ronad Recardo, Corporate Performance Management, Butter Heinemann, New Delhi, 2002.
5. Dewakar Goel: Performance Appraisal and Compensation Management, PHI Learning, New Delhi, 2009
6. A.S. Kholi: Performance Management, Oxford University Press, New Delhi, 2009
7. A.M.Sharma: Performance Management System, Himalaya Publishing House, 2010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Human Resource Management

1. HRM: Significance - Definition and Functions – evolution of HRM- Principles - Ethical Aspects of HRM- Role of HRM - HR policies, Strategies to increase firm performance - Role and position of HR department - HRM at global perspective.
2. Investment perspectives of HRM: HR Planning - Recruitment and Selection, Tests and Interview Techniques - Training and Development – retention - Job Analysis. HRD concepts – mechanisms – MDPs.
3. Performance Evaluation: importance – methods – traditional and modern methods – Latest trends in performance appraisal - Career Development and Counseling- Compensation, Concepts and Principles- Influencing Factors- Current Trends in Compensation- Methods of Payments
4. Salary and Wage Administration: Concept- Wage Structure- Wage and Salary Policies- Legal Frame Work- Determinants of Payment of Wages- Wage Differentials - Job design and Evaluation- - Incentive Payment Systems.
5. Managing Industrial Relations- Trade Unions-Employee Participation Schemes-Collective Bargaining-Managing Knowledge Work force –Grievances and disputes resolution mechanisms.
6. Safety and welfare management: Nature and concepts – statutory and non-statutory welfare measures – incentive mechanisms – types of incentives. Safety at work – nature and importance – work hazards – safety mechanisms - Managing work place stress.

References

1. Muller_Camen. Croucher and Leigh: “**Human Resource Management- A Case Study Approach**”, JAICO Publishing, Delhi.
2. Scott Snell and George Bohlander: “**Human Resource Management**”, Cengage Learning, 2007.
3. Deepak Kumar Bhattacharya: “**Human Resource Management**”, Excel Books, New Delhi.
4. S.Seetharaman, B.Venkateswara Prasad: “**Human Resource Management**”, SCITECH Publication (India) Limited, Hyderabad, 2007.
5. Gary Dessler, Biju Vrkkey: “**Human Resource Management**”, Pearson Education, New Delhi, 2009
6. Uday Kumar Haldar: “**Human Resource Development**”, Oxford University Press, New Delhi, 2009.
7. Iain Henderson: “**Human Resource Management**”, Universities Press (India) Private Limited, Hyderabad, 2008.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Organizational Behavior

1. Introduction - Nature and scope – linkages with other social sciences - Individual Roles and Organizational Goals - Perspectives of Human Behavior, Approach to Organizational behavior - models of organizational behavior.

2. Perceptual Management: nature - Process – selection, organization and interpretation – Influencing factors -Motivation – Concepts - Needs and Motives and theories. Leadership and Motivating people - Leadership Theories. Attitudes and Values: formation - types – changes and behavior modification techniques.

3. Personality Development: Nature - Stages, Determinants of Personality, - Johari Window - Transactional Analysis, Learning Processes - theories, Creativity and Creative Thinking. Leadership – nature – skills.

4. Decision Making Process: Behavioral Dimensions, Groups and their formation - Group Dynamics, Informal Organizations, Group versus Individual Interaction.

5. Inter-Personal Communication: Listening, Feedback, Collaborative Processes in Work Groups, Team Building, Team Decision Making, Conflict Resolution in Groups and Problem Solving Techniques.

6. Organizations: Taxonomy, Elements of Structure, Determinants of Structure, Functional Aspects of Structure, Role Impingement, Stress in Organization. Principles Underlying the Design of Organizations, Organizational Culture, Power and Authority. Nature of OD - interventions, OD techniques and OD applications.

References

- 1 K.Aswhathappa: “**Organizational Behavior-Text, Cases and Games**”, Himalaya Publishing House, New Delhi, 2008,
2. Steven L McShane, Mary Ann Von Glinow, Radha R Sharma: “**Organizational Behavior**”, Tata McGraw Hill Education, New Delhi, 2008.
3. Jerald Greenberg and Robert A Baron: “**Behavior in Organizations**”, PHI Learning Private Limited, New Delhi, 2009.
4. Pareek Udai: “**Understanding Organizational Behavior**”, Oxford University Press, New Delhi, 2007.
5. Jai B.P.Sinha: “**Culture and Organizational Behavior**”, Sage Publication India Private Limited, New Delhi, 2008.
6. Sharma VS, Veluri: “**Organizational Behavior**”, JAICO Publishing House, New Delhi, 2009.
7. Slocum, n Helireigel: “**Fundamentals of Organizational Behavior**”, Cengage Learning India, New Delhi, 2009.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Global HRM

1. **Introduction-** A Global HR Perspective in New Economy-Challenges of Globalisation Implications of Managing People and Leveraging Human Resource- Cross Culture Skills, and Conflicts -Managing Across Culture-Globalisation and HR Issues and Concerns- Dynamics of Change Management
2. **Global Human Resource Management :** Strategic role of International HRM – Global HR Planning – Staffing policy – Training and management development – performance appraisal – Compensation – International Labour relations – Industrial democracy – Talent crunch – Indian MNCs and Challenges - Legal content of Global HRM.
3. **Managing International Assignments:** Significance – Selection methods- Positioning Expatriate – Repatriate – factors of consideration - Strategies - International assignments for women - Problems.
4. **Cross Culture Management :** Importance – Concepts and issues – theories-considerations - Problems – Skill building methods – Cross Culture Communication and Negotiation – Cross Culture Teams- Mergers and Acquisitions- Cultural Implications.
5. **Compensation Management:** Importance – Concepts- Issues – Methods – Factors of Consideration – Models – Performance Management.
6. **Globalization Strategic Advantages through HRD:** Measures for Creating HRD Climate – Strategic Frame Work of HRD and Challenges - Globalization and Quality Working Life and Productivity –Role of HR Audit – Challenges of Creation of New Jobs through Globalization- HR interventions in Y2K- New Corporate Culture

References:

1. Sujata Mangaraj: “Globalisation and Human Resource Management”, Excel Books, New Delhi, 2008
2. Aswathappa K, Sadhana Dash: “International Human Resource Management, TMH, New Delhi, 2009
3. Pradeep Kumar Sinha& Sanchari Sinha: “International Business Management”, Excel Books, New Delhi, 2008
4. Subba Rao P: “International Business”, Himalaya Publishing House, Hyderabad,
5. Chris Brewste, Paul Sparrow, Guy Vernon: “International Human Resource Management”, Universities Press, Hyderabad, 2008.
6. Tony Edwards : International Human Resource Management, Pearson Education, New Delhi, 2008
7. Chris Brewster: International Human Resource Management, University Press, New Delhi, 2008

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Management of Industrial Relations

1. **Industrial Relations Management** – Concept- Evaluation –Background of industrial Relations in India- Influencing factors of IR in enterprise and the consequences. Economic, Social and Political environments- Employment Structure –Social Partnership-Wider approaches to industrial relations- Labour Market.
2. **Trade Unions**- introduction-Definition and objectives-growth of Trade Unions in India-trade Unions Act , 1926 and Legal framework-Union recognition-Union Problems-Employees Association-introduction ,Objective Membership, Financial Status.
3. **Quality of Work Life:** Workers’ Participation in Management - Worker’s Participation in India, shop floor, Plant Level, Board Level- Workers’ Welfare in Indian scenario- Collective bargaining concepts & Characteristics –Promoting peace.
4. **Wage and Salary administration:** Nature & Significance of wage, salary administration, essentials- Minimum wage- Fair wage, Real wage, Incentives & fringe benefits. Issues and Constraints in Wage Determination in India.
5. **Social Security:** introduction and types –Social Security in India, Health and Occupational safety programs- Salient features of Workmen Compensation Act and Employees’ State Insurance Act relating to social security – Workers’ education objectives -Rewarding.
6. **Employee Grievances** – Causes of Grievances –Conciliation, Arbitration and Adjudication procedural aspects for Settlement of Grievances –Standing Orders- Code Discipline. Industrial Disputes: Meaning, nature and scope of industrial disputes - Cases and Consequences of Industrial Disputes –Prevention and Settlement of industrial disputes in India.

References

1. Sinha: Industrial Relations, Trade Unions and Labour Legislation Pearson Education, New Delhi, 2009
2. B.D.Singh: Industrial Relations, Excel Books, New Delhi, 2009
3. Mamoria: Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2010
4. C.S Venkataratnam: Industrial Relations, Oxford University Press, New Delhi, 2009.
5. Arun Monappa: Industrial Relations, TMH, New Delhi. 2009
6. Ratna Sen: Industrial Relations, MacMillon Publishers, New Delhi, 2010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

STRATEGIC HRM

Unit-I : The Human Resource Environment – Technology and Organization Structure – Management of Diversity – HR Outsourcing – Global Competition – Global Sourcing of Labour.

Unit – II : Strategic Perspective of HRM – HR for Competitive Advantage – Business Strategy and HR Strategy – HR and Business Policy Linkages – Organizational Performance.

Unit – III : Strategic Responses of Organizations – Strategic Role of HR Planning – Selection of Employees – Career Paths for Technical Professionals – Strategically Oriented Performance Measurement Systems.

Unit – IV: Compensation Systems –Strategic Requirements – High Performance Practices Rewarding Individual and Team Contribution and Organization Performance.

Unit – V: Strategic Approach to Industrial Relations – Social Dialogue, Negotiation Skills, Dealing with Unions for Working towards Harmonious Relations.

Unit VI: Case Studies from each Unit are Compulsory

Suggested Books:

1. Anuradha Sharma, Strategic Human Resource Management: An Indian perspective, Sage Response Books.
2. Nadler – competing by Design, Oxford University Press.
3. Ramaswamy – Managing Human Resources – A Contemporary, Oxford University Press.
4. Charles R.Greer, “Strategic Human Resource Management”, Pearson Education, New Delhi.
5. Srinivas R.Kandula, “Strategic Human Resource Development”, Prentice Hall of India, New Delhi.
6. Freed R.David, Strategic Management, Prentice Hall of India.
7. Kandula Srinivas, Strategic Human Resource Development, Prentice Hall of India.
8. Agarwal – Strategic Human Resource Management, Oxford Press.
9. Prasad – Strategic Human Resource Management. MacMillan.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management
E-Commerce

1. **Introduction to E-Commerce:** Framework, Architecture, Benefits and Impact of e-Commerce, The Anatomy of E-Commerce applications, e-Commerce Consumer applications, e-Commerce Organization Applications, e-commerce in India, Prospects of e-commerce.
2. **Network Infrastructure for E-commerce:** Electronic Data Exchange: EDI- Definitions & Applications, Standardization and EDI, EDI- Legal Security and Privacy Issues, Advantages & Limitations of EDI. Intranet, Extranet, & Internet, Internet Backbone in India, ISP and services in India, OSI Model, Standards & Overview of TCP/IP, Internet Security, ecommerce & Internet.
3. **E-commerce Models:** Business-to-Business–Hubs, Market Places, Business-to-Business Exchange, Business-to-Consumer, Consumer-to-consumer, Business-to-Government, Government-to-Government.
4. **E-Advertising & Marketing:** The new age of information–based Marketing, Emergence of internet as a competitive advertising media, Market Research, Weakness in Internet Advertising, e- Advertising & Marketing in India.
5. **Electronic Payment Systems:** Introduction to Payment Systems, On-Line Payment Systems, Pre- Paid e-Payment System, Post-Paid e-Payment System, Requirements Metrics of a Payment System.
6. **E-Security:** Securing the Business on Internet- Security Policy, Procedures and Practices, Transaction Security, Cryptology, Digital Signatures, Security Protocols for Web Commerce.
e-CRM: CRM, what is e-CRM , it's Applications,

References

1. Jeffrey F.Rayport & Bernard J.Jaworski: Introduction to E-commerce, TMH, 2003.
2. Kenneth C Laudon: E-commerce, Pearson Education, Mumbai, 2009.
- 3 C.S.V.Murthy: E-Commerce–Concepts, Models & Strategies, Himalaya Publishing house, Mumbai, 2010
4. Kamalesh K Bajaj & Debjani Nag: E-Commerce, the Cutting Edge of Business- Tata McGraw- Hill, New Delhi, 2009.
5. P.T.Joseph: E-Commerce, PHI Learning, New Delhi 2009
6. Gary P Schneider: E Commerce, Cengage Learning, New Delhi,2009.
7. Christopher Westland J, Theodore H K Clark: “Global Electonic Commerce”, Universitites Press, Hyderabad, 2009.

Technology Management

1. Introduction to Technology Management –Definition – Concept of creativity – Components – Features – Classification of Technology – Concept and Nature of Technology Management- Drivers of MOT- Significance and Scope of MOT- Role of Chief Technology Officer – Responding to Technology challenges.
2. Technology Policy – Determinants of Nation’s Capability – Role of Government – Science and Technology policy – Status of Technology in India – Future of India – Technology Strategy – Formulation of Technology Strategy – Technology innovation Strategy.
- 3 Technology Planning and Strategy Tools – Technology Planning – Tools for Company Technology Analysis – Tools for industry Technology Analysis – Trajectories of Technology
4. Technology Acquisition - Methods Acquisition - Internal Development - External acquisition Sources - Acquisition decisions - Technology Acquisition trends – Technology exploitation decisions - Technology appropriation.
- 5 Process Innovations – Concept and types of process - Process Management Concerns - Types of Process innovations- Process improvement techniques – Organizing for improvements. Technology Transfer – Definition – Classification and Significance - Elements of transfer process - Types of Technology transfer - package – Modes of transfer - Channels of Technology flow - Routes of technology transfer- Effective transfer and Pricing of technology transfer – Price negotiation- Technology transfer agreements.
6. Technology Diffusion – Concept of Diffusion - Integrated Diffusion Strategy - Influencing factors - Innovation adoption - Diffusion strategies - Community effects and network externalities – Distribution of Adopters- Crossing the Chasm – Market dynamics. Technology Absorption and Deployment – Technology Absorption – Influencing factors - Deployment strategies - Corporate Venturing - Benefits and Drawbacks of Corporate Venturing – Spin-off Companies

References:

1. Rastogi P.N: “*Management of Technology and Innovation*”, Sage Publications, New Delhi, 2009.
2. Scott Shane: “*Technology Strategy for Managers and Entrepreneurs*”, Pearson Education, New Delhi, 2009.
3. CSG Krishnamacharyulu, Lalitha Ramakrishnan: “*Management of Technology*”, Himalaya Publishing House Private Limited, New Delhi, 2008.
4. White and Bruton: “*The Management of Technology and Innovation*”, Cengage Learning India, New Delhi, 2009.
- 5 Tarek Khalil, “*Management of Technology—The Key to Competitiveness and Wealth Creation*”, McGraw Hill, Boston, 2000.
6. P.N.Rastogi, “*Managing Creativity*”, Macmillan India Ltd, 2003.
7. William L Miller and Longdon, Morris, “*Fourth Generation R & D*”, John Wiley & Sons Inc.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management

Data Base Management System

1. Types of Information Systems: Office Automation System, Communication systems, Transaction processing system, Management and Executive information system, Decision support systems, GDSS, Systems from a functional perspective-sales, production, finance, human resources system.
2. Building and Maintaining IS: Alternative approaches for building information systems – end user development – Outsourcing. Information Security, control and audit – Systems vulnerability and abuse, different threats in IS – methods of minimizing risks,
3. Data base Management System: Objectives of Database Approach – Characters of Data Base Management Systems – Data processing Systems – Components of DBMS Packages – Data base administration.
4. Data Modeling Concept: Development of Data Models – File Management The Hierarchical Data base Models. Physical Vs Logical Models of Data – Network Database Structure
5. Organizational Memory Technologies: Data warehouse – Information presentation – website management -
6. Data integrity- Transaction management - Management of database environment - Data administration.

References

1. Philip J, Pratt, Joseph J. Adamski: “*Database Management Systems*”, Cengage Learning, New Delhi, 2009.
2. W S Jawadekar: “*Management Information Systems*”, Tata McGraw Hill Private Limited, New Delhi, 2009.
3. Mahadeo Jaiswal, Monika Mital: “*Management Information System*”, Oxford University Press, New Delhi, 2008.
4. Goyal DP: “*Management Information System*”, MACMILLAN India Limited, New Delhi, 2008.
5. C.S.V.Murthy: “*Management Information System*”, Himalaya Publications, New Delhi, 2008.
6. Richard T. Watson: “*Data Management*“, WILEY INDIA Limited, New Delhi, 2008.
7. Alex Leon and Mathew Leon: “*Data Base Management Systems*”, Vikas Publishing House, New Delhi.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Syllabus for Pre-Ph. D Examination

Management

Data warehousing and Data Mining

1. **Managing Data:** Individual Data Management, Organisational Data Management, Components of Organisational Memory, Evaluation of Database Technology
2. **File-Oriented Systems:** Meeting the Need for Random Access Processing Information as Resource, Other Limitations of Traditional File Systems, Data Base Systems, Hierarchical Network Model Systems, Relational Database Systems - Database Systems: Hardware, Software, Data, People and Relationship of the four System Components.
3. **Database Systems in the Organisations:** Data Sharing and Data Bases – Sharing Data Between Functional Units, Sharing Data Between Different Levels of Users, Sharing Data Between Different Locations, The Role of the Data Base, Strategic Data Base Planning – The Need for Data Base Planning, The Data Base Project, The Data Base Development Life Cycle (DDLCC)
4. **Risks and Costs of Database:** Organizational Conflicts – Development Project Failures – System Failure – Overhead costs – Need for Sophisticated Personnel – Separating Physical and Logical Data Representation – Client / Server Data Base Architecture, Three-Level Data Base Architecture
5. **Data warehousing Introduction:** What is a Data warehouse, Who uses Data warehouse, Need for Data warehouse, Applications of Data warehouse Concepts. Context of Data warehouse Data Base, Data Base Structures – Organizing Relational Data warehouse – Multi-Dimensional Data Structures – Choosing a Structure, Getting Data into the Data warehouse – Extraction, Transformation, Cleaning, Loading and Summarization,
6. **Analyzing the Contexts of the Data warehouse:** Active Analysis, User Queries – OLAP, OLAP Software Architecture – Web Based OLAP, General OLAP Product Characteristics, Automated Analysis – Data Mining, Creating a Decision Tree, Correlation and Other Statistical Analysis, Neural Networks, Nearest Neighbour Approaches, Putting the Results to Use.

References

1. George M Markas: Modern Data Warehousing, Mining and Visualization, Pearson Education, New Delhi, 2009
2. Bharat Bushan Agarwal: Data Mining and Data Ware Housing, University Science Press, New Delhi, 2009
4. Gary W Hansen, James V Hansen: Data Base Management and Design, 2/E, PHI – 2000 New Delhi.
3. Hector Garcia, Molina, Jeffrey D. Ullman, Jennifer Widom: Data Base System Implementation, Pearson Education, 2001.
- 4 Arun K Majumdar, Primitimoy Bhattacharyya: Data Base Management Systems, Tata McGraw- Hill, New Delhi, 2003.
5. Reema Thareja: Data Ware Housing, Oxford University Press, New Delhi, 2009

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Syllabus for Pre-Ph. D Examination
Management
Systems Audit

1. **Overview of Information System Auditing:** Effect of Computers on Internal Controls, Effects of Computers on Auditing, Foundations of information Systems Auditing, Conducting an Information Systems Audit.
2. **The Management Control Framework-I:** Introduction, Evaluating the planning Function, Evaluating the Leading Function, Evaluating the Controlling Function, Systems Development Management Controls, Approaches to Auditing Systems Development , Normative Models of the Systems Development Process, Evaluating the Major phases in the Systems Development Process, Programming Management Controls, Data Resource Management Controls.
3. **The Management Control Framework-II:** Security Management Controls, Operations Management Controls Quality assurance Management Controls.
4. **The Application Control Framework:** Boundary Controls, Input Controls, Communication Controls. Processing Controls, Database Controls, output Controls.
5. **Evidence Collection:** Audit Software, Code Review, Test Data, and Code Comparison, Concurrent Auditing techniques, Interviews, Questionnaires ,and Control Flowcharts. Performance Management tools.
6. **Evidence Evaluation:** Evaluating Asset Safeguarding and Data Integrity, Evaluating System Effectiveness, Evaluating System Efficiency. Information Systems Audit and Management: managing the Information Systems Audit Function,

References

1. D P Dube: Information System Audit and Assurance, TMH, New Delhi,2008
2. Ron Weber, Information Systems Control and Audit, Pearson Education,2009.
3. S.A.Kelkar : Software Project Management, PHI Learning, New Delhi, 2009
4. Royce : Software Project Management, Pearson Education. New Delhi

Decision Support Systems

1. **M.I.S and Its Role In Organizations** Open-Systems and Closed Systems D.S.S Its Relation to M.I.S, Characteristic Role of D.S.S as Different From M.I.S in an Organization, Expert DSS and Its Role as an Aid to Management Decision Process.
2. **Deterministic Models:** Models Required to Cope With Uncertainty, Probabilistic Models and Fuzzy Sets, Fuzzy DSS and Fuzzy Expert DSS
3. **Application of DSS:** Some Functional Areas of Management Like Finance, Marketing, Production Planning and Control Etc.
4. **Non-Optimizing Models of DSS:** Simulation Techniques and Monte- Carlo Methods.
5. **Application of DSS:** Technical Feasibility and Financial Viability of DSS. Advantages and Limitations of DSS –Contemporary practices.
- 6 **Introduction to Artificial Intelligence (AI):** An Overview of AI– AI Technologies in Business, Domains in AI, Neural networks. Fuzzy logic systems in Business: Virtual Reality, Intelligent agents, expert system and its components, Applications of expert system, developing expert systems, value of expert systems.

References

1. V.S. Janaki Raman: Decision Support System, PHI Learning, New Delhi,2009
- 2 Mallah: Decision Support and Data Warehouse Systems, TMH New Delhi, 2002
- 3 Turbon: DSS and Intelligent Systems, Pearson Education, 2010.
- 4 George M..Marakas: “Decision Support Systems in the 21st Century”, 2/e,Pearson Education, New Delhi, 2008.