2.1: Human Resource Management

Unit – I:

Definition, Evolution, objectives, scope and functions of HRM. HRM Typology, system, strategy, and matrix of HR – Stakeholders and Integrated Models of HRM – Line vs. Staff - The changing environment and role of HRM. Competitive challenges influencing HRM – HRIS: Three levels comparison – Competency Framework for HR professionals.

Unit – II:

Job analysis – Systems exchange model. Analysis and mapping of workflow. Job characteristics model. Job Design - Job evaluation – Towers Perrin Model of Total Reward - Performance appraisal – HR Planning – Gallagher HR Estimator – Cohort Analysis – Recruitment- Yield – ratio Analysis - Process of selection, placement and orientation. Training Methods – Kirkpatrick and Pecuniary Utility Models of Training – MDP.

Unit – III:

Introduction to HRD – HR Accounting – Lev and Schwartz, Flamholtz and Hermanson's Models – Audit, research, Policies, validity generalization of HR – Career planning – Greenhaus career Development Model – Protean career – Psychological Contract: Functions and Types – HR Utility Framework – Markov Employee Transition.

Unit – IV:

Dunlop's IR Model – Organogram – QWL – QC - Grievance management – Labour Turnover and stability indices – Worker's Participation in Management – Bate's brand wheel for employer brand – employee Engagement Index – Employee Value Proposition – Absence Management – Brad factor.

Unit – V:

HR outsourcing - HR issues in mergers and acquisitions – HR six – sigma process – HR Index – HR - ROI – Job Diagnostic Model - Emotional intelligence and competencies at work - Work life integration – Introduction to International HRM, Global HRM, and Strategic HRM – HR Score card – Paradox Theory as a lens of theorizing for Sustainable HRM – Sustainable HRM Model – Paauwe's – Paradox Framework for Sustainable HRM.

Suggested Books:

1. Michael Armstrong, "Human Resource Management", 2010, Kogan Page.
2. Mathis & Jackson, "Human Resource Management", 2009, Cengage.
3. David Lepak, Mary Gower, "Human Resource Management", 2009, Pearson.
4. Paul Banfield, Rebecca Kay, "Human Resource Management", 2009, Oxford.
5. Decenzo, "Human Resource Management", 2008, Wiley.
6. Madhurima Lal, S.Qzaidi, "Human Resource Management", 2009, Excel books.
7. Wayne & Caseia, Ranjeet Nambudri, "Managing Human Resource", 2010, TMH.
8. Gomez Mejia et.al, "Managing Human Resource", 2010, PHI.
9. Steve Fleetwood & Anthony Hesketh, Explain the performance of HRM, 2010, Cambridge.
10. V.K. Sharma, "Human Resource Management", 2010, Viva Books.
11. Sanghi, "Human Resource Management", 2010, Macmillan.
12. David G. Collings, "Human Resource Management", 2009, Routledge.
13. W.J. Rothwell, "Planning & Managing HR", 2010, Jaico.
14. Kenneth M. York, "Applied Human Resource Management", 2009 Sage.

2.2: Business Process Reengineering

Unit – I: Introduction to BPR

Reengineering and its relationship with functional areas of business. History of reengineering, suggested reengineering framework. Deterministic machines, complex dynamic system, interacting feedback loops and social constructs perspectives of BPR.

Unit – II: Managing Process Flows

Business Process and Flows - Through put rate, work-in-process, Cycle Time, Little's Law. Cycle Time and Capacity Analysis – Cycle Time Analysis, Capacity Analysis. Managing Cycle Time and Capacity – Cycle Time Reduction, Theory of Constraints.

Unit – III: Implementation Process

Redesign of business processes – systematic or clean sheet, main and supporting processes, rationale of BPR, key enablers of BPR, technology for BPR, critical success factors, cross functional teams, mentoring, facilitating, models and methodologies of BPR, tools and techniques of BPR.

Unit – IV: Making effective BPR

Virtual ingredient – people, top management's involvement, involvement of consultants, empowerment and autonomy, the IT 'black hole', using process Simulation to minimize the risk – Business Process Map and Simulation Model, Parameter Analysis, Simulation and Key performance Indicators.

Unit – V: ERP and BPR

ERP in Modeling Business Processes, Work flow Management systems in BPR, steps of BPR, Description of the case company, Business Case, Five-stage Model of AS-IS / TO-BE Analysis, Managing Implementation. Business process management, process centric organizations, business process maturity model, business process performance measurement.

Suggested Books:

1. Laguna "Business Process Modeling, Simulation and Design", 2005, Pearson.
2. Chan Meng Khoong, "Reengineering in action", 1st edition, 2009, Cambridge.
3. Charles Poirier "Business Process Management Applied", 2005, Cengage.
4. Martyn A. Ould "Business Process Management", 2010, BCS Viva Books.
5. Tony Carter, "The Aftermath of Reengineering", 2007, Viva Books.
6. Dey "Business Process Reengineering", 2006, Wiley.
7. K. Sridhra Bhat, "Business Process Reengineering", 2007, HPH.
8. Saxena K.B.C., "Business Process Outsourcing", 2007, Excel.
9. Mahadeo Jaiswal, "Enterprise Resource Planning", 2005, Mac Millan.
10. MS.Jayaraman, et.al; "Business Process Reengineering", 1994, TMH.
11. Varun Grover, M. Lynne Markus, "Business Process Transformation", 2010, PHI.
12. Daniel minoli, "Business Process Reengineering", 2010, Routledge.

2.3: Financial Management

Unit – I: The Finance function:

Nature and Scope; Evolution of finance function – Its new role in the contemporary scenario – Goals of finance function – maximizing vs. satisfying; Profit vs. Wealth vs. Welfare; the Agency relationship and costs; Risk-Return trade off; Concept of Time Value of Money – Future Value and Present value.

Unit – II: The Investment Decision:

Investment decision process- Project generation, project evaluation, project selection and project implementation. Developing Cash Flow; Data for New Projects; Using Evaluation Techniques – Traditional and DCF methods. The NPV vs. IRR Debate; Approaches for reconciliation. Capital budgeting decision under conditions of risk and uncertainty; Measurement of Risk – Risk adjusted Discount Rate, Certainty Equivalents and Beta Coefficient, Probability tree approach, Sensitivity analysis.

Unit – III: The Financing Decision:

Sources of finance – a brief survey of financial instruments; Capital Structure Theories, Concept and financial effects of leverage; The capital structure decision in practice: EBIT – EPS analysis. Cost of Capital: The concept – Average vs. Marginal Cost of Capital; Measurement of Cost of Capital – Component Costs and Weighted Average Cost of Capital

Unit – IV: Current Assets Management and Dividend Decision:

Concept of current assets, characteristics of working capital. Factors determining working capital. Estimating working capital requirements. Working capital policy. Management of current assets: Cash Management, Receivables Management and Inventory Management. Bank norms for working capital financing. The Dividend Decision: Major forms of dividends – Cash and Bonus shares. The theoretical backdrop – Dividends and valuation; Major theories centered on the works of Gordon, Walter, and Lintner. A brief discussion on dividend policies of Indian companies.

Unit – V: Corporate Restructuring and Corporate Governance:

Corporate Mergers, acquisitions and takeovers: Types of mergers, Economic rationale of
Mergers, motives for mergers; Financial evaluation of mergers; Approaches for valuation: DCF approach and Comparable Company approach (No practical exercises). Corporate Value based management systems. Approaches: Marakon approach and McKinsey approach; Principles of good corporate Governance.

Suggested Books:

1. Jonathan Berk, Peter DeMarzo, Ashok Thampy, "Financial Management", 2010, Pearson.
2. Brigham, E. F. and Ehrhardt. M. C., "Financial Management Theory and Practice", 2006, 10th Ed. Thomson South-Western.
3. Ross Westerfield Jaffe, "Corporate Finance", 7th Ed, TMH Publishers
4. Vishwanath S. R., "Corporate Finance: Theory and Practice", 2007, 2nd Ed. Response books, Sage Publications.
5. Prasanna Chandra, "Financial Management Theory and Practice", 7th Ed. Tata McGraw Hill,
6. I. M. Pandey, "Financial Management", 2010, 10th Ed. Vikas Publishing House.
7. Sudershana Reddy, "Financial Management", 2010, HPH.
8. Rajiv Srivastava and Anil Misra, "Financial Management", 2009, 4th Ed. Oxford Higher Education.

2.4: Research for Marketing Decisions

Unit – I: Meaning and importance of marketing research:

Marketing Research, marketing information system -Marketing decision support system. Research design Introduction to design of experiments -Exploratory, causative, conclusive and experimental designs.

Unit – II: Marketing research process:

Sources and methods of gathering marketing information - Respondents, Experiments, Simulation (as a source of Data Generations) and Panels. Sampling design and Sample size determination.

Measurement and scaling - Concept of measurement and scaling – Types of Scales - Nominal ,Ordinal, Interval and Ratio Scales - Attitude scales Thurstone's, Likert's, Guttman's, Semantic differential, Reliability and validity of a scales. Design of questionnaire.

Unit – III: Decision Making Tools:

Decision Theory-Decision making under certainty, Risk, uncertainty, Criteria of Decision making-Pessimism, Realism, Optimism, Regret, Equiprobable, EMV, EOL, Cost and value of information, Determination of EVPI utility as a concept of decision making. Decision tree analysis - Decision Tree- Sequential decision making-

Unit – IV: Non-Parametric Statistics in Research:

McNemar, Sign Test –One and Two samples, Run test, Wilcoxon Matched pairs test, Mann-Whitney test, Kolmogorov – Simronov D test, Kruskal –Wallis tests.

Unit – V: Multi-Variate analysis:

Structural and Functional methods-Factor analysis, Cluster analysis, Discriminate analysis, Conjoint analysis, Multi Dimensional Scaling. Multiple Regression (Numerical with two independent variables).

Research report - preparation - and presentation - Oral and written presentation.

Suggested Books:

1. Green E. Paul, Tull S.Donald & Albaum, Gerald: "Research for Marketing Decisions", 2006, 6th Ed, PHI.
2. Tull and Hawckins, "Marketing Research", 2000, 4th Ed. Tata McGraw Hill.
3. Luck and Rubbin, "Marketing Research", 2004, 4th Ed. PHI.
4. Zikmund, "Essentials of Marketing Research", 2009, CENGAGE Publishers.
5. Martin callingam, "Market intelligence", 2009, Kogan Page Publishers.
6. G.C. Beri, "Marketing Research", 2008, 8th Ed, Tata McGraw Hill.
7. Malhotra, K. Naresh, "Marketing Research- And applied orientation", 2005, 4th Edition.
8. Alan Bryman and Emma Bell, "Business Research Methods", 2009, 2nd Ed. Oxford Press.
9. O.R. Krishna Swamy "Methodology of Research in Social Sciences", 2008, HPH.
10. S L Gupta, "Marketing Research", 2009, Excel Books, New Delhi.

2.5: Operations Research

Unit – I:

  i. Introduction to OR- Origin, Nature, definitions, Managerial applications and limitations of OR.

  ii. Linear and Non- Linear, Integer, Goal [Multi-Objective] and Dynamic Programming Problems (Emphasis is on Conceptual frame work-no numerical problems.

  iii. Linear Programming: Mathematical model, Formulation of LPP, assumptions underlying LPP, Solution by the Graph, Exceptional cases.

Unit – II:

  i. LPP - Simplex Method- Solution to LPP problems Maximisation and Minimisation cases Optimality conditions. Degeneracy.

  ii. Dual - Formulation, Relationship between Primal - Dual, Solution of dual, Economic interpretation of dual.

  iii. Sensitivity analysis and its implications.

Unit – III:

  i. Transportation Problem (TP) - Mathematical model, IBFS using northwest corner rule, Row and Column Minimum methods, Matrix minimum method(LCM) and Vogel's approximation method, Unbalanced TP, Degeneracy, Optimality Test and Managerial applications.

  ii. Assignment Problem (AP): Mathematical model, Unbalanced AP, Restricted AP, method of obtaining solution- Hungarian method.

  iii. Travelling salesman problem, Managerial applications of AP and TSP.

Unit – IV:

  i. Network fundamentals- scheduling the activities -Fulkerson's Rule –CPM- earliest and latest times -determination of ES and EF in the Forward Pass - LS and LF in backward pass determination of Critical Path, Crashing, time cost trade off.

  ii. PERT-Beta Distribution, probabilistic models, Calculation of CP, resource analysis and allocation.

  iii. Network flow problems, Max. Flow - Min. cut theorem. Ford and Fulkerson's Algorithm for obtaining Maximum flow. Spanning Tree, Minimal spanning tree.

Unit – V:

  i. Queuing Theory - Concepts of Queue/Waiting Line - General structure of a Queuing system- Operating characteristics of Queues, deterministic Queuing models -Probabilistic Queuing Model –Cost Analysis - Single Channel Queuing model - Poisson arrival and exponential service times with infinite population.

  ii. Game Theory- concepts, saddle point, Dominance, Zero-sum game, two, three and more Persons games, analytical method of solving two person zero sum games, graphical solutions for (m x 2) and (2 x n) games.

  iii. Simulation- Process of simulation, Applications of simulation to different management Problems.

Suggested Books:

1. N.D. Vohra, "Quantitative Techniques in Management", 2010, 4th Ed.TMH.
2. J.K. Sharma, "Operations Research Theory and Applications 2009, 4th Ed. Macmillan.
3. Kasana, HS & Kumar, KD, "Introductory Operations Research theory and applications", 2008, Springer.
4. Chakravarty, P, "Quantitative Methods for Management and Economics", 2009, 1st Ed. HPH.
5. Barry Render, Ralph M. Stair, Jr. and Michael E. Hanna, "Quantitative analysis for Management", 2007, 9th Ed. Pearson.
6. Pannerselvam, R, "Operations Research", 2006, 3rd Ed. PHI.
7. Selvaraj, R, "Management Science Decision Modeling Approach", 2010, 1st Ed. Excel.
8. Ravindren, A, Don T. Phillips and James J. Solberg, 2000, "Operations Research Principles and Practice", 2nd Ed. John Wiley and Sons.
9. Hillier, Frederick S. & Lieberman, "Introduction to Operations Research Concepts and Cases", 2010, 8th Ed. TMH.
10. Prem Kumar Gupta & others, "Operations Research", 2010, S. Chand.

2.6: Operations Management

Unit - I: Introduction to Operations Management:

Introduction to Operations Management - Role of Operations Management in total management System- Interface between the operation systems and systems of other functional areas, Process planning and process design, Production Planning and Control: Basic functions of Production Planning and Control, Production Cycle - characteristics of process technologies. Project, Job Shop, Assembly, batch and Continuous - Inter Relationship between product life cycle and process life cycle.

Unit – II: Scheduling and control of production operations:

Aggregate planning, MPS, Operations scheduling, Product sequencing: Sequencing of products in multi- product multi-stage situations - Plant Capacity and Line Balancing. Plant layout -different types of layouts. Location and the factors influencing location. Maintenance Management: Objectives – Failure Concept, Reliability, Preventive and Breakdown maintenance, Replacement policies

Unit - III: Quality control:

Standards and specifications, Quality Assurance and Quality Circles – Statistical Quality Control – Control Charts for Variables- Average, Range and S.D., Control charts for Attributes- fraction defective and number of defects, Acceptance Sampling Plans, OC Curve Work Study, various techniques in the Methods Study for identifying the most appropriate method. Work measurement - its uses and different methods, computation of allowance and allowed time.

Unit - IV: Materials Management:

Need and importance of Materials management-Materials Requirement Planning-Materials Budgeting- Techniques for prioritization of materials-Sources of Supply of Materials -selection, evaluation and Performance of suppliers-make or buy decisions and its implications under various circumstances Vendor rating - determinants of vendor rating, concept of waste management

Unit - V: Stores Management:

Objectives of Stores Management – Requirements for efficient. Management of Stores - safety stock Inventory Control - Different Systems of Inventory Control, Types of Inventory. Costs - Systems of inventory control – ABC, VED and FNSD analyses. Value Analysis – Importance in cost reduction – concepts and procedures.

Suggested Books:

1. Mahadevan. B, "Operations Management", 2010, Pearson Education.
2. Stevenson J. William, "Operations Management", 2009, 9th Ed. Tata McGraw-Hill.
3. James R Evans, David A. Collier, "Operations Management", 2007, Cengage Learning.
4. Aswathappa K. and Sridhara Bhat, "Production and Operations Management", 2010, HPH.
5. Danny Samson and Prakash J.Singh, "Operations Management-An integrated approach", 2009, 1st Ed. Cambridge press.
6. Ray Wild, "Operations Management, 2003, Thomson Learning.
7. Kanishka Bedi, "Production and Operations Management", 2007, 2nd Ed. Oxford University Press.
8. Everett. Adam, Jr. and Ronald J. Elbert, "Production and Operations Management Concepts, Models and Behaviour", 2003, Prentice Hall of India, 5th Ed.
9. Donald Waters, "Operations Management", 2010, Kogan page India.
10. Upendra Kachru, "Production and Operations Management", 2010, Excel Books.

2.7: Decision Support Systems

Unit I: Introduction to Decision Support Systems (DSS):

Evolution of DSS- Definition of DSS – Need and benefits of DSS. Decision Making Process-Types of Decisions, A framework For DSS Support- DSS as Information System- Types of DSS – Individual, Group.

Unit II: Development and Implementation of DSS and Models in DSS:

DSS Architecture- Hardware, Software Tools for DSS- Approaches to Development – Implementation, Models in DSS – Types of Models.

Unit III: Group DSS and Groupware:

Group Decision Making - problems with groups- MDM Support Technologies-Distributed Group DSS-Distributed DSS Technologies- Executive Information Systems-definition-EIS Components – Making the EIS work – The Future of Executive Decision Making and The EIS.

Unit IV: Artificial Intelligence (AI) and Expert System (ES):

Definition of Artificial Intelligence – Artificial Intelligence vs. Natural Intelligence- The Intelligence of AI- Expert Systems- Definition, Structure of ES- Designing and Building ES- Benefits of ES – Examples of ES- Intelligent Software Agents.

Unit V: Data Ware Housing and Data Mining:

Data Ware house – Definition- Data Marts, Data Stores, Meta Data – Characteristics of Data Ware House – Data Warehouse Architecture- Implementing Data Warehouse. Data Mining- Definition-Online Transaction Processing Techniques use to Mine Data, Data Mining Techniques-Limitations of Data Mining- Data Visualization.

Suggested Books:

1. Efrem G. Mallach, "Decision Support and Data Warehouse Systems", Tata McGraw Hill Edition.
2. George M. Marakas, "Decision Support Systems" In the 21st Century, PHI, EEE, Second Edition.
3. Simon French, John Maule and Nadia Papamichail, "Decision Behaviour, Analysis and Support", 1st edition, 2009, Cambridge press.
4. Efraim Turban, Jay E. Aronson, Teng-Peng Liang, Ramesh Sharda, "Decision Support and Business Intelligence", Eighth Edition, Pearson LPE.
5. Efraim Turban, "Decision Support and Expert System", MSS, PHI.