Principles of Management

(MBA – 111)

L	T	C
3	1	4

Unit – I:

Basics of Management, Classification, Characteristics, and Objectives of management, Management and Society, Social Responsibility and Ethics, Development of Management Thought, Nature and Functions of Management, Management by Objectives, Role of Managers, Principles of Scientific Management, Essence of Management.

Unit – II:

Organization; The Nature and Purpose, Basic Departmentation, Line/Staff Authority and Decentralization, Organization Culture, Human Resource Management and Selection, Training and Development, Performance Appraisal and Career Strategy, Identifying the ability, Team work, Team Building for Enhanced Efficiency and Productivity, Leadership Processes and Framework, Behavior of Employees, Theory and Importance of Motivation, Motivation and Reward System.

Unit – III:

The System and Process of Controlling, Control Techniques and Information Technology, Productivity and Operations Management, Overall and Preventive Control, Policies and Procedures of Management Plans, Production Planning and Control, Techniques for Operations Planning, Gantt Charts, Program Evaluation and Review Technique, Critical Path Method, Difference between PERT and CPM.

Unit – IV:

The Nature and Purpose of Planning, Objectives, Strategies, Policies, and Planning premises, Importance of Planning, Concept and Techniques of Forecasting, Strategic and Tactical Decisions, Decision Making Process, Rationality and Creativity in Decision Making.

Unit – V:

Ethics in Business, Guidelines for Managing Ethics in Work Place, Benefits of Ethics in Business, Concept and concern for Environment, Impact of Industries on Environment, International management: Toward a Unified, Global Management Theory.

RECOMMENDED BOOKS:

1.Fundamentals of Management	**S. P. Robbins & D. A. Decenzo**
2. Principles of Management	**Koontz & Donnel**
3. Handbook of Management Skills	**Jaico Publishing House**
4. Principles of Management	**K. C. Sahu**
5. Principles of Management	**Tripathy & Reddy**
6. Essentials of Management	**J. L. Massie**
7. Principles of Management	**George & Frankline**
8. Business Ethics	**W. H. Shaw**

Human Resources Management
(MBA – 115)

L	T	C
3	0	3

Unit – 1:

Human resource management; Nature, scope, development and operative functions of Human Resources Management, Importance, role and position of personnel function in the organization. The Human resource planning function, Manpower planning & career development planning, Job analysis including job descriptions and job specifications.

Unit – 2:

The recruitment & selection, Induction & Placement, Employment Exchanges (Compulsory Notification of vacancies) Act 1959, The contract labour (Regulation & Abolition) Act 1970. The appraisal function-performance appraisal. Training & Development in organization, Advancement/Promotions & Transfers, Apprentice Act-1961.

Unit – 3:

Basic concepts in wage administration, Company Wage policy, Job Evaluation. Issues in wage & salary administration, Bonus and incentives, Payment of wages Act-1936, Minimum wage-act-1948. Fringe & Retirement/terminal Benefits, Administration of Welfare Amenities, Safety and Accident prevention, Factory Act 1948, Shops and Commercial Establishments Act, Employed P. F. Act 1952 and Scheme and Family Pension scheme, ESI Act 1948, Workmen's Gratuity Act 1972, Maternity Benefit Act 1961.

Unit – 4:

Administration of suggestion schemes, Employee Grievances and their Redressal, Administration of Discipline, Employee Morale & Motivation, Communication in organization, Absenteeism, Labour Turnover, Changing face of the Indian work force and their environment. Management-Union Relations, Trade union movement collective bargaining, Employees participation in management, Group Dynamics; Nature of work groups, group cohesiveness, group performance, group norms.

RECOMMENDED BOOKS

1. Personnel Management: Edwin B. Flippo
2. Personnel Administration: Figors P. & Myers

3. Personnel and The Human Problems of Management:	**Strauss G. & Sayas L.R.**
4. Personnel Principles and Policies:	**Yader D.**

Managerial Economics

(MBA – 112)

L	T	C
3	1	4

Unit-I:

Economics: Meaning, Nature and Scope; Micro & Macro Economics; Central Problems of an Economy, Economic Systems – Types and Features, Introduction to Business Economics: Nature and Scope of Business Economics; Decision Process; Fundamental Concepts in Business Decisions, Basic Tools in Economic Analysis, Functional Relationship Between Economic Variables, the Function; Objectives of a Firm, Baumol's Theory and Behavioral Model, Profit Maximisation as the Goal of Corporate Firms.Limitations of Economic Theories.

Unit-II:

Theory of Demand: Meaning, Law of Demand; Types of Demand; Factors Affecting Demand; Marginal Utility Analysis and Analysis of Consumer Behaviour: Cardinal and Ordinal Utility Approach; Elasticity of Demand; Measurement of Elasticity of Demand and its Implications in Decision Making Process; Introduction to Demand Forecasting - its Role, Types and Methods.

Unit-III:

Production and Cost Analysis; Meaning of Production; Production Function, Least Cost Combination of Inputs; Factor Productivity and Returns to Scale; Cost Concepts. Traditional and Modern Theory of Cost in Short and Long Run; Economies of scale, Market Structures and firm's equilibrium, Concepts of Revenue, Break-Even Analysis, CVP analysis

Suggested Readings:

1. **Dean, Jod:Managerial Economics, New Delhi, Prentice Hall.**
2. **Haynes, W. W., V. L. Mote and S. Paul(1970): Managerial Economics-Analysis and Cases, Bombay.**
3. **Truett, C. J. and D. B. Truett(1984): Managerial economics,2nd ed.,Cincinati, South Western Publication.**
4. **Dwivedi, D. N.: Managerial Economics, 7th ed., Vikas Publication, 2008.**
5. **Koustosiannis, A: Modern Micro Economics,2nd ed., Mc Millan,1979.**

Business Statistics

(MBA – 113)

L	T	C
3	1	4

Unit – 1:

Types of statistics, types of variables, levels of measurements, relative frequency distribution, stem and leaf displays, graphical and histograms frequency distribution, measures of central tendency: average, sample mean, arithmetic mean, weighted mean, median, mode, dispersion and skewness: measures of dispersion, relative dispersion, skewness.

Unit – 2:

Approaches to probability, basic rules of probability, Bayes' theorem, principles of counting, concept of probability distribution, random variables, mean, variance and standard deviation, Binomial probability distribution, cumulative probability distribution, Piosson probability distribution.

Unit – 3:

Characteristics of Normal distribution, family of normal distribution, Standard normal probability distribution, Area under normal curve, Standard normal probability distribution, Normal approximation to the Bionomial, Probability sampling, methods of probability sampling, sampling error, central limit theorem, point estimates and interval estimates, Confidence intervals, finite population correction factor. Concept of hypothesis and hypothesis testing, Five step procedure for hypothesis testing, one tailed and two tailed tests of significance, two tailed test, one tailed test, two population mean, Type II error, tests of hypotheses: proportion, one and two tailed tests, students t distribution.

Unit – 4:

F Distribution, ANOVA, assumptions underlying ANOVA, analysis of variance procedure, two factor analysis of variance, simple correlation analysis, scatter diagram, coefficient of diagram, coefficient of determination and non determination, testing the significance of the coefficient of correlation, rank order correlation. Regression equation, least square principle, standard of estimate, assumptions underlying linear regression, confidence interval estimates, multiple regression

analysis, multiple standard error of estimate, multiple correlation analysis, stepwise regression.

Unit – 5:

Goodness of fit test, equal and unequal expected frequencies, using goodness of fit test to test for normality, contingency table analysis. Sign test, Mann -Whitney U test, Kruskal- Wallis test, Wilcoxcon method.

TEXT BOOKS

1. Statistical Techniques in Business and Economics by Mason and Lind

REFERRENCE BOOKS

1. Statistics by Freedman, Pisani and Purves
2. Statistics by Montegomery

Computer Applications in Management

(MBA – 116)

L	T	C
3	0	3

Unit-I:

Introduction to computers, Advantages, Disadvantages and Applications of computers, Block diagram and working,Evolution(Generations) and classification of computers(Mini, Micro etc),Common I/O devices and their characteristics. Primary and secondary memory: RAM and ROM, Hard Disk, Magnetic Tape, Optical devices, Flash memories.Computer software: Classification and Types, Generations of computer languages.

Unit-II:

Operating System: Functions, types- Multiprogramming, Multiprocessing, Timesharing, Real time, Online and Batch Systems, Booting process. Windows environment basics; Desktop, Common Start menu options. DBMS Basic Concepts: Entity, Attributes, Keys, Relationship, Association, Database, DBMS, Data Independence, Three Level Architecture, Functions, Advantages and Disadvantages of DBMS. Relational Algebra – Union, Difference, Intersection, Cartesian Product, Projection, Selection, Join, Division, Relational Data Base Design – Various Database Dependencies, Database Anomalies.

Unit-III:

Computer and communication networks, Evolution of computer networks, LAN, MAN, WAN, Network topologies , Modes of Data communication Wired Media of Data communication: STP, UTP, Coaxial, Fiber optic wires. Wireless Medium Technologies: VSAT, Microwaves, Bluetooth, WIFI Internet Basics: ISP, Web server, Web Browser, Domain names, Email, Mail server, search engine, web portal, other internet common terms

Unit-IV:

Microsoft Word-File Handling, File Creation Retrieval, Saving & Printing, Edit Commands. Formatting- Paragraphs, Documents, Headers, Footers. Working with Tables. Inserting Graphics & Text Boxes, Advanced Functions- Mail Merge,

Macro. Microsoft Excel- Creation of Spread Sheet Applications Using Worksheets & Work Books. Data Entry-Formatting, Editing, In built Functions, Working with GraphicsDesigning Charts, Graphs using Spread Sheets. Introduction to Power point

Suggested Readings:

1. **Introduction to Information Technology, ITL education solutions, Pearson.**
2. **Understanding Computers: Today and Tomorrow by Morley and Parker, Cengage**
3. **Introduction to Computer science, ITL education solutions, Pearson.**
4. **MS-Office 2007, step by step, Pearson.**

International Business and Marketing

(MBA – 117)

L	T	C
3	0	3

Unit – 1:

Basic Concepts Dimensions of International Business and marketing, foreign market entry modes, Large, medium, and multinational Enterprises, Value chain framework benefits of international business and marketing.

Unit – 2:

Trade Theories Foreign trade, productivity possibility curve, principles of absolute advantage, , relative advantage, exchange ratios and trade, factor endowment theory, determinations of export performance. Environment of International Business Political and legal environment, cultural environment, financial environment, variables in international societal environment

Unit – 3:

Consumer Behaviour and Product Policy Perspectives of consumer behaviour, psychological & social perspectives, new product development, market segmentation, product positioning, product adoption, international product life cycle, international product policy, international marketing mix. Advertisement And Promotion Role of advertising, regulation, media, standardized international marketing, decision making framework, communication and publicity

Unit – 4:

International Market Selection Factors affecting international market selection, market segmentation, market selection process, market research, techniques in market reseach, international marketing planning International Business Define Risk Risk, Risk in international business, importance, types of international risk, variables affecting international risk, international marketing risks, country risk assessment, checklist for international business risk

Recommended Book

International Marketing: R. Srinivasan, PHI

Environment Management

(MBA – 114)

L	T	C
3	0	3

Unit-I:

Environment Management – Meaning, Nature and Scope. Ecological Systems and Environmental Systems, Components of the Eco-System. Environment education; Objectives, Principles, Scope and functions of environmental education.

Unit-II:

Man and Ecosystem and Environmental Systems, Conservation and Management, Global Warming and Control Measures. Managing Natural Resources; Importance – water, land.

Unit-III:

Eco-Friendly Business – Corporate Social Responsibility, Green Marketing, Environment Ethics, Sustainable Development, Global Warming; Problem, implications, Concepts of carbon credit, Role of Government and Non-Government Agencies and Business.

Unit-IV:

Approaches for Environmental Management – Management Based on Standards, Management Based on Best Practicable Means, Other Measures for Environment. Major Provisions of the Environment (Protection) Act, 1986; Environment Audit; Role of NGO's and other Institutions in Environment Protection.

Suggested Readings:

1. Chary S.N. and Vyasulu, Vinod: Environment Management, MacMillan India, 2001
2. Oberoi N.K.: Environment Management, Excel Books, 2007
3. G.N. Pandey: Environment Management, Vikas Publications New Delhi, 2004

Business Communication

(MBA – 118)

L	T	C
3	0	3

Unit- I:

Communication; Meaning, Objectives and Importance; Communication Process, Barriers in Communication, Essentials of Effective Communication; Verbal and Non-Verbal Communication; Effective Listening; formal & Informal Communication; Ethical Issues in Communication.

Unit – II:

Business Messages: Memo Writing, Proposal Writing, Office Orders, Office Circulars; Report Writing: Types and Formats; Persuasive Message Writing.

Unit – III:

Public Speaking: Strategies for Oral Presentations, Informative and Persuasive Speaking; Interpersonal Communication: Dyadic, Interviewing, Telephonic Conversation, Dictating.

Unit – IV:

Communication Outside the Organization: Agenda, Quotations, Tenders, Business Letters, Complaints and Follow-up Letters; Business & Group Meetings: Purpose, Types and Responsibility in Business Meetings. Job Application Process: Written Job Presentation , Interview and Follow-Up, Use of Visual Aids in Business Communication.

Suggested Readings :

1. Hilderbrandth and Murphy: Effective Business Communications, Irwin McGraw Hill, 7th edition,USA.
2. Sinha, K.K.: Business Communication, Galgotia Publishing Company.
3. Pradhan, Homai, et al: Business Communication, Himalaya Publishing House.
4. Paul, Rajendra and Korthalli, J.S.:Business Communication, Sultan Chand & Sons.
5. Chaturvedi and Chaturvedi : Business Communication, Pearson Publishing

Business Environment

(MBA – 121)

L	T	C
3	1	4

Unit-I:

Concept of a Welfare State. Directive Principles under the Constitution of India relating to Welfare State. Rights of a citizen in a Modern Welfare State and Liberalized Economic Environment. Fundamental Duties of Citizens.

Unit-II:

Preamble to the Constitution of India; Fundamental Rights in India ; Economic Roles of Government - Planning, Entrepreneurial, Regulatory & Promotion, Major Problems of Indian Economy - Economic Growth, Poverty, Population and Unemployment. Role of Economic Planning, India Economic Planning.

Unit-III:

Business Environment: Various Components; New Economic Policy & Economic Reforms; Recent Industrial Policy, Monetary Policy, Union Budget and Fiscal Policy; Role of Public Sector Enterprises in Indian Economy, Concepts of Liberalization, Privatization, Globalization Disinvestment, CSR and MNC's.

Unit-IV:

Foreign Trade Policy (EXIM Policy) Role of WTO, IMF & World Bank, Balance of Payment, Foreign Exchange Management Act.

Suggested Readings:

1. Cherunilam, Francis: Business Environment, Himalaya Publishing House.
2. Joshi, Rosy & Kapoor Sangam: Business Environment, Kalyani Publishers,2009.
3. Aswathappa, K.: Essentials of Business Environment, 7th ed., Himalaya Publishing House.
4. Mishra, S.K.& Puri, V.K.: Economic Environment of business, Himalaya Publishing House.
5. Frank, T. Paine & William Naumes: Organizational Strategy & Policy, The Dreyden press, Chicago, 1982.

6. Glueck, William: Business Policy & Strategic Management, McGraw Hill International Book Co., Auckland, 1972.

Finance Accounting

(MBA – 125)

L	T	C
3	1	4

Unit – I:

Theoretical Framework (meaning, scope and usefulness of Accounting; Generally Accepted Accounting Principles, Concepts and Conventions, Capital and Revenue transactions- capital and revenue expenditures, capital and revenue receipts Measurement, Valuation and Accounting estimates, Double entry system, Books of prime entry, Subsidiary Books, Recording of Cash and Bank transactions, Preparation of Ledger Accounts, Preparation of Trial Balance- interpretation and usefulness, Rectification of Errors, Opening entries, Transfer entries, Adjustment entries, Closing entries

Unit – 2:

Bank Reconciliation Statement, Receivables/ Payables Reconciliation Statement, Stock Reconciliation Statement, Depreciation Policy, Methods, computation and Accounting treatment

Unit – III:

Preparation of Final Accounts Of a Profit making concern (for sole proprietorship concern and partnership firm only) Preparation of Trading Account, Profit & Loss Account and Balance Sheet, Accounting treatment of bad debts, reserve for bad and doubtful debts, provision for discount on debtors and provision for discount on creditors Of a Not-for- Profit making concern, Preparation of Receipts and Payments Account, Preparation of Income and Expenditure Account, Preparation of Balance Sheet, Under Single Entry System including conversion of single entry into double entry system (basic level) Concept of Single Entry System and preparation of Statement showing Profit and Loss , Statement of Affairs, Conversion of Single Entry System into Double Entry System of Accounting

Unit IV:

Accounting for Special Transactions - Bills of Exchange, Consignment, Joint Venture, Sale of goods on approval or return basis, Budgerary control – meaning, need,

objectives, types; Standard costing and variance analysis (Materials, labour); marginal costing and its application in managerial decision making

Suggested Readings:

1. Singhal, A.K. and Ghosh Roy, H.J., Accounting for Managers, JBC Publishers and Distributors, New Delhi

2. Pandey, I.M., Management Accounting, Vikas Publishing House, NewDelhi

3. Horngren, Sundem and Stratton, Introduction to Management Accounting, Pearson Education, New.Delhi.

4. Anthony R.N. and Reece J.S., Management Accounting Principles, Homewood, Illinois, Richard D.Irwin, 1995.

5. Hansen & Mowen, Cost Management, Thomson Learning
6. Mittal, S.N., Management Accounting and Financial Management, Shree Mahavir Book Depot, New Delhi.

7. Jain, S.P and Narang, K.L., Advanced Cost Accounting , Kalyani Publishers, Ludhiana.
8. Khan, M.Y. and Jain, P.K., Management Accounting, TMH, New Delhi.

Management Information System

(MBA – 122)

L	T	C
3	1	4

Unit – 1:

Introduction to Management Information Sstem, MIS a tool, advantages and disadvantages, areas of application, systems and system environment, components of a system, discrete and continuous systems, discrete event system simulation, Concepts in discrete event simulation. Concept of Computer networking and DBMS.

Unit – 2:

Datbase management systems: Concept of DBMS, characteristics, frontend and backend actors, advantages, database applications. Data models, instances, schemas, three schema architecture, database system environment. Data modelling: High level conceptual data models for database design, example of database application, entity types, entity sets, attributes and keys, relationship types, relationship sets roles and structural constraints, weak entity, ER diagram conventions, total participation, partial participation, extended ER features.

Unit – 3:

Relational data model: Relational model concepts, domain attributes, tuples and relations, characteristics of relations, relational model constraints, relational database schema. Relational algebra and expression. Database design theory and methodology: Problems with DBMS, functional dependencies, closure of a set of functional dependency, canonical curve, decomposition, Normalization, 1NF, 2NF, 3NF and BCNF, 4NF, 5NF. Test for lossless decomposition, SQL.

Unit – 4:

Computer networks and the internet: Internet, service description, protocol, network protocols, Network edge, end systems, clients, servers, connectionless and connection oriented service, network core, circuit switching and packet switching, multiplexed in circuit switched networks, message segmenting, packet forwarding in computer networks, virtual circuit networks, datagram networks, network access, company access, mobile access, physical media, delay and loss in packet switched networks, delay and routes in internet, protocol layers, internet protocol stack, network entities and layers.

Unit – 5:

Different layers: Principles of application layer protocols, services provided by the internet transport protocols, Web and HTTP, Transport layer services, relationship between transport and network layer, transport layer in the internet, Network service models, routing principles, Link layer channels, data link layer, services provided by the link layer, Local Area Networks, LAN address and ARP, address resolution protocol.

TEXT BOOKS

1. **Computer networks by A.S. Tanenbaum, 3rdedition, Prentice Hall India**
2. **Fundamentals of database systems by Elamsari and Navathe**
3.

REFERRENCE BOOKS

1. An engineering approach on computer networking by S. Keshav, Addison Wilsey.

2. Data and computer communication by W. Stalling, Macmillan Press.

3. Database System Concepts by Silberschatz, Korth, Sudarshan, 4THedition, McGraw

Business Research Methods

(MBA – 126)

L	T	C
3	1	4

Unit – 1:

Understanding Research: Concept & Paradigm; Types of Research; Methods for Research: case study method, experimental method, survey method, other methods; Objectives of Research; Criteria of good Research; Sources of acknowledging Research: citation index, patents, copy rights, intellectual property rights (IPR).

Unit – 2:

Identifying area of Research Interest; Literature Review: procedure of synthesizing & summarizing; Exploring Research Gaps; Ways of bridging Research Gaps; Defining Research Problem: Conditions of formulation, sources of research problem, techniques involved, common errors; Framing objectives of Research Study; Deciding Research Methodology: modeling, simulation, optimization, fabrication, result evaluation & interpretation.

Unit – 3:

Concept and need of research design; Components of research design; Types of research design: Descriptive, Diagnostic, Exploratory, Experimental; Basic principles of experimental design; Characteristics of a good research design. Data Collection, Measurement & Scaling Techniques, Designing sample size and process; Choice among Primary and Secondary data; Preliminaries to the collection of data; Requirements and importance of Statistical Units; Methods of primary & secondary data collection; Selection of appropriate method; Sources of primary & secondary data collection; Precautions in the use of primary & secondary data; Importance of measurement in research; Self generated and surrogate measures; Measurement scales; Sources of error in measurement; Techniques of developing measurement tools; Scale construction techniques.

Unit – 4:

Data processing operations; Problems in data processing; Types of Data analysis; Mathematics in research: Types of numbers, Use of Linear and Quadratic equations, Set descriptions and operations, Rules of Differentiation and Integration, Function rule; Techniques of data analysis: Testing of Hypothesis I(Parametric tests) and II(Nonparametric tests), Analysis of variance and covariance, Exploratory and

confirmatory factor analysis, Conjoint analysis, Discriminant analysis, Cluster analysis, Bentler Bonett analysis; Software applications (SPSS or SAS or R) for data analysis.

Unit – 4:

Modelling of a system; Types of models; Patterns of Model Building; Use of Analogy in Modelling; Input Modelling: Parameter estimation, Goodness of fit test, Selection of appropriate Input model with or without data; Structural Equation Modelling: Concept, tools, procedure and software application; Testing of Modelling; Understanding Simulation; Need and benefits of using Simulation, Models in Simulation; Verification and validation of simulation models; Output Analysis; Role of optimization: Applications of Fuzzy logics, Neural Networking, FEM, FVM and FDM; Software applications (MAT Lab or Frontier Simulation Software). Importance of Interpretation of results; Techniques of interpretation; Prerequisites and precautions in Interpretation; Sources of error; Conclusions and Generalizations.

References

1. Research Methodology by Goddard and Melville
2. Research Methodology by R. Panerselvam
3. Applied Statistics and Probability for Engineers by Montgomery and Runger
4. Computing tools for Modeling, Optimization and Simulation by Laguna and Velarde.

Corporate Legal Environment

(MBA – 123)

L	T	C
3	0	3

Unit- I:

Introduction to law, Business Ethics and Social Responsibility, Dispute Resolution, Common Law, Statutory Law and Administrative Law, Constitutional Law, Torts, Criminal Law and Business, Sole trader (proprietorship), Partnership, Limited Liability Partnership, Limited Liability Company. Legal principles and concepts in relation to company law

Unit II:

Introduction to Contracts, Legality, Consent and Writing, Conclusion to Contracts, Sales and Product Liability, Employment Law, Labor Law, International Laws such as World Trade Organization (WTO) 'Public international law', 'private international law' and 'supranational law'

Unit III:

Starting a Business, Securities Regulation, Intellectual Property, Property, Consumer Law, sales contracts between undertakings

Refrences

Operations Management
(MBA – 127)

L	T	C
3	1	4

Unit – 1:

Historical Evolution, A System View of Operations, and Scope and Objective of Operation Management Conceptual Model of Production / Operation System, Frame Work for Managing Operations, Operation Strategy for Competitive Advantage.

Unit – 2:

Features and Importance of Forecasting in Production and Operations Management. General Steps in the Forecasting Process, Phases of Forecasting, Various Forecasting Methods –(A) For Long Term Decisions (B) Medium and Short Term Decision (C) Casual Or Econometric Decisions, Facilities / Layout Planning in Production Systems – Functional / Process Layout; Product/Line Layout; And Fixed Position Layout, Computerized Layout Planning (CORELAP, ALDEP & CRAFT).

Unit – 3:

Capacity planning – types and need, Capacity Planning Procedure, capacity Planning Models & their Section, Production Scheduling – Objectives, Scheduling aspects in various (Job – shop, Batch, mass) Production System, KANBAN System of Production Scheduling, scheduling Rules: FISFS - First in Shop First Served, FCFS- First Come First Served, LST- last slack time, SPT - Shortest Processing Time Master Schedule - Gantt chart.

Unit – 4:

Importance of quality, reliability and Maintainability in Production Systems, Organization for QRM, Improving QRM aspects of Systems using various Tools and Techniques. Simulation Definition , Monte Carlo simulation, Generational random numbers. Advantages of simulation, case studies.

Unit – 5:

Concept of Time Study, The equipments for Time Study, Selecting and Timing the job, calculation of basic time from observed time Rating, standard Rating and Standard performance, concept and Procedure of work sampling, Test of Hypothesis in Sampling, Type 1 and Type 2 errors in Testing of Hypothesis, Test for Number of successes, Test of Significance of a mean, Estimation of Parameters, central limit theorem, Interval estimation of small samples. Design of display, Anthropology, Ergonomic practices

RECOMMENDED BOOKS

1. Production and Operation Management:	**Adam, Ebert.**
2. Production and Operation Management;	**K.C. Arora**
3. Motion & Time Study- Design & Measurement of Work;	**Barnes, R. M.**
4. Introduction to Work Study:	**ILO**

Organizational Behavior

(MBA – 124)

L	T	C
3	0	3

Unit-I:

Organisational Behaviour: Meaning, Nature, Scope and Historical Background.The Hawthorne Studies, Contemporary checllenges-workforce diversity, cross cultural dynamics, changing nature of managerial work, ethical issues at work.

Unit-II:

Work Motivation: Meaning and Theories of Work Motivation. Perception: Nature and importance of perception; Process of perception; Laws of perception; Perceptual Abnormalities; Perceptual distortion. Impression Management. Personality: Types and theories of personality, emotional intelligence in contemporary business.

Unit-III:

Foundations of Group Behaviour: Definition and Types of Groups, Understanding and Managing group processes-interpersonal & group dynamics, Teams in Work Places. Leadership: Nature & Leadership Styles in Organization, Conflict: Nature and Types, Approaches to Management of Organisational Conflict; Empowerment & Participation.

Unit-IV:

Organisational Change and Development: Definition and Goals, Approaches to Organisational Change. Prerequisites to Organisational Development, Steps in Organisational Development, Organisational Development Works in India.

Suggested Readings:

1. **Davis, K.: Human Behaviour at Work: Organisational Behaviour, Tata McGraw-Hill Publishing Co. New Delhi.**
2. **Luthans, F. : Organisational Behaviour, McGraw-Hill Publishing Co.,New Delhi.**
3. **Robbins, S.P. : Organisational Behaviour, Prentice Hall of India, New Delhi.**
4. **Dwivedi, R.S. : Human Relations and Organisational Behaviour, Oxford & IBH Publishing Co. New Delhi.**

5. **Dwivedi, R.S. : Corporate Excellence: An External Search, McMillan India.**

6. **Schermerhorn : Managing Organisational Behaviour, et at. John Wiley & Sons, New Delhi.**

7. **Kreitner and Kinier : Organizational Behaviour, McGraw Hill Publishing Co.**

Operation Research

(MBA – 211)

L	T	C
3	1	4

Unit – 1:

Nature and development of operation research, some mathematical preliminaries, general methodology of operation research, application of operation research to industrial problems, a survey.

Unit – 2:

Formulation of linear programming deterministic models; graphical solution; simplex algorithm, computational procedure in simplex, duality and its concept, dual linear programming, appl1cation of simplex technique to industrial problem. Assignment Models; formulation of assignment problems, methods for solutions; transportation problems; methods for obtaining optimal solution; degeneracy in transportation problems; transshipment problems.

Unit – 3:

Introduction and scope of game problems in business and Industry; Mini-max criterion and optimal strategy, solution of two person zero sum game; game problem as a special case of simplex. Basic principles of network construction, CPM/PERT and solution of simple problems.

Unit – 4:

Queuing systems and concepts; classification of queuing situations; solution of queuing problems, single channel, single stage, finite and infinite-queues with Possion arrival and exponential service time; applications to industrial problems, simulation techniques. Processing of 'n' jobs through two machines, processing of 'n' jobs through three machines, processing of 'n' jobs through 'm' machines.

BOOKS RECOMMENDED

1. Operation Research: Hira Gupta.
2. Operation Research: Loomba
3. Operation Research: H.A.Taha.
4. Fundamentals of Operation & Research: AC Koff & Sasiene
5. Linner Programming: L.S.Srinath.

Total Quality Management
(MBA – 212)

L	T	C
3	0	3

Unit – 1:

Quality management; Evolution of Philosophy of Quality, Quality Gurus-Crosby, Deming and Juran, Attributes of Quality, Quality Characteristics-Quality of Design, Quality of Performance and Quality of Conformance, Organization For Quality, Total Quality Management (TQM), TQM Models, 4 – C'S of TQM; Barriers to Implement TQM.

Unit – 2:

Organising for quality; Developing an Organization Al Structure for Quality. Quality Management System. Role of top Management ,Quality Council, Quality Policies ,Quality Improvement Teams, Role of Middle and Lower Management ,Quality Circles, Organization Structure for Quality Circles. Problem Solving Techniques .Zero Defects.

Unit – 3:

Quality measurement; tool and techniques; Seven Basic (B7)Tools – Cause & Effect Diagram, Flow Diagrams, Trend Charts, Histogram, scatter Diagram, Control Chart, New Seven (S7)Tools – Affinity Diagram, Inter relationship Diagram, Tree Diagram, Matrix Diagram, Process decision Program chart (PDPC) and Matrix Data Analysis.

Unit – 4:

Quality assurance & control; Causes of Quality Failure ,Quality Assurance-Need and Various Elements In Quality Assurance Programme. Quality Control- On Line and Off Line, Statistical Concepts in Quality, Chance and Assignable causes. Types of control charts. Control chart for variables (X and R charts).Interpreting patterns of variations on X and R charts. Control chart for attributes: Attribute chart for defectives, P- chart, NP- chart. Attribute chart for number of defects per unit ,C-Chart and U-Chart.

Unit – 5:

Innovative techniques in qm; Quality Function Deployment (QFD)-Definition and Phases in QFD , Taguchi Approach to quality-system design, parameter design and Tolerance design, Six-Sigma -Definition & Implementation Steps, ISO-9000 and 14000,

Role of Total Productive Management (TPM), Bench Making in quality management, Quality systems; Seven QC tools of quality control, Histogram, Scatter diagram, Standardisation

RECOMMENDED BOOKS

1. TQM Text with Cases:	**Amrik Sohal**
2. Managing Quality:	**B. G. Pale**
3. TQM Text with Cases:	**John S. Oaklend**
4. TQM and ISO –14000:	**Arora**
5. TQM:	**Besterfield**

Strategic Management

(MBA – 221)

L	T	C
3	1	4

Unit – 1:

Introduction of Strategic Management, Strategy, Purpose and Mission, Objectives and Goals, Policies, Program Strategies, Stimulus for Strategy, Strategic Decision Making, Strategic Management Process, Learning Organization, Corporate Planning, Failures At Strategic Management.

Unit – 2:

7- s Framework, Strategy and super ordinate goals, Structure, System, Style, Staff, Skills, Board of Directors, Size and Composition of Board of Directors, Board Structure, Agency Theory, Board Committee, Two Tier board, Chairman and Managing Director, Effectiveness of BOD, CEO, Role of Top Management, Functions of Top Management, Skills required, Corporate Values, Styles of Strategic Management, Ethical Behaviour.

Unit – 3:

Environmental scanning, Mega and micro environment, SWOT Matrix, Competition Analysis, Risk Assessment, Strategic Groups, Types of strategies, Routes of gaining competitive advantage, Hyper competition, Porter's Generic Strategies. Strength and weakness criteria, Formats to analyze strengths and weaknesses, Resource based Approach, Sustainability of an Advantage, Value chain analyse, Functional Resource planning, corporate culture, Strategic issues.

Unit – 4:

SFAS Matrix, Finding a Niche, TOWS Matrix, Business Strategy, Strategic Alliance, Corporate Strategy, Diversification Strategy, Portfolio Analysis, Corporate Parenting, Functional Strategy, POutsourcing, Marketing Strategy, Financial Strategy, R&D Strategy, Operational Strategy, Purchasing Strategy, Logistics Strategy, HRM Strategy, Information system strategy. What must be done, organizing for action, diversification, mergers and acquisitions, Reengineering, Job designing and strategy formulation, staffing and directing, downsizing, MBO, TQM, Measurement of Performance, Strategy Audit, Strategic Information System, Control.

Environmental Impact Assessment

MBA (EM – 211)

L	T	C
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Unit – I:

Aims and objectives, basic concepts of environmental impact statement (EIS), framework of EIA, description of environmental setting, approaches for developing list of environment factors, pre -project, operational and post-project environment impacts. Methods of EIA; adhoc procedures, checklists, matrices, networks. Qualities of a good method, evaluation of efficiency of methods, comparative studies on methodology.

Unit – II:

Prediction and assessment of impact on the land, air, water, noise, biological and socio -economic environments. Public participation and preparation of environmental decision-making. Preparation of environmental management plan and criteria for selection of environmental factors, alternatives. International Organization for standardization (ISO): Duties and function, basic total quality management concept, techniques and implementation requirements.

Unit – III:

ISO 9001 and development of ISO 9000 series, historical background and benefits of ISO 9001, clause analysis of ISO 9001. ISO 14001, explanation of ISO 14000 series, EMS and its benefits, formulating environment policy exercise, preparation ground for development EMS-Initial environmental review and exercise of identification of environmental aspects, clause analysis of ISO 14001, explanation of PDCA cycle, comparison of ISO 14001: 1996 and ISO 14001:2004,

Unit – IV:

Training need identification and communication and a role play exercise, audit process preparation and planning, opening meeting, audit investigation-interview techniques and nonconformities, closing meeting and follow up, attributes of an auditor and psychology of auditing and role play exercise, selection of audit team, checklist preparation, audit reporting, certification process and certification bodies, legislation pertaining to ISO 14001 documentation-preparation of L/R, emergency prepare dness

and response and a role play exercise, comparison of ISO 9001 and ISO 14001, comparison of ISO 14001 and OHSAS-18001.

Reference Books:

1. Canter R.L., Environmental Impact Assessment, Mc Graw Hill International Edition, 1997.
2. John G. Rau and David C. Wooten (Ed), Environmental Impact Analysis Handbook, McGraw Hill Book Company.
3. Peter Watten (Eds.) - `Environmental Impact Assessment Theory and Practice', Unwin Hyman, London (1988).

Natural Resource Conservation and Management

MBA (EM – 212)

L	T	C
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Unit – I:

Introduction: Current issues, challenges and innovative solution for society and natural resources, Public policy. Law and public involvement: the endangered species Act, the clean water Act, Renewable & Non renewable resources.

Unit – II:

Forest resources; distribution of forests, wood production, carbon sequestration, non-wood forest produce, cost associated with forest exploitation, cost of felling/removal & transportation of forest produce, energy cost for forest exploitation, environmental cost, loss of habitat, deforestation impact reforestation and processing cost, sustainable management

Unit – III:

Mineral resources, distribution and management, economics of mineral resources, cost associated with mineral exploitation, economic cost, energy cost, environmental cost, steps in mineral exploitation, recycling as an alternative.

Unit – IV:

Soil structure and use, soil formation, decomposition of parent rock, formation of humus and organic matter, soil properties, soil structure, soil texture, soil profile, soil erosion, water holding capacity, biological activity in soil, soil conservation practice, land capability classes, contour forming strip forming, terracing,, Water resources, water management wind erosion, use of wind breaks. Wildlife resources, restoration of wildlife, habitat management.

Reference Books

1. **Rodgers & Panwar 1988, Planning Protected Area Network in India, Vol. I & II.**
2. **T. N. Khoshoo (1988) Environment Concerns and Strategies. Ashish Pub. House, Delhi.**
3. **Pachauri R. K. & Sridharan (1997), Looking back to Think Ahead, The Energy Research Institute, New Delhi**
4. **R. F. Dasmann (1968) Environment Conservation: John Willey and Sons, New York.**

5. Hydrological Measurements for Watershed Research by Wasi Ullah, S. K. Gupta & S. S. Dalal.
6. Watershed Management in India by C. V. S. Murty
7. Groundwater Hydrology by Todd
8. Groundwater Hydrology by Hereemath.

Environmental Pollution Management

MBA (EM – 213)

L	T	C
3	0	3

Unit – 1:

Basic concept of environmental pollution; Air Pollution: Definition, Sources of air pollution. Air pollutants (CO, CO2, SO2, NOX, hydrocarbons & aerosols). Specific phenomena related with air pollution- Green House Effect, acid rain, Ozone layer depletion and Smog. Effect of air pollution on – Human health, Animals, Plants, Atmosphere and other effects. Management measures for preventing and controlling air pollution.

Unit – 2:

Water Pollution: Sources of water and its quality, Definition and sources of water pollution. Specific phenomena related with water pollution- Algal bloom, Eutrophication, Biomagnification/ Bioaccumulation, BOD, Sewage treatment. Ground water pollution. Effect of water pollution – on man, Animals, Marine life, Vegetation and other effects. Management measures for preventing and controlling water pollution. Land/ Soil Pollution: Definition, Sources of land/ soil pollution, Specific phenomena related with land/ soil pollution: Energy from refuse, Recycling of waste materials, NIMBY, NIABY Radioactive pollution. Harmful effects of land/ soil pollution. Remediation of land-fill sites Management measures for preventing and controlling land/ soil pollution. Methods of solid waste disposal.

Unit – 3:

Noise Pollution: Definition, Measurement of noise and its intensity, Sources of noise pollution, Effects of noise pollution. Prevention and Control measures of noise pollution. Types and classification of waste: Air, Liquid and Solid, Characteristics of Waste. Basic units of an Effluent treatment plant. Biomedical Waste, Hazardous Waste, Municipal Solid Waste (MSW)

Reference Books

1. Air Quality Management by Stern, A. C. (Ed) (1974).
2. Air Pollution by Perkin, H. G. (1974)
3. Air Monitoring Survey Design by Noll, K. E. and Miller, T. L.

4. Fundamentals of Air Pollution by Stern, A. C., Henry Wohlers, G. R. Richard, Boudal, W. and William Lowry, P. (1973).
5. Air Pollution by Wack, K and Waner C. F. (1976)
6. Air Pollution by Sainfeld J. H. (1975)
7. Air Pollution by H. C. Pertin
8. Air Pollution by Dystsusd.
9. Air Pollution (Vol VI – VII) by Stern.
10. Air Pollution Control Theory by Graw ord.
11. The atmosphere by Tarbuck and Lutgen.
12. Environmental Pollution of Cadmium by Rohatgi.

Disaster Management

MBA (EM – 214)

L	T	C
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Unit – 1:

Disaster Management; Meaning, Approaches and Scope, Elements of disaster management, Disaster Management Policy: Significance of disaster management policy, Principles of disaster management policy, Policy options and approaches in disaster management, Essential components of disaster management policy, Formulation and execution of disaster management policy, Command and coordination in disaster management.

UNIT – 2:

Case study I: Disaster Management Policy in United States of America, Disaster Management Policy in Bangladesh, Case Study II: Disaster Management Policy in South Africa, Disaster Management Policy in India.

Unit – 3:

Moving to a Disaster Information Network (DIN) for the Future: Background, findings, foundation for addressing needs, vision for a future disaster information network, fundamental need to Involve stakeholders. Recommendation and Action Plan: Policy and organization implementation, phased approach: The global extension, analysis of the ratio of costs to benefits.Global Considerations: Global phase, GDIN international goals, priorities, GDIN international model, possible GDIN management packages, possible GDIN partners.

References:

1. **H.K. Gupta (2003) Disaster management**

Environmental Law and Sociology

MBA (EM – 215)

L	T	C
3	0	3

Unit – 1:

Environment & Environmental Pollution; Environment; Meaning, Types : Natural & Man-made Environment, Eco System, Balance of Ecology, Environmental Pollution : Meaning, causes, Factors & Effects of Environmental Pollution, Types of Environmental Pollution : Air, Water and Noise Pollution, Environment Protection; International Scenario & Constitutional Remedies, International Scenario

Unit – 2:

Global environmental issues and International laws: to control Global warming, Ozone depletion, Acid rains, hazardous waste, CITES etc. Role of UN authorities in protection of Global Environment, Multinational authorities and agreements, future of International laws

Unit – 3:

Environmental laws in India: Environmental Policy and laws. Constitutional and statutory laws in India: Doctrine Principles of State Policy, Fundamental Duties and Fundamental Rights and Panchayat Raj System. Statutory protection of the Human Environment: such as Indian Penal Code, Factories Act, Motor Vehicle Act, Hazardous Waste legislation for pollution abatement.

Unit – 4:

Anti Pollution Acts: The water Act. 1974. The Air Act 1981. The Environment Protection Act 1986 Objectives of the Anti-pollution Acts. Institutional mechanism created under these acts and role and contribution in combining environmental pollution. The role of courts Equity Environment versus Development: Importance of critical review of plan with respect to local, regional & immediate & long term gains & Effect of Development. Comparison between a. Exploitation and safe guard for conservation

Unit – 5:

Rate of utilization and regeneration, c. Natural and manmade growth, d. Survival need of mankind and protection of environment Integration of development with carrying capacity of Environment, National Environmental Policy:National Policy on EIA and Regulatory Framework: Rule & regulations of central & state Government and Central & State pollution control boards for Safeguard for Environmental Protection Sustainable Development: Definition and concepts of sustainable development, Integration of: a. Economic, Social and Environmental sustainability, Biodiversity and c. Availability of natural resources in development. Critical review of drawbacks in traditional (base on economics) evaluation of development, Cost benefit analysis. Introduction of Ecological growth factor similar to economical growth factor for sustainable development

Reference Books:

1. CPCB, "Pollution Control acts, Rules and Notifications issued there under "Pollution Control Series – PCL/2/1992, Central Pollution Control Board, Delhi, 1997.
2. Shyam Divan and Armin Roseneranz "Environmental law and policy in India "Oxford University Press, New Delhi, 2001.
3. Greger I. Megregor, "Environmental law and enforcement", Lewis Publishers, London1994.
4. Constitution of India [Referred articles from part-III, part-IV and part-IV A]
5. Pares Distn. Environmental Laws in India (Deep, Lated edn.)
6. Handbook of environmental management and technology: Gwendolyn Holmes, Ben Ramnarine Singh, Louis Theodore.
7. The ISO 14000 Handbook: Joseph Cascio.
8. ISO 14004: Environmental management systems: General guidelines on principles, systems and supporting techniques (ISO 14004:1996 (E)).
9. ISO 14001: Environmental management systems: Specification with guidance for use (ISO 14001:1996b(E)) (International organization for standardization-Switzerland)

Global Climate Change

MBA (EM – 216)

L	T	C
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Unit – 1:

Climate Change: Earth's Climate System, Past, Present and Future Climate. The greenhouse effect and major Greenhouse gases. Future Climate Scenarios and its impact on tropical and temperate regions. Adaptability of ecosystem to climate change. India specific impact of climate change.

Unit – 2:

Climate Change Mitigation: Way and means, the concept of Carbon Sequestration. Global Carbon Cycle: Stocks and Fluxes of Carbon in terrestrial and marine ecosystems and anthropogenic impact. Policy Perspective: UNFCC, Role and Function of IPCC, Kyoto Protocol and its implication on Developed and developing countries, operationalization of Kyoto Protocol. The Clean Development Mechanism (CDM) and its operationalization, modalities and procedures for CDM Project, National Communication to the UNFCCC (NATCOM). Mitigation Strategies: Transportation Mitigation Strategies: Electric Power Generation

Unit – 3:

The Energy Perspective: National and International for Energy use and its implication on Climate Change. The Forestry Perspective: Forest: Source or Sink of Carbon, Measuring of Carbon Dioxide. The Climate Mitigation potential of Forest and its evaluation, Land use, Land use Change and Forestry (LULUCF), Evolution of LULUCF in CDM. How to develop Carbon Sequestration Projects their Modalities and Procedures, Global climate and law, Global climate change; the human response

Reference Books

1. **Kasperson, J.X. and Kasperson, R.E. and Kasperson,R.E., Global Environmental Risks, V.N.University Press, New York, 2003.**
2. **Environmental Geology by Valdia, Tata Mc-Graw Hill Pub. Co. N.D.**
3. **Perspectives on Environment by I. R. Manners, M.W.M. Micksell**
4. **Our Planet Our Health – WHO, Oxford Publications, 1992.**
5. **Environment and Health – A. J. Rowland and Paul Cooper, Edward Arnold Publishers**

DIGITAL MARKETING

MBA (TM)- 211

L	T	C
3	0	3

Unit I: A Framework for Internet Marketing

Adding Online Power to Marketing Mix; New Paradigms of Online Marketing; Marketing Opportunities on the Internet; Web Business Models

Unit II: Online Marketing Tools

Marketing research Online; Customer Service and Support Online; Competitive research Online; Measuring Results from Online Marketing

Unit III: The Online Customer

Online Marketing to Individuals; Online Consumer Behaviour; Demographic Profile of Web Users; Interactive Advertising and its Effectiveness; Building Online Communities

Unit IV: New Product Development and Brand Building on the Net

Concept of Internet Time and Its Business Implications; New Product Development on the Net; Brand Building on the Net; Building Web Traffic; Building Relationship with Online Customers

Unit V: Emerging Issues in Internet Marketing

Pricing on the Internet; E-tailing; Legal Issues for Marketers; B2B Exchanges and their Business Potential; Recent Advances in E-marketing

Suggested Readings

1. Douglas E. Comer: Computer Networks and Internets, Pearson Education.
2. Ward Hanson: Principles of Internet Marketing, South Western.
3. Brannstein and Levine: Deep Branding on the Internet, Pearson Education.

ENVIRONMENT AND SOCIAL ASPECTS OF TECHNOLOGY

MBA (TM)- 212

L	T	C
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Unit-I

Introduction: Motivation, Issues, Problems, Approaches; Determinism- Technological determinism, Social determinism; Cause and Effect-narrative- Narrative emergence of identity, the structure of narrative; & complex systems- Lotka Volterra predator-prey model, Lotka-Volterra Simulation

Unit-II

Inseparability of the Technical, Social and Ethical: Introduction, Politics, Ethics, Conflicts, Technology and its Effects, effects of technology on Family and Community; Technology and Science: The Rennaissance and Classical Periods, Later developments- rationalism, empiricism, monism, Platonism, Vienna circle, logical positivism; Paradigms and paradigm shifts

Unit-III

Social theories of science and technology: Actor-Network Theory, Socio-technical networks, Principle of Symmetry; impact of technology on government; Impacts on the local natural environment, Impacts involving human health and safety: Global environmental impacts, Impacts on scarce or non-renewable resources: Living Resources, Non-living resources, Land resources; Social Impacts: Cultural resources and values, Social disruption to the community, Equity issues

Suggested Readings

1. Computerization and Controversy: Value Conflicts and Social Choices, edited by Rob Kling (Academic, 1996). ISBN 0-12-415040-3.
2. The Social Life of Information, John Seely Brown and Paul Duguid (Harvard Business School, 2000).
3. Social Science, Technical Systems, and Cooperative Work, edited by Geoffrey Bowker, Susan Leigh Star, William Turner and Les Gasser (Lawrence Erlbaum, 1997).
4. Requirements Engineering: Social and Technical Issues, edited by Marina Jirotka and Joseph Goguen (Academic Press, 1994).
5. Graedel, T. & Allenby, B. Industrial Ecology and Sustainable Engineering 3rd edn (Prentice-Hall, 2009).

INNOVATION AND CHANGE MANAGEMENT

MBA (TM)- 213

L	T	C
3	0	3

Unit-I:

Changing landscape of Business Organisations, A Historical Overview of Business Practice and Theory Development, The Process of Change, Creativity and Innovation; Introduction- E-business innovation; E-Business Change Management Issues: Identifying the Strategic Opportunities, Justification of E-Business, Communication, E-business planning, Socio-technical Issues, Technology integration, Supplier of Technology, Installation and Commissioning of E-Business

Unit II

Change and Innovation in Organizations, Components of Change: Choice, Communication and Resistance, The Change-Continuity Paradox: Strategic Dilemmas and Theoretical Concerns, Planning Approaches to Change and Linear Stage Models, Process Approaches to Change and Nonlinear Time

Unit III

Creativity, Innovation and Change in Organizations- The individual: promoting critical thinking, The Group: Nurturing Team Work, The Leader: Promoting New Ideas at Work. The Internal Environment: Orchestrating Structure, Systems and Resources, Culture: Enabling and Constraining Creative Processes at Work, Creative Industries, Innovative Cities and Changing Worlds

Unit IV

E-Business & Change: Overview, E-transformation, Three-phase Change Management framework for E-Business transformation; Resistance in Technological Innovation: Definition of resistance, Understanding Resistance over time, The utility of resistance, Management of resistance, rethinking resistance, System Development Life Cycle- Phase I: Systems initiation & investigation, Phase II: Systems planning, Phase III: Analysis, Phase IV: Systems Design, Phase V: Systems Implementation, Phase VI: Systems Maintenance; Payment System Innovation: Cash to e-Money; Security Management

Suggested Readings:

1. Patrick Dawson and Constantine Andriopoulos: Managing Change, Creativity and Innovation, SAGE
2. David Mayle: Managing Innovation and Change, 3rd ed, Sage Publishing
3. E-Business Innovation and Change Management, Mohini Singh and Dianne Waddell, (2004) IGI Global Publisher

PROJECT MANAGEMENT

MBA (TM)- 214

L	T	C
3	0	3

Unit I: Project Management Concepts
Project management overview, Project management challenges, Explain the need for project management, Role of the project manager, project success factors, Organizing Human Resources and Contracting, Project selection, initiation and definition, Uncertainty Analysis

Unit II: Selecting, Monitoring and Controlling the Project
Assess a project's potential profit, Evaluate and rank projects using a matrix, Adapt an existing evaluation from a matrix to criteria for a project, Select relevant financial data for decision making, Support the importance of monitoring and controlling, Calculate the impact of change on project cost and performance.

Unit III: Project Planning and Scheduling
Produce a statement of work (SOW) and decompose overall project goals, Develop a work breakdown structure (WBS), using established tools and techniques, to achieve stated project objectives, PERT analysis, Gantt chart, Project scheduling under uncertainty,

Unit IV: Project Performance Measurement and Control
Monitoring project progress, Define the concept of earned value performance measurement, Describe how project management information systems (PMIS) are used to Monitor, evaluate, and control planned cost and schedule performance, Project metrics and scorecards, Computer Based Project Management, Future of Project Management.

Unit V: Project Risk Management and Project Quality Management
Role of risk management in overall project management, Identify risk management activities throughout the project life cycle, Measure the element of risk, Develop responses to high-risk events, Define the elements of project quality management and apply them to the final project

Suggested Readings

1. Meredith, J. R. and Mantel, S.J. "Project Management: A Managerial Approach" 5th Edition, Wiley.
2. Kerzner, H. "Project Management: A Systems Approach to Planning, Scheduling, and Controlling", Wiley.
3. Project Management Institute "A Guide to the Project Management Body of Knowledge", Third Edition.

TECHNOLOGY TRANSFER MANAGEMENT

MBA (TM)- 215

L	T	C
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Unit-I

Technology Transfer: Introduction, objectives and aims, Obstacles to effective technology transfer; Types of technology transfer, Technology transfer and development process, Measuring the impact of technology transfer in the Production function; Regulatory requirements for technology transfer, safety, health and environmental regulations, general safety and health considerations, Waste disposal, Potential impact of notification of new substances (NONS) regulations, economic factors, Technology, Social aspects and the impact of technology transfer, Language, Culture, Team Building

Unit-II

Technology Transfer: Organization Strategy and Planning, Stages of Technology transfer process, Technology transfer strategies, Management of Change, Organization, Teams supporting the technology transfer process, Global technology transfer management team, Documentation required to support technology transfer, planning, timings, Modes and Methods of Technology transfer, Principles for Technology transfer, Risk Analysis and Risk Management to Technology Transfer Decisions, Pre-Approval Inspection and Launch

Unit-III

Training for Technology Transfer: Learning from technology transfer, Developing a training strategy, prioritization and Context of training needs, training programmes, Methods and tools for delivering training, Management of Training programmes, training documentation, Language, Technology transfer in different sectors

Suggested Readings:

1. Mark Gibson: Technology Transfer, DHI Publishing, LLC
2. Technology Transfer: Strategic Management in Developing Countries, Goel Cohen, Sage Publications Private Ltd
3. The Art and Science of Technology Transfer, Phyllis L Speser, Wiley

DECISION SUPPORT SYSTEM

MBA (TM)- 216

L	T	C
3	0	3

Unit-I:

Introduction to Decision Support System (DSS), Human decision making to DSS, Requirement for Decision support for Decision making and other Executive work, DSS architecture, types of decision support systems and its development, decision theory, Human decision making heuristics and bounded rationality, Application of Decision Support System in different sectors, rational decisions & applicability

Unit-II:

Decision modeling and analysis, Executive information system, Goals of Group Decision Support Systems, Group versus Individual Activities, Types of Group DSS, Negotiation Support System, Advancement in Decision Support System, Intelligent Decision Support Systems, Knowledge based Decision Support Systems, Knowledge acquisition and validation, knowledge representation, inference techniques, Understanding risk in making decisions, Managerial risk taking and Organisational decision making

Unit-III:

Database queries, query optimization for Decision Support System, Information gathering and presentation for Decision Support, Decision Support System Models, Neural Network Fundamentals, Neural Network Architecture, Simple Neural Network Applications, Generic Algorithm, Fuzzy Logic, Fuzzy sets in decision making, Intelligent software agents and creativity, system integration and Future of DSS

Suggested Readings:

1. Decision Support Systems and Intelligent Systems, 7th Ed, Pearson Education
2. Decision Support Systems and Intelligent Systems, E. Turban & Jay E. Aronson
3. Handbook on Decision Support Systems1, Springer
4. Decision Support and Business Intelligence Systems: E. Turban, Jay E. Aronson, Ting-Peng Liang, Ramesh Sharda, Eighth Edition

HUMAN RESOURCES ACCOUNTING AND INFORMATION SYSTEM

MBA (TM)- 217

L	T	C
3	0	3

Unit I: Introduction
HR Measurement:, HR Audit, why audit and Accounting? Accounting what?, Audit process and report, Rationale for HRA, Approaches to HRA, Evaluation of different approaches, Indian Experience.

Unit II: Human Resource Information System
Introduction and overview of HRIS, Human Resource Information System and its Interfaces with other systems, HR tasks and computerisation, the need of organization and HRIS, external environment relevant for HRIS.

Unit III: HRIS Planning
HRIS Applications, Planning, staffing, Training and career development, compensation and Benefits, Performance management, Discipline and Grievances, Quality of Work Life and Payroll.

Unit IV: HRIS Development
HRIS development and Implementation, The systems development process, Need analysis, Systems design/Acquisition, Make HRIS work.

Unit V Contemporary Issues in HRIS
Future Directions, Technology, Changes in HR practices, Changes in HR skills, staffing, Changes in organization and structure, applied Research needs.

Suggested Readings

1. Kavanagh, Gueutal and Tannenbaum, HRIS: Development and Application, PWS Kent, 2005
2. Walker, HRIS Development: A project team guide to building an effective personnel system, Reinhold, New York, 2003
3. Fitz Enz, How to measure HRM, McGraw-Hill, London, 2000
4. R.K. Gupta, Human Resource Accounting, Anmol Publications, New Delhi 2004

BUSINESS ANALYSIS AND VALUATION

MBA (TM)- 218

L	T	C
3	0	3

Unit-I

Historical background, objective and aims of Business Analysis and Valuation; Financial Modeling for Project Appraisal: Use of Functions like Net Present Value (NPV), Internal Rate of Return (IRR), etc., forecasting techniques. The Analysis of the Statement of Shareholders' Equity, Financial Analysis- ratio analysis. Financial Statement of Analysis; Statement of Cash Flows; Approaches to Valuation and Identifying value drivers.

Unit-II

The Analysis of profitability: The Analyst's Checklist, Du Point Analysis, Cutting to the Core of Operations (the analysis of profitability). The Analysis of Growth and Sustainable Earnings: The Analyst's Checklist; Growth Analysis; The Analysis of Changes in Profitability and Sustainable Earnings; The Analysis of Growth in Shareholders' Equity; Growth, Sustainable Earnings, Evaluation of P/B Ratios and P/E Ratios

Unit-III

Business Valuation Basics: Principles and techniques of valuation – DCF, Multiple methods, Accounting based valuation, Asset Valuation; Earning Valuation; Cash flow valuation; other valuation basis. Valuation in Mergers and Acquisitions: Assets and Cash Flows – strengths and weaknesses of various valuation method; Recognition of interest of various stakeholders; Selection of appropriate cost of capital for valuation; Synergistic benefits

Unit-IV

Fair Value in Accounting Measurement: concept; Measurement techniques and standards, Challenge; Accounting treatment, Valuation of Intangibles: Intellectual Property, Intangibles and Brand Valuation.

Suggested Readings

1. Security Analysis and Business Valuation on Wall Street: A Comprehensive Guide to Todays Valuation Method, JC Hooke, 2nd ed. Wiley Finance
2. Business Analysis and Valuation Using Financial Statements; Palepu, Healy and Bernard
3. Financial Statement Analysis and Valuation, Easton, P.D., McAnally, ML, Sommers, G.A., Zhang, Xiao-Jun

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

MBA (TM)- 219

L	T	C
3	0	3

Unit-I

Meaning of investment, savings, speculation, Gambling, arbitrage and portfolio. Investment process, legal framework of securities market, investors and stock exchanges. Risk and Return: Computation of return; Meaning, definition of risk and its types. Risk measurement and minimizing risk exposure. Calculation of Expected Return and Risk

Unit-II

Fundamental Analysis: economic analysis, Industry analysis and company analysis. Technical Analysis: Tools and Methods of Technical Analysis, Dow Theory, Illiot Wave theory, Moving Averages, Breadth of Market Momentum, Support and Resistance levels, Price-volume relationship, Short selling, Breadth of market (Advance/Decline) – Odd lot trading – Oscillators, Relative Strength Index (RSI), Rate of Change (ROC), Charting, Types of price charts and Price patterns

Unit-III

Fixed-Income Securities: overview of fixed-income securities, risk factors in fixed-income securities (Systematic and unsystematic), Bond valuation and analysis, Types of bonds. Interest rates and yield curve, Duration of bond, Valuation of preference shares. Stock return and valuation: Stock Return and Valuation, anticipated returns, Present value of returns, Constant Growth model, Two-Stage Growth model, The Three-Phase Model, Valuation through P/E ratio. Features of capital markets and functioning, new issues market, IPO's, valuation of issues, role of SEBI. role and importance, trading procedures in securities, and brokers, impact of certain economic indicators on the stock market

Unit-IV

Risk profile determination, Capital asset allocation, Diversification and portfolio analysis, portfolio selection- Index model and Markowitz Model, Derivative securities and valuation; portfolio performance evaluation; portfolio revision, international portfolio diversification; The theory of active portfolio management, Characteristic line Capital Asset Pricing Model (CAPM) and beta forecasting, Arbitrage Pricing Theory (APT) and Intertemporal Capital Asset Pricing Model. Methods of Portfolio Evaluation Sharpe's, Treynor's and Jensen's measures of portfolio performance evaluation, Fama's decomposition of portfolio return Portfolio Revision: Need, Constraints, and Strategies. Performance-Measure approaches, Futures, Options and Option Pricing

Services Marketing
MBA(TM):219(A)

L	T	P
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Unit I

Meaning and Concept of services, importance of Goods & Services marketing, Goods and Services Continuum, Classifications of services, Environment of Service Marketing (Micro as well as Macro), Reasons for growth in schemes economy; need to study service organizations; marketing approaches to services, Emergence & Reasons for growth of service sector in India, contribution to Indian economy.

Unit-II

Introduction to Service Organization Management, Framework for Studying Service Marketing, Status of marketing in service sector; marketing strategy and marketing mix in services; services product planning and development; Understanding Customers-the customer experience, Concept of Customer Relationship Management (CRM), Relationship management in practice, Segmenting, Targeting & Positioning various services.

Unit-III

Tools for Marketers of Services, Creating and delivering services; Pricing of services- pricing concepts, pricing strategies for services, Use of differential pricing, Advertising, Positioning Services in Emerging Markets, Sales Promotion & Personal Selling in service industry, Service distribution in competitive markets, components of service delivery system, potential management, Problems Associated, with services delivery, Importance of people in service marketing. role of various people involved, concept, types of process, Role of process in various services, Physical Evidence, communicating and promoting services.

Unit-IY

Trends in Management of Service Organizations, Consumer evaluation process in services; managing the service quality; building a customer oriented organization; advertising strategies for services firms. Marketing of Banking service, Tourism and hospitality services, Educational and Health services.

Unit-V

Improving Services Quality and Productivity, Gronross Model of service quality (Internal marketing, external marketing and Interactive marketing); Service Quality Gap Model by Parasuramann (i.e. SERVQUAL), Service Quality Model by Cronin & Taylor (i.e. SERVPERF), Challenges in Marketing of services.

Suggested Readings:

1. Ziethaml VA and Bitner MJ, Service Marketing, 2007, TMH.
2. Hellen W, Service Marketing, Macmillan India Ltd, 2000, New Delhi.
3. Nargundkar, Services Marketing, McGraw Hill.
4. Lovelock C.H. and Lauren W, Principle of Services Marketing and Management, 1998, Prentice Hall of India, London.

Services Operations Management
MBA(TM):219(B)

L	T	P
3	0	3

Unit-I:

Understanding the Nature of Services: Introduction and imperatives of services, Nature and characteristics of services. Classification of services and analyzing service operations. Aligning Service Strategy and Service Competitiveness: Introduction to Service Strategy, Competitive Service Strategies, Strategic Service Vision.

Unit-II:

Service Design, Development & Automation: New service design and development, Service system design and delivery process, Technology & automation in services, Service encounter. Managing Human Resources in Services: Human resource planning & employee selection, Managing people in Services organization, Work measurement in Services.

Unit-III:

Service Quality: Defining Service Quality, Quality Service by Design, Service process control, Total quality management t' 's, Quality philosophy and performance excellence, Service recovery and Service guarantee. Service Facility Design and Facility Location: Service facility design, Process analysis of facility layouts, Facility location decision factors, Quantitative models for facility location: Service facility on a line or on a plane, Quantitative models for facility location: Based on different objective functions of optimization criteria, Quantitative models for multiple service facilities.

Unit-IV:

Demand and Capacity Management in Services: Forecasting Demand in Services, Smoothing Customer Demand in Services, Service Capacity Management, Yield management, Resource and Workforce Scheduling in Services. Managing Waiting Lines & Queuing Models: Introduction to Queuing System, Characteristics of Queuing system, Queuing Models.

Unit-V

Service Inventory and Supply Chain Management: Service Inventory Management, Service Supply Chains, Processes in Service Supply Chain. Quantitative Models in Managing Service Operations: Data Envelopment Analysis, Application of simulation in service operations management, Vehicle routing and scheduling.

Suggested Readings:

1. B. Fitzsimmons, James A., and Mona J. Fitzsimmons, Service Management: Operations, Strategy, and Information Technology, 6th Ed., Irwin/McGraw-Hill, 2007.

2. C. Haksever, Render B., Russel S. R. and Murdick R. G., Service Management and Operations, 2nd Ed., Prentice Hall 2007.

Training Development & Professional Growth

(MBA-219 C)

L	T	P
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Unit-I:

Understanding human interactions: Introduction to Interpersonal Relations, Johari Window of different ego states, Analysis of Transactions, Analysis of Strokes, Analysis of Life position. Personality: Meaning & Concept, Personality Pattern; Symbols of Self; Molding the personality pattern; Persistence and change.

Unit-II:

Frameworks for Identifying & classifying traits; MBTI & Big Five, predicting behavior at work, other personality trait relevant to behavior within organization, types of personality; Sick personalities and Healthy personalities, Winning Personality.

Unit-III:

Concept and philosophy of training; Trainers, Consultant and Organizational culture & climate for training; Component of training; Training skills, Learning and training: Learning theories; Organizational learning and Learning Organization; Conditions for effective learning; Continuous learning and development.

Unit-IV:

Assessment of training needs: Identifying various stages of training, advantages and disadvantages of training, planning and designing programmes for Training and development, teaching aids for training. training methods; On-the-job training; Off-the-job training. Evaluation of T & D programme, Economics and effectiveness of training programme.

Unit-V:

HRD in Organizations: Selected cases covering HRD practices in government organizations, manufacturing and service industries and MNCs; International experiences of human resource development; Emerging issues in HRD, HRD & Diversity: diversity training & beyond.

Suggested Readings:

1. Aswathappa K. – Human Resource Management: Text & Cases (McGraw Hill Education, 7 th Ed.)

2. Friedman- Personality: Classic Theories and Modern Research (Pearson, 2nd edition) 2004.

3. Hurlock E- Personality Development (Tata McGraw-Hill)

4. Lynton R P and Pareek U- Training for Organizations Transformation (Sage)

5. Pareek U.- Training Instruments for HRD and OD (Tata McGraw-Hill, 2nd edition)

Suggested Readings:

1. Cheng-Few Lee, Joseph Finnerty, John Lee, Alice C Lee, Donald Wort (2012) "Security Analysis, Portfolio Management and Financial Derivatives", World Scientific Publishing.
2. Kevin, S., "Security Analysis and Portfolio Management" 2nd ed. PHI
3. Thomas, Samuel, "Security Analysis and Portfolio Management" PHI
4. Berstein, P., The improbable origins of modern Wall Street, New York, Free Press, 1992
5. Aswath Damodaran, Investment Fables, Pearson Education 2004
6. Fischer, Donald E. and Ronald J. Jordan, Security Analysis and Portfolio Management, Prentice Hall of India, 2009, 1st Edition, New Delhi.

Natural Resource Management

MBA (EM – 221)

L	T	C
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Unit – 1:

Forest; Forest types, role of forest, Forest products- demand and supply, Tribal and forest, Forest management. Classification of forest land, Administrative classification of forests, Classification of forests for management, social forestry, community forestry. Indian forest policy and Forest conservation. National Forestry Action Plan-1999: An Overview, Wildlife; Importance of wildlife, abuse and depletion of wildlife, Wildlife conservation- classification of scarce wildlife, Methods of wildlife conservation, Endangered species of India, Wildlife conservation in India, Legislation: WLPA – 1972 and 2002 Amendment, development and Impact of wildlife, National Parks and Sanctuaries, GO's and NGO's in wildlife conservation, Eco-tourism.

Unit – 2:

Energy requirement. Impact of energy utilization on the environment. Conventional sources of energy: Coal, Oil and Natural gas, Thermal power, Firewood, Hydropower, Nuclear power. Non Conventional Sources of Energy: Solar energy, Wind energy, Ocean/ Tidal energy, Geothermal energy, Biomass based energy, Dendrothermal energy, Energy from urban waste, Bagasse based energy. Land/ Soil Landforms- types and significance, Degradation of land- causes and effects, Desertification. Soil: Basic Natural Resource, Formation and Composition, Soil erosion, Soil conservation.

Unit – 3:

Surface and groundwater, Water management, Rain water harvesting, Water shed management. Aquaculture- Inland water resources and their economic potential with respect to fisheries. Fresh water fish culture, Establishment and management of fish farm. Fishery – as self employment avenue (small scale industry), Govt. schemes, Training and incentives.

Reference Books

1. Environmental System "Organisation"
2. Rodgers & Panwar 1988, Planning Protected Area Network in India, Vol. I & II.
3. T. N. Khoshoo (1988) Environment Concerns and Strategies. Ashish Pub. House, Delhi.
4. Pachauri R. K. & Sridharan (1997), Looking back to Think Ahead, The Energy Research Institute, New Delhi

5. R. F. Dasmann (1968) Environment Conservation: John Willey and Sons, New York.
6. Hydrological Measurements for Watershed Research by Wasi Ullah, S. K. Gupta & S. S. Dalal.
7. Watershed Management in India by C. V. S. Murty
8. Groundwater Hydrology by Todd
9. Groundwater Hydrology by Hereemath.

Economics of Environment

MBA (EM – 222)

L	T	C
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Unit – 1:

Environmental Economics: Introduction to WTO and International Trade, Environmental Trade Barriers, Green GDP, Natural Resource Accounting, Green Accounting, Environmental Communication, GRI reports State of Environment in India: State of India's Environment Report by CSE and MOEF. Survey of the Environment by Hindu, State Government Environmental Status Reports. Environmental Compliance Status of Industries, State of the Environment in major cities of India, Air and Water Quality Standards of CPCB, State Governments and WHO.

Unit – 2:

Major Environmental Organizations and events: Green Peace Movement, WWF, UNEP, UNCED – 1992 (Stockholm Conference, Earth Summit, Rio Declaration, Action Plan and Agenda, WBCSD, WRI, GRI, World Bank, Environmental Movements in India: Case Studies- Silent Valley, Tehri Dam, Chipko Movement, Sardar Sarovar Dam Controversy, Enron Power Project controversy, Thapar Dupont Nylon Project,.ENVIS

Unit – 3:

Green Marketing: Emergence of new Environmental market, Green marketing, Environmental strategy and Competitive advantage, Green supply Chain Management, Eco Designing, Eco- Labeling.

Reference Books

1. The Economics of Development and Planning – by M. L. Jhingan.
2. Microeconomic Theory & Welfare Economics – by P. N. Chopra
3. Economic Development – Problems, Principles & Ploicies – by Benjamin Higgins.
4. Economic Development – Past & Present – by Gill
5. Economic Development of Business – by Dr. M. Adhikari
6. Survey of the Environment – Annual Reports published – by The Hindu.
7. State of India's Environment Reports published by Center for Science and

Environment.
8. Factor Four by L Hunter Lovins, Ernst von Weizsäcker and Amory B Lovins
9. Changing Course by Stephan Schmidheiny

Environmental Risk Assessment and Management

MBA (EM – 223)

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Unit – 1:

Introduction; Sources of Environmental hazards, Environmental and ecological risks, Environmental risk assessment framework, Regulatory perspectives and requirements, Risk Analysis and Management and historical perspective; Social benefit Vs technological risks; Path to risk analysis; Perception of risk, risk assessment in different disciplines.

Unit – 2:

Elements of Environmental Risk Assessment : Hazard identification and accounting, Fate and behaviour of toxics and persistent substances in the environment, Properties, processes and parameters that control fate and transport of contaminants, Receptor exposure to Environmental Contaminants, Dose Response Evaluation, Exposure Assessment, Exposure Factors, Slope Factors, Dose Response calculations and Dose Conversion Factors, Risk Characterization and consequence determination, Vulnerability assessment, Uncertainty analysis.

Unit – 3:

Different Analysis for Risk Assessment: Cause failure analysis, Event tree and fault tree modeling and analysis, Multimedia and multipathway exposure modeling of contaminant migration for estimation of contaminant concentrations in air, water, soils, vegetation and animal products, Estimation of carcinogenic and non carcinogenic risks to human health, Methods for Risk Assessment: HAZOP and FEMA methods, Methods in Ecological risk assessment, Probabilistic risk assessments, radiation risk assessment, Data sources and evaluation.

Unit – 4:

Risk Management: Risk communication and Risk Perception, comparative risks, Risk based decision making, Risk based environmental standard setting, Risk Cost Benefit optimization and tradeoffs, Emergency Preparedness Plans, Emergency planning for chemical agent release, Design of risk management programs, risk based remediation; Risk communication, adaptive management, precaution and stake holder involvement. Application: Case studies on risk assessment and management for hazardous chemical storage, Chemical industries, Tanneries, Textile industries, Mineral processing and Petrochemical plants, Hazardous waste disposal facilities, nuclear power plants, contaminated site remediation, Case histories on Bhopal, Chernobyl, Seveso, Three Mile Island.

References:

1. Cutter, S.L., Environmental Risk and Hazards, Prentice-Hall of India Pvt. Ltd., New Delhi, 1999.
2. Kolluru Rao, Bartell Steven, Pitblado R and Stricoff, Risk Assessment and Management Handbook, McGraw Hill Inc., New York, 1996.
3. Kofi Asante Duah, Risk Assessment in Environmental management, John Wiley and sons, Singapore, 1998.
4. Kasperson, J.X. and Kasperson, R.E. and Kasperson,R.E., Global Environmental Risks, V.N.University Press, New York, 2003.
5. Risks and Decisions for Conservation and environmental management, Mark Burman, Cambridge University Press.
6. Susan L Cutter, Environmental Risks and Hazards, Prentice Hall of India, New Delhi, 1999.
7. Joseph F Louvar and B Diane Louver, Health and Environmental Risk Analysis fundamentals with applications, Prentice Hall, New Jersey, 1997.

Solid Waste Management

MBA (EM – 224)

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Unit – 1:

Introduction to Solid Waste Management; Ecosystem; meaning, Types, Components, Structure, Functions, Levels of organization in nature, Food chain and Trophic structure, Biogeochemical Cycles, Energy flow

Unit – 2:

Definition Sources and types of solid waste, composition and its determinants of Solid waste factors influencing generation quantity assessment of solid wastes methods of sampling and characterization, collection of Solid waste collection services collection system, equipments time and frequency of collection, labour requirement, factors affecting collection, analysis of collection system, collection routes, preparation of master schedules

Unit – 3:

Need for transfer operation, transfer stations, types, transport means and methods, location of transport stations, Manpower requirement, collection routes: Transfer stations, selection of location, types & design requirements, operation &maintenance, Processing techniques; purposes mechanical volume reduction necessary equipments chemical volume reduction, incinerators mechanical size reduction selection of equipments, components separation, methods drying and dewatering.

Unit – 4:

Refuse disposal; various methods, incinerations, principle features of an incinerator, site selection and plant layout of an incinerator, sanitary landfill, methods of operation, advantages and disadvantages of sanitary land fill, site selection, reactions accruing in completed landfills, gas and leachate, movement and control, equipments necessary

References:

George Techobanoglous et al,"Integrated Solid Waste Management" McGraw Hill, 1993

Environmental Finance

MBA (EM – 225)

L	T	C
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Unit – 1:

An overview of the provisions of the two federal environmental statutes that contain major funding programs: the Clean Water Act and the Safe Drinking Water Act; as well as an analysis of specific state laws which complement these programs, Overview of how environmental projects are financed using grants, loans and guaranties. A survey of the sources of funds available to pay for such grants, loans, etc. for environmental improvements.

Unit – 2:

Financial markets and how they work, The municipal bond market, Nutrient trading markets in the water sector. Emission credit trading, both in Europe and the U.S., in the air sector, Measuring and maximizing income, Calculation of Cash Available for Debt Service (CADS). Loans and Guaranties, Principal, interest rate, maturities, the relationship between rate and term and the impact of points and fees on Annual Debt Service Payments (ADSP).

Unit – 3:

The core concepts of finance: the time-value of money. Compounding and discounting. Present Value. Future Value. Internal Rate of Return, Project Valuation. Cost/benefit analyses, Determining financial feasibility. The key concept of leveraging. Comparing the relative efficiencies of grants, loans and guaranties.

Unit – 4:

Tariffs and subsidies. Tariff setting. The legal bases of tariffs. Designing fair and equitable tariffs for environmental services using appropriate types of tariffs and tariff rates. The role of subsidies. Moving from supply-based general subsidies to demand-based targeted subsidies, and on to full-cost pricing, Climate Change Finance. The Kyoto Protocol. Joint Implementation (JI) and the Clean Development Mechanism (CDM). The Copenhagen Accord. The Regional Greenhouse Gas Initiative (RGGI)

References:

New Strategies for Environmental Financing: Nele Matz, Zaoerv.de

Environmental Statistics

MBA (EM – 226)

L	T	C
3	0	3

Unit – 1:

Basic Statistics: Statistical methods for environmental systems, significance of statistical data analysis, Measures of central tendency (mean, median, mode) and dispersion (Variance, Standard Deviation, Coefficient of Variation, range, etc.), Correlation and Regression

Unit – 2:

Probability and probability distributions: Basics of probability, Binomial, Poisson and Normal distributions,Testing of hypothesis: Null and alternative hypotheses, tests of hypothesis - t, F, z and Chi-square tests. Types of errors in testing hypotheses, ANOVA, ANOCOVA. Sampling: Basics of sampling, simple Random Sampling, Stratified Random Sampling, Systematic Sampling, Multistage sampling.

Unit – 3:

Time series: Time series analysis, trend, seasonal, cyclic and random fluctuations, Analysis of environmental data: Variables of environmental interest, Multivariate Data Analysis - Multivariate ANOVA, Cluster Anal ysis, Multiple regression analysis, Principal Components Analysis, Ecological economics, ecological integration with economy: Cost benefit analysis.

References:

Manly B.F.J. (2001) Statistics for Environmental Science and Management, Chapman & Hall/CRC.

Sales and Distribution Management
MBA(TM):229(A)

L	T	P
3	0	3

Unit-I:

Nature and Scope of Sales Management, Concept of Personal Selling and its Objectives; Marketing Sales and Distribution linkage, Sales Management Process, Role of Sales Manager, Sales Management and Salesmanship, Dyadic relationship, Selling situation, Selling theories; The Ones of Personal Selling, Process of Personal Selling, Qualities of a Successful Salesman

Unit-II:

Prospecting, Pre approach, Approach, Presentation, Objection Handling, Sales Close, Sales Force Management: Organising the Sales Force, Designing the Structure and Size of Sales Force, Formulation of Personal Selling Strategies; Sales Force Organization – Nature and Types; Sales Force Recruitment – Process and Sources; Sales Force Selection Process

Unit-III:

Sales force Training: Need and Objectives; Motivating Sales Personnel – Significance, Financial and Non-Financial Reward System, Sales force Compensation, Sales Contests, Evaluation and Analysis; Goals in Sales Management: Goal Setting Process in Sales Management, Analyzing Market Demand and Sales Potential, Techniques of Sales Forecasting, Designing Sales Territory, Quota Setting; Selling Strategies, Sales Budget, Sales Analysis and Audit; sales person's performance evaluation.

Unit-IV:

Introduction to Distribution Management: Concept of Distribution Channel, Importance of a Channel, Types of Channels, Primary Distributors, Specialized Distributors and Participants, Distributors: Policies and Strategies; Channel Management: Forces of Distributing Systems, Distributors Selection and Appointment, Channel Conflicts and their Resolutions, Training the Distributors Sales Team.

Suggested Readings:

1. Still Cundiff and Govoni: Sales Management, PHI, New Delhi
2. Nag: Sales and Distribution Management, McGraw Hill
3. Johnston: Sales Force Management: McGraw Hill
4. Spiro: Management of Sales Force, McGraw Hill, New Delhi
5. Panda and Sahadev: Sales and Distribution Management: Oxford University Press, Delhi
6. Matin Khan: Sales and Distribution Management, Excel Books, Delhi

IT in Supply Chain Management
MBA(TM):229(B)

L	T	P
3	0	3

Unit-I:

Building a strategic framework to analyze supply chains: Fundamentals of Supply Chain Management, Supply chain networks, Integrated supply chain planning, Decision phases in supply chain, process view of a supply chain, supply chain flows, Overview of supply chain models and modeling systems, Supply chain planning: Strategic, operational and tactical, Understanding supply chain through process mapping and process flow chart.

Unit-II:

Designing the supply chain network: Supply chain strategies, achieving strategic fit, value chain, Supply chain drivers and obstacles, Strategic Alliances and Outsourcing, purchasing aspects of supply chain, Supply chain performance measurement: The balanced score card approach, Performance Metrics. Planning demand and supply: Demand forecasting in supply chain, Aggregate planning in supply chain, Predictable variability.

Unit-III:

Planning demand and supply in a supply chain: Planning and managing inventories: Introduction to Supply Chain Inventory Management. Inventory theory models: Economic Order Quantity Models, Reorder Point Models and Multi-Echelon Inventory Systems, Relevant deterministic and stochastic inventory models and Vendor managed inventory models.

Unit-IV:

Designing and planning transportation networks: Distribution Management: Role of transportation in a supply chain - direct shipment, warehousing, cross-docking; push vs. pull systems; transportation decisions (mode selection, fleet size), market channel structure, vehicle routing problem. Facilities decisions in a supply chain. Mathematical foundations of distribution management, Supply chain facility layout and capacity planning.

Unit-V:

Revenue Management: Role of Pricing and Revenue Management in a Supply Chain; Pricing and Revenue Management for Multiple Customer Segments; Pricing and Revenue Management for Perishable Assets; Pricing and Revenue Management for Seasonal Demand; Pricing and Revenue Management for Bulk and Spot Contracts. Role of IT in Pricing and Revenue Management.

Suggested Readings:

1. Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies, Second Edition, David Simchi-Levi, Philip Kaminsky, and Edith Simchi-Levi, McGraw-Hill/Irwin, New York, 2003.
2. Sunil Chopra and Peter Meindel. Supply Chain Management: Strategy, Planning, and Operation, Prentice Hall of India, 2002.
3. Introduction to Supply Chain Management by Robert Handfield & Ernest Nichols, Prentice hall Publishers, 1999.

Industrial Relations & Cyber Laws
MBA-229(C)

L	T	P
3	0	3

UNIT-I

Overview of Industrial Relations: Concept, history and theoretical perspective of Industrial Relations, Nature an Importance of IR, approaches to IR, organization of IR in India, IR in modern era, IR and HRM/HRD Employers Organization; ILO in IR. Information Technology Act, 2000 - Introduction, Digital Signature, Electroni Governance, cyber-crimes and remedies. Electronic records, Controlling and Certifying authority, cyber regulatio appellate tribunals.

UNIT-II:

Indian Labor Force: Introduction, types of labor, growth, size, and distribution of labor, characteristics of Indiar labor, labor administration machinery. Trade Unions (TU): Definition, objectives, reasons for joining, types of TU structure of TU, Theories of TU, evolution of TU, functions of TU, methods of achieving objectives, TU in India.

UNIT-III:

dustrial Disputes and Settlement: Nature & Causes of Disputes, Industrial discipline, Disputes Manifestations: settlement of disputes; collective bargaining, code of discipline, grievance handling, arbitration, conciliation. adjudication, and consultative machinery. Labor problems: Labor turnover; Absenteeism; Workers' participation in management.

UNIT-IV:

Labor Welfare and Wages: Evolution, objectives, theories and types of Labor Welfare, labor and five year plans, Wages: Definition and Theories of Wages. Labor Laws: The Factories Act, 1948, The Industrial Dispute Act, 1947, The Industrial Employment Act (Standing Orders), 1946.

UNIT-V:

Labor Legislations: The Maternity Benefit Act, 1961, The Minimum Wages Act, 1948, The Payment of Bonus Act, 1965, The Payment of Gratuity Act, 1972, The Payment of Wages Act, 1936, The Employees' Provident Fund Act, 1952, The Employees' State Insurance Act, 1948, The Employees' Compensation Act, 1923.

Suggested Readings:

1. Aswathappa K. – Human Resource Management: Text & Cases (McGraw Hill Education, 7th Ed.)
2. Ghosh&Nandan – Industrial Relations and Labor Laws (McGraw Hill Education, 2015)
3. Srivastava S C - Industrial Relations and Labor Laws (Vikas, 2000, 4th Ed.)
4. Singh B. D. - Industrial Relations & Cyber Laws (Excel, 1st Ed.)

Personality Development & Leadership
MBA – 229(D)

L	T	P
3	0	3

UNIT-I:
Personality: Concept, Personality Patterns, Symbols of Self, Molding the Personality Pattern, Persistence & Change. Personality & Personal Effectiveness: Psychometric Theories – Cattele and Big Five.

UNIT-II:
Psychodynamic Theories - Carl Jung and MBTI, Transactional Analysis, Johari – Window, Personal Effectiveness. Personality Determinants: An overview of Personality determinants. Evaluation of Personality: Sick and Healthy Personalities.

UNIT-III:
Training: Concept, Need and Importance, Types of Training, Learning Process, Integrating Learning & Training to develop effective Training Programs. Training Need Assessment.

UNIT-IV:
Leadership – Meaning & Concept, Evolution through theories, contingent leadership styles and characteristics of such leaders, trust and leadership challenges to the construct 'Leadership', Team Building for Work Teams, Building effective Teams.

UNIT-V:
Groups & Teams the differences and their Leadership. Groups – Nature, Size, Stages of Group Development. Group Roles, Norms, Status, Cohesion. Decision making in group, Ginnetts Team Effectiveness Leadership Model.

Suggested Readings:

1. Robbins S. P. Organizational Behavior (Pearson, 15th Ed.)
2. Yukl G - Leadership in Organizations (Prentice hall, 7th Ed.)
3. Hurlock., Elizabeth B - Personality Development (Tata McGraw Hill, 1st Ed.)
4. Udai Pareek - Understanding Organizational Behaviour (Oxford, 2nd Ed.)

Negotiation & Counseling
MBA- 229(E)

L	T	P
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UNIT-I:
Negotiation: Concept and overview of negotiation: Types of Negotiation, Strategy and Tactics of Distributive Bargaining, Strategy and Tactics of Integrative Negotiation; Strategy and Planning for Negotiation, Choosing Effective Negotiation Tactics.

UNIT-II:
Negotiation Sub processes: Perception, Cognition and Emotion Communication: What is communicated during negotiation and how people communicate in negotiation? Information Bargaining.

UNIT-III:
The Relationship between the Negotiators: Initial Orientation, Important factors and emotions in negotiation: ommunication; Creativity; BATNA; Role of emotions, Narrowing of Differences and Closure: Competitive and Cooperative Tactics, Problem Solving Tactics.

UNIT-IV:
International and Cross Cultural Negotiation: Context and Concept, Negotiation Planning, Negotiator Identity and Negotiation Context: Effects of Culture, Gender & Race.

UNIT-V:
Emergence & Growth of Counselling: Factors contributing to the emergence, Approaches to Counseling: Behavioristic, Humanistic Approaches and Rogers Self Theory Counseling Process: Steps in Counseling Process. Modern Trends in Counselling – Trends, Role of a Counselor and Model of Counseling.

Suggested Readings:

1. Rao S N - Counseling and Guidance (Tata Mc Graw Hill, 2nd Ed.)
2. Cohen S- Negotiating Skills for Managers (Tata McGraw-Hill) 2003.
3. Lewicki, Saunders & Barry - Negotiation (Tata Mc Graw Hill, 5th Ed.)
4. B.D.Singh - Negotiation Made Simple (Excel Books, 1st Ed.)
5. Singh Kavita - Counselling Skills for Managers (PHI, 1st Ed.)
6. Pareek Udai - Understanding Organisational Behaviour (Oxford)