

**MADURAI KAMARAJ UNIVERSITY**  
**M.B.A. (AIRLINE & AIRPORT MANAGEMENT )**

**FIRST YEAR**

**SEMESTER –I**

**Paper1 Management and Organizational Behaviour**

**Unit I :**

Management: Science, Theory and Practice - The Evolution of Management Thought and the Patterns of Management Analysis - Management and Society : The External Environment, Social Responsibility and Ethics - Global and Comparative Management - The Basis of Global Management

**Unit II :**

Nature and functions of management: Planning, Organizing/ Organizing Structures and Design, Controlling, Staffing

**Unit III :**

Introduction to Organizational Behaviour, Nature of organizations, The Individual Perceptual Process, Decision making, Nature of Learning, Values and attitudes, Motivation and emotions in workplace Personality

**Unit IV :**

Foundation of Group Behaviour  
Nature of work groups and teams, Communication, Leadership

**Unit V:**

The Entire Organization: Organizational Culture and Climate, Management of Conflict within the organization, Organizational Change and Development

**References :**

1. Koontz & Weirich, Essentials of Management, Tata McGraw Hill.
2. VSP Rao, V Hari Krishna – Management: Text and Cases, Excel Books, I Edition, 2004
3. Stoner & Wankai, Management, PHI.
4. Robbins.S. Organisational Behaviour, X edn., Prentice-Hall, India.
5. Hellinegal Slocum, Woodman, Organisational Behaviour, IX edn., Thomson learning.
6. Umasekaran, Organisational Behaviour, Tata McGraw Hill.
7. Robbins S.P., Concepts contrivances and applications, Prentice Hall.

## **Paper 2 MANAGERIAL ECONOMICS**

**UNIT I :** Managerial Economics - meaning, nature and scope - Managerial Economics and business decision making - Role of Managerial Economist - Fundamental concepts of Managerial Economics.

Demand Analysis - meaning, determinants and types of demand - Elasticity of demand.

**UNIT II:** Supply meaning and determinants - production decisions - production functions - Isoquants, Expansion path - Cobb-Douglas function, Cost concepts - cost - output relationship - Economies and diseconomies of scale – cost functions.

**UNIT III:** Market structure - characteristics - Pricing and output decisions - methods of pricing - differential pricing - Government intervention and pricing.

**UNIT IV:** Profit - Meaning and nature - Profit policies - Profit planning and forecasting – Cost volume profit analysis - Investment analysis.

**UNIT V:** National Income - Business cycle - inflation and deflation - balance of payments - Monetary and Fiscal Policies

### **References :**

1. Joel Dean - Managerial Economics, Prentice Hall/Pearson.
2. Rangarajan - Principles of Macro Economics, Tata McGraw Hill.
3. Atmanand, Managerial Economics, Excel, 2001.
4. Athmanand.R., Managerial Economics, Excel, 2002, New Delhi.
5. Mankar.V.G., Business Economics, Macmillan, Business Book, 1999.

## **Paper 3 Financial accounting**

### **UNIT I**

Financial Accounting - Definition - Accounting Principles - Concepts and conventions – Trial Balance – Final Accounts (Problems) - Depreciation Methods-Straight line method, Written down value method, Sinking fund method.

### **UNIT II**

Financial Statement Analysis - Objectives - Reorganizing the Financial Statement Information - Techniques of Financial Statement Analysis: Comparative Statements, Common – Size statement, Trend Percentage - Accounting Ratios: construction of balance sheet using ratios

(problems)-DuPont analysis.

### **UNIT III**

Fund Flow Statement - Statement of Changes in Working Capital - Computation of Fund from Operations - Workings for Computation of various sources and uses - Preparation of Fund Flow Statement - Cash Flow Statement Analysis- Computation of Cash from Operations Problems - Distinction between Fund Flow and Cash Flow Statement. Problems

#### **UNIT IV**

Cost Accounting - Meaning - Distinction between Financial Accounting and Cost Accounting - Cost Terminology: Cost, Cost Centre, Cost Unit - Elements of Cost - Cost Sheet – Problems.

Budget, Budgeting, and Budgeting Control - Types of Budgets - Preparation of Flexible and fixed Budgets, master budget and Cash Budget - Problems -Zero Base Budgeting.

#### **UNIT V**

Marginal Costing - Definition - distinction between marginal costing and absorption costing - Breakeven point Analysis - Contribution, p/v Ratio, margin of safety - Decision making under marginal costing system-key factor analysis, make or buy decisions, export decision, sales mix decision-Problems

#### **References:**

1. Advanced Accountancy - R.L.Gupta and Radhaswamy
2. Management Accounting - Brown and Howard
3. Management Accounting - Khan and Jain
4. Management Accounting - S.N.Maheswari
5. Management Accounting - Antony and Recece
6. Management Accounting - J.Batty

### **Paper 4 Quantitative Methods for Management**

#### **UNIT I**

Linear, Non-Linear functions – graphical representation of functions, Constants, Variables – notion of Mathematical models – concept of trade off – notion of constants – concept of Interest.

Basic Concept of differentiation – integration – Optimization concepts – use of differentiation for optimization of business problem- Optimization

#### **UNIT II**

Data Analysis – Univariate – ungrouped and grouped data measures of central Tendencies, measures of dispersion – C V percentages (problem related to business applications). Bivariate – correlation and regression – problems related to business applications

#### **UNIT III**

Probability – definitions – addition and multiplication Rules (only statements) – simple business application problems – probability distribution – expected value concept – theoretical probability distributions – Binomial, Poisson and Normal – Simple problems applied to business.

#### **UNIT IV**

Basic concept of index numbers – simple and weighted index numbers – concept of weights - types of index numbers – Business index number – CPT, WPI, Sensex, Nifty, Production Index, Time series – variations in Time Series for business forecasting.

## **UNIT V**

Hypothesis testing of Proportion and Mean – single and two tailed tests – errors in Hypothesis Testing – Measuring the power of Hypothesis test. Chi-Square Tests

### **References:**

1. Statistics for Management – Richard L Levin & Daid S Rubin
2. Statistical Methods – S P Gupta
3. Statistics for Business and Economics – R P Hoods – MacMillan India Limited
4. David M. Levine, Timothy C. Krehbiel and Mark L. Berenson —Business Statistics: A First Course, Pearson Education Asia
5. Amir D. Aczel, Complete Business Statistics, 5th edition, Irwin McGraw-Hill.

## **Paper 5 Managerial Communication**

### **Unit 1:**

Communication basics – Business Communication – components – Types – formal communication network – Work team communication – variables – goal – conflict resolution – non – verbal communication – Cross cultural communication – Business meetings – Business Etiquette.

### **Unit 2:**

Understanding Corporate Communication – Employee Communication – Managing Government Relations – Writing for Media and Media Relations

### **Unit 3:**

Corporate Communication in Brand Promotion – Financial Communication – Crises Communication.

### **Unit 4:**

Report writing: Characterizing & business reports – Types and forms & reports – Project proposals – collection of data – tables constitution – charts – writing the report – documenting the sources – proof reading.

### **Unit 5:**

Business Presentation: Written and oral presentation – work – team presentation – Delivering the business presentation visual aids – slides – electronic presentation – hand-outs – delivering the presentation – career planning – preparing Resume – job applications – preparation for a job interview – employment interviews – follow-up.

### **Suggested Readings:**

1. Scot Ober, Contemporary business communication, fifth edition, biztantra.
2. Lesiler & Flat lay, Basic Business communication. Tata Mc Graw Hill.

## **II SEMESTER**

### **Paper 6 HUMAN RESOURCE MANAGEMENT**

#### **Unit I : Human Resource Function**

Human Resource Philosophy - Changing environments of HRM - Strategic human resource management - Using HRM to attain competitive advantage - Trends in HRM - Organisation of HR departments - Line and staff functions - Role of HR Managers.

#### **Unit II: Recruitment & Placement**

Job analysis: Methods - IT and computerised skill inventory - Writing job specification - HR and the responsive organisation.

Recruitment and selection process: Employment planning and forecasting - Building employee commitment: Promotion from within - Sources, Developing and using application forms – IT and recruiting on the internet.

Employee testing & selection: Selection process, basic testing concepts, types of test, work samples & simulation, selection techniques, interview, common interviewing mistakes, Designing & conducting the effective interview, small business applications, computer aided interview.

#### **Unit III: Training & Development**

Orientation & Training: Orienting the employees, the training process, need analysis, Training techniques, special purpose training, Training via the internet.

Developing Managers: Management Development - The responsive managers - On-the-job and off-the-job Development techniques using HR to build a responsive organisation. Management Developments and CD-Roms - Key factor for success.

Performance appraisal : Methods - Problem and solutions - MBO approach - The appraisal interviews - Performance appraisal in practice.

Managing careers: Career planning and development - Managing promotions and transfers.

**Unit IV: Compensation & Managing Quality** Establishing Pay plans: Basics of compensation - factors determining pay rate – Current trends in compensation - Job evaluation - pricing managerial and professional jobs - Computerised job evaluation.

Pay for performance and Financial incentives : Money and motivation - incentives for operations employees and executives - Organisation wide incentive plans - Practices in Indian organisations.

Benefits and services: Statutory benefits - non-statutory (voluntary) benefits - Insurance benefits - retirement benefits and other welfare measures to build employee commitment.

#### **Unit V: Labour relations and employee security**

Industrial relation and collective bargaining: Trade unions - Collective bargaining - future of trade unionism. Discipline administration - grievances handling - managing dismissals and separation.

Labour Welfare: Importance & Implications of labour legislations - Employee health - Auditing

HR functions, Future of HRM function.

**References:**

1. Gary Dessler, "Human Resource Management", Seventh edition, Prentice-Hall of India P.Ltd., Pearson.
2. H. John Bernardin & Joyee E.A. Russel, Human Resource Management - An experiential approach, 4th Edition, McGraw-Hill International Edition., 2007
3. David A. DeCenzo & Stephen P. Robbins, Personnel/Human Resource Management, Third edition, PHI/Pearson.
4. VSP Roa, Human Resource Management : Text and cases, First edition, Excel Books, New Delhi - 2000.
5. Dr. R. Venkatapathy & Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
6. Robert L. Gibson and Marianne H. Mitchell, Introduction to Counseling and Guidance, VI edition, PHI, 2005.

**Paper 7 MARKETING MANAGEMENT**

**Unit I**

Marketing Concepts and Tasks, Defining and delivering customer value and satisfaction - Value chain - Delivery network, Marketing environment, Adapting marketing to new liberalised economy - Digitalisation, Customisation, Changing marketing practices, e-business - setting up websites; Marketing Information System, Strategic marketing planning and organization.

**Unit II**

Buyer Behaviour, Market Segmentation and Targeting, Positioning and differentiation strategies, Product life cycle strategies, New product development, Product Mix and Product line decisions, Branding and Packaging, Price setting - objectives, factors and methods, Price adapting policies, Initiating and responding to price changes.

**Unit III**

Marketing channel system - Functions and flows; Channel design, Channel management - Selection, Training, Motivation and evaluation of channel members; Channel dynamics - VMS, HMS, MMS; Market logistics decisions

**Unit IV**

Integrated marketing communication process and Mix; Advertising, Sales promotion and Public relation decisions. Direct marketing - Growth, Benefits and Channels; Telemarketing; Salesforce objectives, structure, size and compensation.

**Unit V**

Identifying and analysing competitors, Designing competitive strategies for leaders, challengers, followers and nichers : Customer Relationship marketing - Customer database, Data warehousing and mining. Attracting and retaining customers, Customerism

in India, Controlling of marketing efforts. Global Target market selection, standardization Vs adaptation, Product, Pricing, Distribution and Promotional Policy.

**References :**

1. Marketing Management - Philip Kotler - Pearson Education/PHI 12th Edition, 2006.
2. Marketing Management - Rajan Saxena - Tata McGraw Hill, 2002.
3. Marketing Management: Planning, Implementation and Control: Global Perspective Indian Context – VS Ramasamy & S. Namakumari - Macmillan India, 2007.
4. Marketing Management: A South Asian Perspective – Philip Kotler and Kevin Lane Kotler, Pearson Education, 11th Edition, 2007.
5. Basic Marketing - Perreault and McGarthy - Tata McGraw Hill, 2002.
6. Case and Simulations in Marketing - Ramphal and Gupta - Golgatia, Delhi.
7. Case Studies in Marketing - R.Srinivasan - PHI.
8. Marketing concepts and cases – Michael J Etzel, Bruce J Walker, William J Stanton and Ajay Pandit, TMH 13th Edition, New Delhi, 2007.
9. Marketing Management – S.Jayachandran - TMH, 2003.

**Paper 8 OPERATIONS MANAGEMENT**

**UNIT I :** Operations Management – Meaning – Importance – historical contributions – System view of OM - Operation strategy and competitiveness - Functions of OM – types of production systems

**UNIT II :** Product design and process selection – Evaluation and Selection of appropriate Production and Operations technology. Product Design and process selection.

Types of layout – analysis and selection of layout – Product and / or Process layout, Cellular, Lean and Agile manufacturing systems – Computer Integrated Manufacturing Systems - Assembly line balancing.

**UNIT III :** Production planning and control – meaning – functions – aggregate planning – master production schedule (MPS) – Material requirement planning (MRP) – BOM – Capacity requirement planning (CRP) – Techniques – problems in MRP and CRP – an introduction to MRP II and ERP – Business Process Re-engineering - Total Productive Maintenance (TPM)

**UNIT IV :** Materials management – functions – material planning and budgeting – Value Analysis - purchase functions and procedure - inventory control – types of inventory – safety stock – order point – service level – inventory control systems – perpetual – periodic – JIT – KANBAN.

**UNIT V :** Total Quality Management Concept - Statistical Quality Control for Acceptance Sampling and Process Control – Concepts of O.C.C. Curve – Use of the O.C. Curve – Concept of Type I and Type II error – Quality movement – Quality circles — ISO Quality Certifications and types – Quality assurance – Six Sigma concept.

**References :**

1. Production and Operations Management – Everest E Adam & Ebert – PHI – publication forth edition.

2. Operations Management (Theory and Problems) – Joseph G Monks – McGraw Hill Intl.
3. Production and Operations Management – S N Chary – TMH Publications
4. Production and Operations Management – Pannerselvam, PHI
5. Lee J. Krajewski and Larry P. Ritzman, —Operations Management: Process and value Chainsll, 7th Edition, PHI, 2007
6. Hunawalla and Patil – production and Operations Management, Himalaya.
7. Modern Production and operations management – E.S Buffa.
8. Lee J. Krajewski and Larry P. Ritzman, — Operations Management: Strategy and Analysisll, Addison Wesley.
9. Chase, Aquilano & Jacobs —Production and Operations Managementll, Tata McGraw Hill.

## **Paper 9 AVIATION LEGAL ENVIRONMENT**

### **Unit – I**

DGCA-Introduction to Directorate General of Civil Aviation-DGCA functions-DGCA Organization-DGCA as Regulatory Authority

### **Unit – II**

REGULATIONS-Aircraft Act 1934- The Aircraft Rules 1937

### **Unit – III**

NATIONAL LEGISLATION – The Air corporations Act, 1953 (27 of 1953)

- The Air Corporations (Transfer of Undertakings and Repeal) Ordinance, 1994(4 of 1994)
- The Air Corporations (Transfer of Undertakings and Repeal) Act, 1994 (13 of 1994)
- The International Airports Authority of India act, 1971 (43 of 1971)
- The National Airports Authority of India, 1985 (64 of 1985)
- The Airports Authority of India Act 1994 (55 of 1994)
- The Carriage by Air Act, 1972 (69 of 1972)
- The Tokyo Convention Act, 1975 (20 of 1975)
- The Anti-hijacking Act, 1982 (65 of 1975)
- The suppression of unlawful acts against safety of Civil Aviation Act, 1982 (66 of 1982)

### **Unit – IV**

CIVIL AVIATIONREQUIREMENTS (CAR)

- Section 1-General
- Section 2-Airworthiness
- Section 3-Air Transport
- Section 4-Aerodrome standards and Air Traffic Services
- Section 5-Air Safety
- Section 6-Design standards and type certification
- Section7-Flight crew standards, training and licensing



- Section 8-Aircraft operations

#### **Unit- V**

INTERNATIONAL CONVENTIONS: The Chicago conventions, 1944

- The International Air Services Transit Agreement, 1944
- The International Air Transport Agreement, 1944
- The Warsaw Conventions, 1920
- The Geneva Convention, 1948
- The Rome Convention, 1952
- The Tokyo Convention, 1963

**References:** Aircraft Manual, C.A.R.Sec.II

### **Paper 10 AVIATION RESOURCE MANAGEMENT**

#### **Unit – I**

CREW RESOURCES MANAGEMENT:

The role of crew resources management – The trouble with culture – Creating and implementing human factors' safety culture – human assessment – traditional flight crew and CRM training in general aviation – crew concepts in the air ambulance services.

#### **Unit- II**

THE AIRCRAFT CABIN:

Safety issues in cabin – cabin crew communication – service, teamwork and flight safety – flight attendants' job performances and job satisfaction.

#### **Unit – III**

FATIGUE AND STRESS:

Fatigue management in aviation – Fatigue in air activity – Stress management – the physiological factor

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#### **Unit – IV**

SELECTION AND TRAINING:

Job requirements of Airline Pilots – Pilot selection process – Personality test for traffic controllers – training of pilots and crew members – the link between human factors and organizational learning.

#### **Unit – V**

AVIATION INFORMATION AND MANAGEMENT:

Structure of aviation operational information, management of aviation operational information – User innovation in Aviation operational information – Future of Aviation operational information

## **References:**

1. Brain Mc Allister, Crew Resource Management ,Air life
2. Jensen, Pilot Judgement & Crew Resource Management ,N A
3. Thomas L Seamster, Aviation Information Management – From Documents Data, Ashgate
4. Thomas L Seamster & Barbara G Kanki ,Aviation Information Management, Ashgate
5. Eduardo Sales, Katherine A Wison ,Crew Resource Management, Ashgate.
6. Frank H Hawkins, Human Factors in Flight Ashgate
7. Mary Edwards & Elwyn Edwards, The Aircraft Cabin –Managing Human Factors , Ashgate
8. Harry W Orlady & Linda M Orlady, Human Factors in Multi Crew Flight Operation Ashgate

## **SECOND YEAR SEMESTER III**

### **Paper 11 BUSINESS ETHICS AND GLOBAL BUSINESS ENVIRONMENT**

#### **Unit - I**

Business environment - The concept and significance - constituents of business environment - Business and society, Business & ethics - Social responsibility - Environmental Pollution and Control. Business and culture - Business and Government - Political system and its influence On business - Indian constitution - Directive Principles of State Policy.

#### **Unit - II**

Managing Ethics - Frame work of organizational ethic theories and sources, ethics across cultures, factors influencing business ethics, ethical decision making, ethical values and stakeholders, ethics and profit, Corporate governance Structure of boards, reforms in boards, compensation issues, ethical leadership for improved Corporate governance and better business education.

#### **Unit - III**

Global management Issues MNCs Politics and Environment Multinational corporations and Government relationship, Business in Politics, Managing environmental quality, Ethics & Profit in Business.

#### **Unit - IV**

Fiscal Policy - Central finances and New fiscal policy - Direct and indirect Tax structure, VAT, MODVAT - Service Tax problems and reforms - Expenditure Tax - Public debts & deficit financing.

#### **Unit - V**

Legal environment of business - Monopolies Restrictive Trade Practices Act. Foreign Exchange Management Act-1 Securities and Exchange Board of India Act - Customs & Central Excise Act- Central & State Sales Tax - Consumer Protection Act Patents Act - Competition Law.

**References:**

1. Adhikari M - Economic Environment of management
2. Francis Cherunilam - Business Environment
3. Pruti S. - Economic & Managerial Environment in India
4. Shaikh Saleem – Business Environment, Pearson Education, 2006
5. Davis & Keith William C. Frederik - Business and society
6. Amarchand D - Government and Business
7. Mankard - Business Economics, Mac Millan.
8. A.N.Agarwal - Indian Economy - Wishwa Prakashan
9. Steiner & Steiner - Business Government and Society, McGraw Hill, 2003.
10. Kitson.A and Campbell.R - The Ethical Organisation, Palgrave, 2001

**Paper 12: ENTREPRENEURSHIP DEVELOPMENT****Unit 1 : Introduction:**

Concept of entrepreneurship, nature and development of entrepreneurship, entrepreneurial decision processes. Entrepreneurial traits, types culture and structure, competing theories of entrepreneurship, entrepreneurial motivation, establishing entrepreneurial systems.

**Unit 2 : Self assessment and the entrepreneurial process:**

Identifying and evaluating the opportunity, developing a business plan, resource required and to managing the enterprises. Strategic orientation, commitment to opportunity, resources, control of resources and management structure. Entrepreneurial careers, education and training. Entrepreneurial ethics.

**Unit 3 : The Business Idea:**

Sources of New Idea : The unexpected incongruities, process need, industry and market structure, demographics, changes in perception, new knowledge, and the bright idea. Consumers, existing companies, distribution channels, government and research and development, purposeful innovation and principles of innovation.

**Unit 4 : Product planning and developing Process:**

Establishing evaluation criteria, idea stage, concept stage, product development stage and est. Marketing stage. Group innovation; Establishing role in creative groups, taking the lead in-group problem solving Business innovation with a purpose, vision and strategy.

**Unit 5 : Special aspects in entrepreneurship :**

Intrapreneurship, international entrepreneurship : Problems and opportunities, entrepreneurship in rural sectors and service institutions, ecological niches, legal aspects.

**References :**

1. Entrepreneurship – Strating, Developing & Managing a New enterprises Hisrich and Peters Irwin
2. Innovation and Entrepreneurship – Practice & Principles Peter F. Drucker, Affiliated East West Press Ltd.

3. Entrepreneurship Development in India Dr.C.B. Gupta, Dr.N.P. Srinivasa, Sultan Chand & Sons
4. Entrepreneurial Development & Programmes: Principles & Policies O.Saravanavel –Kay Ess Pee Kay Publishing House

### **Paper 13: STRATEGIC AIRPORT PLANNING AND MARKETING**

#### **Unit – I**

Introduction – Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic Zones and approach areas. Context of Airport system planning – Development of Airport Planning process – Ultimate consumers – Airline decision – Other Airport operations.

#### **Unit – II**

AIRPORT CHARACTERISTICS RELATED TO AIRPORT DESIGN -Components Size, turning radius, speed, airport characteristics. CAPACITY AND DELAY: Factors affecting capacity, determination of runway capacity related to delay, gate capacity, and taxiway capacity.

#### **Unit - III**

AIRPORT PLANNING AND SURVEYS: Runway length and width, sight distances, longitudinal and transverse, runway intersections, taxiways, clearances, aprons, numbering, holding apron. PLANNING AND DESIGN OF THE TERMINAL AREA: Operational concepts, space relationships and area requirements, noise control, vehicular traffic and parking at airports. AIR TRAFFIC CONTROL AND AIDS: Runways and taxiways markings, day & night landing aids, airport lighting and other associated aids.

#### **Unit – IV**

The role and scope of activity of the Airport Enterprise – The economic impact on countries and regions – the main governance patterns in the airport business – The International path of evolution in the air port business – Airport transport value chain – Air enterprises – two primary actors in the air transport value chain – Skipping peripheral positions in the value chain. Rise of airport marketing for the aviation related business – airports market positioning – primary hub – secondary hub – regional airport – all cargo airport – airport positioning criteria – role on the market – identification of partners for airport development – first quantum leap of the airport enterprises – low cost airports – role of helicopters as a complimentary feeder and defender of hub airports – Airport revenue management – Airport alliances – management contract

#### **Unit – V**

The Development of the Non Aviation – Related value Proposition. Evolution of traditional Air port – Evolutionary patterns for airport enterprises – Commercial Airport Philosophy – tourist and conference service – logistic services – property management – consulting services – BAA and the non aviation business – best airport in the world: The case of Singapore Airport – Role and meaning of loyalty for a service company – Bench marking airline experience – Provider – Customer relational link – benefits from ALPS implementation of ALPS

Airport marketing Planning – London city Airport: A best – in – class provider in the Airport business – The Airport industry and An International Picture - Air port business in 2002- US & European performance in 2002 – Asia pacific performance in 2002 – Middle

east/Africa in 2002 – Airport business in 2003 – 2005 outlook for the Air transport industry.

**Reference Books:**

1. Aviation Safety Programs A Management Hand Book-Richard H.Wood – Jeppesen Sanderson Inc.
2. Strategic Management –Gregory G.Dess and Alex Miller –McGraw Hill
3. Strategic Management: An Integrative Perspective-A.C.Hax and NS-Majifu, Prentice Hall.
4. Marketing Management –Philip Kotler – Pearson Education/PHI
5. Marketing Management – RAJAN SAXENA –Tata McGraw Hill
6. International Marketing – Philip R.Cateora-Irwin McGraw Hill, 9th Edition.

**Text Book:**

1. Strategic Airport Planning –Robert E.Caves & Geoffrey D.Gosling-Elsevier Science Ltd
2. Airport Marketing –David Jarach –Ashgate Publishing Limited

**Paper 14: AIRLINE AND AIRPORT OPERATIONS**

**Unit - I**

**INTRODUCTION**

History of Aviation- Development of Air transportation in India-Major players in Airline Industry-SWOT analysis in Airline Industry-Market potential of Indian Airline Industry— Current challenges in Airline Industry-Completion in Airline Industry-IATA & ICAO

**Unit- II**

**AIRPORT MANAGEMENT**

Airport planning-Operational area and Terminal planning, design, and operation-Airport operations-Airport functions-Organization structure of Airline and Airports sectors-Airport authorities-Global and Indian scenario of Airport management – DGCA –AAI.

**Unit - III**

**AIRTRANSPORT SERVICES**

International trends-Emerging Indian scenario-PPP- Public Private Participation in Indian Airports-Environmental regulations-Private participation in International developments-Environment regulations-Regulatory issues-Meteorological services for Aviation-Airport fees, rates, and charges

**Unit - IV**

**AIRLINE OPERATIONS**

Airline Terminal Management-Flight Information Counter/Reservation and Ticketing-Check In/Issue of Boarding pass-Customs and Immigration formalities-Co-ordination-Security Clearance-Baggage and -Handling of Unaccompanied minors and Disabled Passengers-Handling of Stretcher Passengers and Human Remains-Handling of CIP,VIP & VVIP-Co-ordination of Supporting Agencies /Departments.

**Unit - V**

## **LOGISTICS AND AIR CARGO MANAGEMENT**

Concept of Logistics- Role of Ware Housing-trend in material handling-Global Supply Chain-Quality concept and Total Quality Management-improving Logistic performance-Air Cargo Concept- Cargo Handling-Booking of Perishable Cargo and Live Animals-Industry Relation-Type of Air Cargo-Air Cargo Tariff, ratios and Charges-Airway Bill, Function, Purpose, Validation.

### **References:**

1. Graham.A-Managing Airport an International Perspective –Butterworth Heinemann, Oxford-2001
2. Wells.A-Airport Planning and Management, 4th Edition-McGraw-hill, London-2000.
3. Doganis.R.-The Airport Business-Routledge, London-1992
4. Alexander T.Well, Seth Young –Principles of Airport Management-McGraw Hill 2003
5. P.S.Senguttuvan –Fundamentals of Airport Transport Management – McGraw Hill 2003
6. P.S.Senguttuvan –Principles of Airport Economics-Excel Books-2007
7. Richard De Neufville – Airport Systems: Planning, Design, and Management.-McGraw-Hill, London- 2007
8. Kent Gouiden- Global Logistics Management –Wiley Black Well
9. Lambert –Strategic Logistic Management – Academic Intl Publishers
10. Alan Ruston & John Oxley, Hand book of Logistics & Distribution –Kogan Page
11. Paul R.Murphy,JR and Donal & F.Wood-Contemporary Logistics –Prentie Hall.9th Edn.2008.

### **Paper 15: COMPUTER APPLICATIONS IN MANAGEMENT USING SAP - PRACTICAL**

**Aim:** To introduce the concepts of information technology and their application in management decision making.

**Components of a Computer** - Hardware and Software – Operations Systems – Directories and File properties.

**MS OFFICE** – Introduction to **WORD, EXCEL** and **POWERPOINT**

**WORD** – Creating a new document with templates & Wizard – Creating own document – Opening/modifying a saved document – converting files to and from other document formats – Using keyboard short-cuts & mouse – Adding symbols & pictures to documents – header and footers – Finding and replacing text – spell check and Grammar check – Formatting text - paragraph formats - adjusting margins, line space – character space – Changing font type, size – Bullets and numbering – Tables – Adding, editing, deleting tables – Working within tables – Adding, deleting, modifying rows and columns – merging & splitting cells.

**EXCEL** – Working with worksheets – cells – Entering, editing, moving, copying, cutting, pasting, transforming data – Inserting and deleting of cells, rows & columns – Working with multiple worksheets – switching between worksheets – moving, copying, inserting & deleting worksheets – Using formulas for quick Calculations – Working & entering a Formula – Formatting a worksheet – Creating and editing charts – elements of an Excel

Chart – Selecting data to a chart – Types of chart – chart wizard – Formatting chart elements – Editing a chart – Printing charts.

**POWERPOINT** – Creating new presentations – Auto content wizard – Using template – Blank presentation – Opening existing presentations – Adding, editing, deleting, copying, hiding slides – Presentations – Applying new design – Adding graphics – Using headers and footers – Animations text – Special effects to create transition slides – Controlling the transition speed – Adding sounds to slides – Using action buttons.

**TALLY** – Introduction and Installation, Required Hardware, Preparation for installation of Tally software, installation, Working in Tally: Opening new company, Safety of Accounts or Password, Characteristics, Making Ledger Accounts, Writing voucher, voucher entry, Making different types of vouchers, Correcting sundry debtors and sundry creditors accounts, Preparation of Trial Balance, Books of Accounts, Cash Book, Bank Books, Ledger Accounts, Group summary, Sales Register and Purchase Register, Journal Register, Statement of Accounts & Balance Sheet.

**ERP & SAP** : Introduction – Need for ERP – Advantages – Major ERP Packages – SAP: Features – ABAP: Logon to SAP Environment – ABAP Dictionary – Functions – Objects – Managing SAP Application

**Practicals:** Simple problems to be done in WORD, EXCEL and POWERPOINT using all the above mentioned topics.

**References:**

OFFICE 2000 Complete – BPB

Windows 98 Complete – BPB

Windows 98 6 in one by Jane Calabria and Dorothy Burke – PHI

Using Microsoft Office 2000 by Ed, Bott – PHI

Enterprise Resource planning (ERP): Text and case studies by Murthy, C S V, HPH

Teach yourself SAP in 24 hours by George Anderson; Danielle Larocca - Pearson Education

## **IV SEMESTER**

### **Paper 16: MANAGEMENT INFORMATION SYSTEM**

#### **Unit - I**

Foundations of Information Systems: A framework for business users - Roles of Information systems - System concepts - Organization as a system - Components of Information Systems - IS Activities - Types of IS.

#### **Unit - II**

IS for operations and decision making: Marketing IS, Manufacturing IS, Human Resource IS, Accounting IS and Financial IS - Transaction Processing Systems- Information Reporting System - Information for Strategic Advantage.

#### **Unit - III**

DSS and AI: DSS models and software: The decision making process - Structured, Semi Structured and Unstructured problems; what if analysis, Sensitivity analysis, Goal-seeking Analysis and Optimizing Analysis. Overview of AI, Neural Networks, Fuzzy Logic Systems, Genetic Algorithms - Expert Systems.

#### **Unit - IV**

Managing Information Technology: Managing Information Resources and technologies – IS architecture and management - Centralized, Decentralized and Distributed - EDI, Supply chain management & Global Information technology Management.

**Unit - V**

Security and Ethical Challenges: IS controls - facility control and procedural control - Risks to online operations - Denial of service, spoofing - Ethics for IS professional - Societal challenges of Information technology.

**References:**

1. James A O'Brien, "Management Information Systems", Tata McGraw Hill, Fourth Edition, 1999.
2. Effy Oz, "Management Information Systems", Vikas Publishing House, Third Edition, 2002.
3. Kenneth C Laudon and Jane P Laudon, —Management Information Systemll, 9th Edition, PHI, New Delhi, 2006.
4. Waman S Jawadekar , "Management Information System Text and cases", Third Editions, Tata McGraw-Hill ,2007.
5. R.Srinivasan, —Strategic Managementll, IInd edition, Prentice Hall of India, New Delhi.
6. M.Senthil, —Management Information Systemll, 2003.

**Paper 17: RESEARCH METHODOLOGY**

**Unit 1 : Research Planning:**

Research – Meaning – Objectives – Importance of Social science research – Types of research – Pure, applied, historical, case study, experimental, analytical, descriptive, comparative, Ex post facto.

**Unit 2: Research Planning**

Research planning – Selection and formulation of research problem – Selection of the topic – preparation of research design.

**Unit 3 : Sampling Techniques:**

Sampling – meaning – Importance – Census method and sampling methods – Types of sampling – Factors affecting the size of the sample – sampling and non-sampling errors - Biased and unbiased errors.

**Unit 4 : Tourism Research:**

Contents of Tourism Research – Major areas of research in Tourism – Strategy, Challenge, Contemporary Trends in Tourism Research – Forecasting Tourism Demand and supply – Market trends, Nature of Forecasting, Simple Regression Analysis – Research Methodology for identifying new Tourism Destinations, Assessment of Tourism Impacts.



### **Unit 5 : Report Writing:**

Steps in writing a report – Layout of a research report – Types of reports – Precautions for writing a research report – Foot noting and referencing – Bibliography.

### **Reference:**

- Amarchand, D., “Research Methods in Commerce”, Emerald Publications, Chennai – 2. 2005.
- Bajpai, S.R., “Methods for Social Survey and Research”, Kitab Ghar, Kanpur, 2005.
- Anderson, J., Durson, B.H. and Poole, M. “Thesis and Assignment Writing”, Wiley Eastern Ltd., New Delhi. 2005.
- Gupta, S.P., “Statistical Methods”, Sultan Chand & Sons, New Delhi, 2006
- Kothari, C.R., “Research Methodology”, Wiley Eastern Ltd., New Delhi, 2006.

## **Paper 18: AVIATION SAFETY AND SECURITY**

### **Unit - I**

A National security asset: importance of Air transportation – Airways – Development of the Aviation industry – Deregulation – Consequences of 9/11 to the industry – Emergency Funding – Protecting Public Air transportation. Hijacking – Security Measures – International Prospective – Trend begins – Aviation regulations – Airport security – New Carrier rules – New Airport Operator rules – Resistance Fades – Public Law 93 – 366 – threat warnings – Presidents Commission – Aviation Security Improvement Act of 1990 – Civil Aviation Security – research and Development – Lot of Talk: Crimes against Humanity – Convention – Tokyo – Hijacking , Montreal- Bonn Agreement – Diplomatic Conference on Air Law – Ministerial Conference on Terrorism – Financing of Terrorism – United Nations – ICAO/ECAC

### **Unit - II**

Aircraft as Missiles: Early Hijackings – Terrorist Hijackings Spread – Initial Public response – Cockpit Doors – Profile of a Hijacker – Sky Marshal Program/Federal Air Marshal Program – History of Significant Air hijackings since 1972. The Roots remain: Introduction – Causes of Terrorism – Middle East – Rival Claims – Palestinian Liberation Organization – Abu Nidal – Hamas – Iranian Support of Terrorism – Hezbollah – Afghanistan: Osama Bin Laden – Europe – Japan – Peru – Russia – US – Domestic Terrorism – Nuclear Terrorism. The Best Defense: Introduction – Counter terrorist Units – Enforcement – central, Defense Intelligence Agency.

### **Unit - III**

Screening: The last line of Defense – Introduction – Facilities – Screening check Point Augmentation – Law enforcement Officers at the gate – Flexible Law enforcement response Program – Public and Private Security Interface. Airborne Aircraft Security. Increased Supervision: Introduction – Criminal Guards – Ergonomic Solutions – potential Operator concerns – measuring operator Performance – The public tolerate the intrusion – Introduction – Metal detectors – Selecting a metal detector – Hand Held Body Scanners – X-ray inspection units – Passive and active metal detectors – Wave imaging – Selecting an X- Ray unit – Sizes – Film and Laptops – Details of X-ray unit – US standard for radiation exposure – New computer software – Trace – Detection technology – Tangents – conclusion.

#### **Unit - IV**

A Loose End : Introduction – Cargo Carrier responsibility – Air cargo security – Suicides – Baggage Tags – Passenger/ Baggage reconciliation – Airport lockers – Container hardening – Blast containment versus blast management – Airmail security – Indirect air carriers – known and unknown shipper – Vacuum chambers – Inspection of cargo – International Air cargo standards – Irelands air Cargo Security Program – TSA inspection of Air port – Conclusion. A slippery slope: Introduction – Fourth Amendment – Administrative search exception – Balancing Approach – Less intrusive alternatives – Stop and frisk exceptions – Individual stop and frisk search – Selective class stop and frisk search – Consent exception – Fourth amendment requirements – reasonableness – probable cause – Exclusionary rules – Police participation – Non- Violent threats – Passenger’s right to terminate a search – Alternate view point – the war on drugs – New law and technologies – Conclusion . Foreign Airport Security: Introduction – ground Security – American assessments – diversion airports – Aviation safety assessment program – Legal Remedies – Profiling – Bomb sniffing dogs – Conclusion.

#### **Unit - V**

Technological Improvements: Some intrusive and some not: Introduction – Core commission – Micro wave Holographic Imaging – Body orifice security scanner – Flight Vu™ Aircraft data scanner – New Generation of video security systems – Bio simmer™ quadruple resonance device – Intelliscan™ - 12000 Metal Detector-Biometric systems - FACEIT™ Access controls – Imaging Technologies – Conclusion. The Foundations of Security: Introduction -Airport/Runway incursions – Passenger interference – Conventional weapons – explosives – Nuclear weapons – Biological weapons – Conclusions. Another Foundation: Introduction – Access control – exterior alarm sensors – Control room – no power/ security – media intrusion – computer security – conclusion.

#### **Text Book:**

1. Aviation and Airport Security – Kathleen M. Sweet – Pearson Education Inc.

#### **Reference Books:**

1. Aviation in Crisis – Ruwantissa I.R.Abeyrante-Ashgate Publishing Ltd.
2. Aviation Safety Programs-Richard H.Wood –Jeppesen Sanderson Inc.

### **Paper 19: AIRLINE MARKETING AND STRATEGIC AIRLINE ALLIANCES**

#### **Unit – I**

Market For Air transport Service-Definition-Marketing Mix- stages in the application of Marketing Principles of Airline Management – successful Airlines – definition of market for Air Transport Services – what business are we in –who is the customer –definitions – apparent and true needs – Industrial Buying Behavior –customer business Air Travel market –leisure air travel market – Air Freight Market – market segmentation – concept-segmentation variables in the air passenger market-customer requirements-demographics and psychographics-the leisure segment of demand – air freight market-differences between the passenger and air freight markets.

Marketing Strategy: PESTE analysis : political factors – economic factors – social factors – technological factors – environmental factors – introduction of Airline Business and Marketing Strategies – Porters Five Forces and their application to the Airline Industry –

strategic families – differentiation airlines – the future – focus strategies – Airline Business and marketing strategies – common mistakes

### **Unit - II**

Product Analysis-What is product- theory of product analysis and its application to the Airline Industry – fleet and schedules – related product features – customer service – related product features – controlling product quality – introduction of Pricing and revenue management – building blocks in airline pricing policy – uniform and differential pricing – the structures of air freight pricing-Distribution Of Product And Brand Relationship-Distribution channel strategies – The Travel Agency Distribution system – Global Distribution System (GDS) –Distribution Channels in the Air Freight market – Brands and Commodities – Brand –Building in the Airline Industry – Brand Strategies

### **Unit - III**

Promotion Marketing-Fundamentals of relationship marketing – components of a relationship marketing strategy – frequent flyer programmers –the anatomy of a sale – sales planning – marketing communication techniques – airline advertising – selling in the air freight market – glossary of aviation terms and marketing terms.

### **Unit –IV**

The regulatory framework of Air Transport- Economic characteristics of the Airline Industry-Benefits of scale, scope and density in Air Transport-Types of Alliances between Airlines-Current Airline Alliance group-Cases of failed Airline Alliances-A Historical glimpse at Alliancing objectives-Reasons for Airlines building Alliances-Objectives of Alliances- Introduction- Marketing-driven objectives for alliances-Turbulence in marketing channels-Changes to airline marketing-Determinates of alliance image-Benefit challenges and cost of alliance brand association-Marketing and information. Performance measurement in airlines- Measuring the performance impact of alliance-Time continuum in performance assessment-Traffic and revenue enhancement-Cost-Productivity-Profitability.

### **Unit - V**

Introduction –Sources of financial benefits –Labour cost reduction –Cost reduction in sourcing – marking financial benefits come true- Airline views or financial benefits – Traffic increase- revenue enhancement- Cost reduction-Profit improvement. The structure of alliance groups- The airline alliance group as a hybrid organization-The airline alliance group as an industrial network. Airline alliance groups as ‘multinational corporations’ - The problem of local rationales.

Introduction- Success drivers in airline business- Premises and objectives – Finding suitable partners – governance structure- degree of integration and trust- Organization’s commitment- Ensuring flow of information- Performance evaluation-Managing cultural differences- In conclusion. Scenarios for the future- The internal dynamics of alliancing- a look into the future of airline alliance groups.

### **Reference Book:**

1. Marketing Management – Philip Kotler-Pearson Education
2. Marketing Management –Ramaswamy & Namakumari –MacMillan
3. Global Marketing Management –Warren J.Keegan –P.H.I
4. Strategic Management –An Integrated Approach –Hill Jones –(Dreamtech Bictantia)
5. Strategic Management Concept & Cases –Thomson & Strictland –Tata McGraw Hill

6. Cases in Strategic Management –S.B.Budhiraja & M.B.Athreya –Tata McGraw Hill.

**Text Book:**

1. Airline Marketing and Management-Stephen Shaw – Ashgate Publishing Limited
2. Managing Strategic Airline Alliances-Birgit Kleymann & Hannu Seristo- Ashgate Publishing Limited

**Paper 20: AIR TRAFFIC CONTROL**

**Unit - I**

Human factors in Air traffic Control –Temporal progress in Human Factors in ATC –The circumstances – Background Details – The Human Factors –Preventive measures. Nature of Human Error: Shell model –Modeling Error –Engineering ,Interactive Information Processing – Levels of Behavior – Skill based, Rule Based, Knowledge based – Violations – Decision Making – Action – nature of Intended action – Managing Human error – Individual blame or systemic causal factors.

**Unit - II**

Information processing – Sensation and sensory memory – Perception – Detection – Attention – Recognition – Decision Making and response selection – the visual system – visual sensation, perception, cognition, imagery – visualization in air traffic control. Auditory cognition – Spatial Orientation – Situation awareness – Mental Models – decision making and Judgment – Cognitive aspects – attitudinal behavioral aspects – selection and training

**Unit - III**

Introduction – Communication distortion, expectancy, Noise and masking – Interruption – Listening – Selecting – Attending – Understanding – Non-verbal communication – Touch – Body Language – Communication in the ATC environment – communicating within groups – to solve problems – gate keeping – mediating – Criticism – Leadership – Team Building – Stress reduction – Self development and learning – Communication style – teams and Team work –Teams – Conformity – Compliance – Group decision making – group polarization – group think – cultural influences – Team roles – Working with other teams.

**Unit - IV**

Procedures – Circumstances – Background details – The Human factors – preventive measures – Checklists – Software display. Human machine systems – operational complexity versus Functional capability – Radar service – Procedural service – Future changes in the controlling environment – navigation: GNSS and free flight – surveillance: ADS and ADS-B – Other Human Factor issues in the CNS environment – Design and development – training – licensing

**Unit - V**

Stress – causes of stress – noise and vibration – stress recognition – Stress management – Estimating stress levels -Changing Attitudes and behavior – Post traumatic stress Disorder – Sleep and fatigue – Circadian Rhythms – Cardiovascular and respiratory systems – The digestive system and the kidneys – Mental performance – psychological problems – performance changes – safety management – A case study – The Mount Erebus Disaster –

Individual Performance factors – task factors – organizational culture – ATS organizations.

**Reference Book:**

1. Investigating Human Error –Barry Strauch –Ashgate Publishing Limited Staffing the ATM System –Hinnerk Eibfeldt, Mike C.Heil and Dana Broach –Ashgate Publishing Limited.

2. Innovation and Consolidation in Aviation – GrahamEdkins and PeterPfister – Ashgate Publishing Ltd.

**Text Book:**

Air Traffic Control: Human Performance Factors –Anne R.Issac with Bert Ruitenber-Ashgate Publishing Ltd.