B.VOC IN AIRLINE & AIRPORT MANAGEMENT SYLLABUS

B.VOC IN AIRLINE & AIRPORT MANAGEMENT

VISHVAKARMA SKILLS UNIVERSITY-VSU- JAIPUR

SEMESTER-1

THEORY PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|-----------------------------|
| 1 | | AVIATION INDUSTRY |
| 2 | | AVIATION ANCILLARY SERVICES |
| 3 | | GEOGRAPHY OF TOURISM |
| 4 | | FRONT OFFICE OPERATIONS |

PRACTICAL PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|-----------------------------|
| 1 | | AVIATION INDUSTRY |
| 2 | | AVIATION ANCILLARY SERVICES |
| 3 | | GEOGRAPHY OF TOURISM |
| 4 | | FRONT OFFICE OPERATIONS |

1- AVIATION INDUSTRY

| Unit | Topic |
|--------|--|
| Unit-1 | Evolution of Aviation Growth, Issues & challenges. Global Aviation, Aviation Industry In India, Aircrafts types & manufactures. |
| Unit-2 | Airports (Civil, Military, Trainer), Domestic & International Passenger cargo training, World Airlines & Major Airports with IATA & ICAO. National Aviation Authorities with role. |
| Unit-3 | Layout of an Airport, Airport & Aircraft security, Areas at Airport, Catering Department, Types of passengers |
| Unit-4 | Airport Services operational areas, Reservation & Ticketing, Baggage screening, Check in counter, Boarding, BMA RAMP, BBA (Arrivals) |
| Unit-5 | Crisis at Airport. SOP for BOMB Throat, Hijack crisis situation, Response to unlawful interference. |

PRACTICALS

- Areas at Airport, Catering Department, Types of passengers
- National Aviation Authorities with role.
- Reservation & Ticketing, Check in counter, Boarding

- 1. Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- 2. Arora Krishna, Theory of Cookery, Frank Brothers,
- 3. Pervinder Singh Bali- Food Production Operation
- 4. Food & Beverage Service R. Singaravelavan
- 5. Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber.
- 6. Introduction to Aviation Management Paperback By Andreas Wald (Editor), Christoph Fay (Editor), Ronald Gleich (Editor)
- 7. International Airfare and Ticketing Methods and Techniques- By S. K. Gupta.
- 8. Flight Without Formulae- By- Alfred Cotterill Kermode
- 9. Aircraft Electricity and Electronics- By *Thomas K. Eismin*
- 10. Objective and Subjective Civil Aviation Requirements By D.P. Sabharwal
- 11. Boeing versus- By John Newhouse

2- AVIATION ANCILLARY SERVICES

Course Contents

| Unit | Topic |
|--------|--|
| Unit-1 | Outsourcing - Ground Handling: Case Studies at India and Abroad - IATA Ground Handling Council |
| Unit-2 | Passenger Handling: Departure Concourse - Passenger Handling: Transit and Arrivals - Passengers' Baggage Handling - Specialized Handling of Passengers: VVIPs, VIPs, Physically Challenged |
| Unit-3 | Cargo Services at Export Shed - Cargo Services at Import Shed - Cargo Services at Transit Shed - Cargo Aircraft Handling, Air Cargo -Concept- Cargo Handling Booking of Perishable Cargo and Live Animals - Industry Relation - Airway Bill. |
| Unit-4 | Catering: Preparation, Escort and Security, Inter-terminus Transfers - Medical Services, Accommodation and Hospitality, Information Dissemination Airport Operations - Airport Management |
| Unit-5 | . Planning and Design Considerations for Security at Airports - Annex 17: SARPs (Standard and Recommended Practices) - Access Control and Alarm Monitoring Mechanisms, Security Screening Infrastructure and Procedures |

PRACTICALS

- Ground Handling
- > Passenger Handling Role Plays
- > Booking of Perishable Cargo
- > Airport Operations

- Airline Ancillary Service and Incompatibilities within alliances by Barvis Maroulas
- Airlines Operations and Management by Gerald N Cook, Bruce Billig
- Human Factors in Aviation by Eduardo Salas , Dan Maurino

3- GEOGRAPHY OF TOURISM

Course Contents

| Unit | Topic |
|--------|---|
| Unit-1 | India: General introduction, states & capitals, physiographic units, seasons and climatic regions & their impacts on tourism. Natural vegetation & wild animals of India & wild life tourism, India: a destination for all reasons & seasons. |
| Unit-2 | Fundamentals of geography, climatic regions of the world, study of maps, Latitude, longitude, International Date Line |
| Unit-3 | Importance of Geography in Tourism, definition, scope and contents of geography of Tourism, Tourism Models. |
| Unit-4 | Political and Physical features of World Geography: America, South America, Europe, Asia, Africa and Australia. |
| Unit-5 | Indian Geography: Physical and Political features of Indian Subcontinent, climatic conditions prevailing in India, Some important locations prevailing in famous for international tourism. |

PRACTICALS

- ➤ Wild life tourism
- > Study of maps
- > Tourism Models
- > Physical and Political features

- Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber
- Introduction to Aviation Management Paperback By Andreas Wald (Editor), Christoph Fay (Editor), Ronald Gleich (Editor)
- International Airfare and Ticketing Methods and Techniques- By S. K. Gupta.

4- FRONT OFFICE OPERATIONS

Course Contents

| Unit | Topic |
|--------|---|
| Unit-1 | TARIFF STRUCTURE A. Basis of charging B. Plans, competition, customer's profile, standards of service & amenities C. Hubbart formula D. Different types of tariffs , Rack Rate , Discounted Rates for Corporate, Airlines, Groups & Travel Agents |
| Unit-2 | FRONT OFFICE AND GUEST HANDLING - Introduction to guest cycle, Pre arrival, Arrival, During guest stay, Departure, After departure |
| Unit-3 | RESERVATIONS A. Importance of reservation B. Modes of reservation C. Channels and sources (FITs, Travel Agents, Airlines, GITs) D. Types of reservations (Tentative, confirmed, guaranteed etc.) E. Systems (non automatic, semi-automatic fully automatic) F. Cancellation G. Amendments H. Overbooking, ROOM SELLING TECHNIQUES A. Up selling B. Discounts |
| Unit-4 | ARRIVALS A. Preparing for guest arrivals at Reservation and Front Office B. Receiving of guests C. Pre-registration D. Registration (non automatic, semi-automatic and automatic) E. Relevant records for FITs, Groups, Air crews & VIPs |
| Unit-5 | DURING THE STAY ACTIVITIES A. Information services B. Message and Mail Handling C. Key Handling D. Room selling technique E. Hospitality desk F. Complaints handling G. Guest handling H. Guest history, FRONT OFFICE CO- ORDINATION With other departments of hotel |

Recommended books:

- Sue Baker, Pam Bradley and Jeremy Huyton , Principles of Hotel Front Office Operations, Cassel
- 2 Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- 3. Renner Peter, Basic Hotel Front Office Procedures, Van No strand,
- 4. Abbot Peter, & Sue Lewry, Front Office Procedures, Social Skills and Management, Butterworth Heinemann,
- 5. Paige Grace, Jane Paige, Hotel & Motel Front desk Personnel, Van No strand Reinhold.

SEMESTER - 2

THEORY PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|--|
| 1 | | AIRCRAFT & ENGINES INTERIORS & EXTERIORS |
| 2 | | AIRLINE RESERVATION AND TICKETING |
| 3 | | AIRPORT OPERATIONS |
| 4 | | AIRLINE ETIQUETTES |

PRACTICAL PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|--|
| 4 | | AIRCRAFT & ENGINES INTERIORS & EXTERIORS |
| 5 | | AIRLINE RESERVATION AND TICKETING |
| 6 | | AIRPORT OPERATIONS |
| 7 | | AIRLINE ETIQUETTES |

1 - AIRCRAFT & ENGINE INTERIORS & EXTERIORS

Course Contents

| S.No. | Unit | Topic |
|-------|--------|---|
| 1 | Unit-1 | Air Frame, Fuselage, Wings, Landing Gears, Tail Emphange, Basic Failures. |
| 2 | Unit-2 | Principles Of Flights, Laws & Definitions, Forces Acting, Shape of an aero foil, Stability, Models of an Aircraft. |
| 3 | Unit-3 | Limitations operating , Structural & Natural Limitations, Maneuvering area, Apron area |
| 4 | Unit-4 | Flight Mechanism, Forces: Thrust, Drag, Lift, Weight. |
| 5 | Unit-5 | Functions of external features, Fuselage, Aircraft Types, Wing Assembly, Parts of Aircraft, Cockpit, Cabin compartment. |

PRACTICALS

- > Air Frame
- > Principles Of Flights
- Forces Acting
- Parts of Aircraft,

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH
- Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopedia of Tourism Management

2 - AIRLINE RESERVATION AND TICKETING

Course Contents

| Unit | Topic |
|--------|--|
| Unit-1 | . Time calculation- GMT variation, concept of standard time and daylight saving time, Calculator of elapsed time, flying time and ground time, Aviation Organization: IATA and ICAO |
| Unit-2 | 3 letters city code and airport code, airline Designated code, minimum connecting time, global indicator, Familiarization with air tariff: currency regulations, NUC conversion Factors, general rules., Passport, Visa, Custom Regulations, Health Regulations and Airport Tax, Passenger needing Special attention |
| Unit-3 | One Way journey, Round trip and circle journey, Airlines Reservation System – CRS- Comparative study of different CRS System |
| Unit-4 | Software study – Sign on ,Sign off ,work areas , Encode / Decode, Time table, Availability |
| Unit-5 | PNR, Booking File, Retrieve, Seat Request, List Display, Queues, Divide, Fares, Stand Alone Entries, Room Master and Car Master. |

- Gupta S.K: International Airfare & Ticketing Methods & Technique UDH
- Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopedia of Tourism Management
- Jag Mohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC & OAG Guide, TIM Air Tariff

3- AIRPORT OPERATIONS

Course Contents

| Unit | Topic |
|--------|---|
| Unit-1 | Air transportation in India. Major Airlines of India, Current Challenges in Airline Industry IATA & ICAO. |
| Unit-2 | Ground Handling Agencies, Schedules & Approvals, Department in Airlines. |
| Unit-3 | Airport operations, Ground & Flight Safety, Domestic Terminal Procedures. Cargo Terminal |
| Unit-4 | Tour operators, Travel Agents & their role , Hotel Industry : Tourist Passenger Handling |

PRACTICALS

- Major Airlines of India
- > Department in Airlines.
- Ground & Flight Safety
- Tourist Passenger Handling
- Domestic Terminal Procedures. Cargo Terminal

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Introduction to Aviation Management Paperback By Andreas Wald (Editor), Christoph Fay (Editor), Ronald Gleich (Editor)
- International Airfare and Ticketing Methods and Techniques- By S. K. Gupta.
- Flight Without Formulae- By- Alfred Cotterill Kermode
- Objective and Subjective Civil Aviation Requirements By D.P. Sabharwal
- Boeing versus- By John Newhouse

4 AIRLINE ETTIQUETTES

Course Contents

| Unit | Topic |
|--------|---|
| Unit-1 | Aircraft cabin classes, Gallery, In-flight catering, Locations |
| Unit-2 | Trolleys, Meal Codes, Meal courses, Layout of trolleys. |
| Unit-3 | Service Procedure, First class procedure, Business class procedure, Economy class procedure |
| Unit-4 | Major cuisine of the world, European, South /East Asian G Billing, American |
| Unit-5 | Table layout, Breakfast table/ Tray layout, Lunch/ Dinner Economy layout, Executive class layout. |

PRACTICALS

- > In-flight catering
- > Service Procedure
- > Layout of trolleys.

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Arora Krishna, Theory of Cookery, Frank Brothers,
- Pervinder Singh Bali- Food Production Operation
- Food & Beverage Service R. Singaravelavan

SEMESTER - 3

THEORY PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|--------------------------|
| 1 | | BAGGAGE HANDLING |
| 2 | | AIR TRANSPORT IN TOURISM |
| 3 | | FLIGHT OPERATIONS |
| 4 | | FUNDAMENTALS OF TOURISM |

PRACTICAL PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|--------------------------|
| 1 | | BAGGAGE HANDLING |
| 2 | | AIR TRANSPORT IN TOURISM |
| 3 | | FLIGHT OPERATIONS |
| 4 | | FUNDAMENTALS OF TOURISM |

SEMESTER 3

1- BAGGAGE HANDLING

Course Contents

| Unit | Topic | |
|--------|---|--|
| Unit-1 | Discrimination of Bags, Tags used on Baggage at counters, Screening of bags & its importance acceptance of baggage. | |
| Unit-2 | Baggage Procedure, Baggage M.A., Segregation of Baggage, Types of baggage. | |
| Unit-3 | Reconciliation of Baggage, Aids of Reconciling, Checks at BMA. | |
| Unit-4 | Tallying the baggage's, Loading in trolleys, Dispatching the bags to RAMP, BTL/ Load instructions. | |
| Unit-5 | Compartment Checks, Loading & Off-loading of baggage, Dispatching of trolleys to BBA, Arrival procedures. | |

PRACTICLAS

- > Tags used on Baggage at counters,
- > Types of baggage.
- > Load instructions.
- ➤ Checks of Baggage

- Baggage Handler by David Rawlings
- Airline Operations and Management by Gerald N. Cook and Bruce G Billig

2- AIR TRANSPORT IN TOURISM

Course Contents

| Unit | Topic | | |
|--------|--|--|--|
| Unit-1 | Travels and tourism - Principles – Scope and Operations - Perception of Travel worldwide - Perception of Tourism worldwide - India a tourist destination - Indian States, Capitals, Public holidays, Banks - Important Festivals and Tourist attractions. | | |
| Unit-2 | World Tourism - Important Countries/ Capitals / Currencies / Exchange - World Tourism Attractions - Indian Tourism — Types — Transportation Commercial Aviation-Air Taxi Operations-Private Operation- Airport Handling Functions of IATAICAO - Aims and Objectives. | | |
| Unit-3 | Hotels and Star Ratings, Resorts, Boarding and Lodging houses - Rating Systems and Classifications - Hotel Products, Facilities, Services, Room types, Bedding Types, Meal Plans – Cancellations. | | |
| Unit-4 | Relationship of Air Transport in Tourism – Itinerary Preparation - Currency Fluctuations and Commission Policies IATA Approved Travel Agency Appointment and Control -Customer Service-Service Provider- Training and Development of Travel agent-GDS | | |
| Unit-5 | Activities of People Travelling – Festival and Seasons – Destination Management Companies – Supplier Relationships – FIT & Group tour planning – Group travel – Mass Tourism – Adventure - Medical Tourism | | |

PRACTICALS

- > Important Festivals and Tourist attractions.
- ➤ Indian States, Capitals, Public holidays
- ➤ Hotel Products, Facilities, Services, Meal Plans
- ➤ Itinerary Preparation, Customer Service

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber.
- The Development and Management of Visitors Attraction by Jhon Swarbrooke

3- FLIGHT OPERATION

Course Contents

| Unit | Topic |
|--------|--|
| Unit-1 | Introduction to Flight Operation Aircraft Operational Procedure in Indian Civil Aviation – Flight Crew Standards as per DGCA – About Flight Dispatcher role in Flight Operations – Training Program – Competency Check – Regency Check - |
| Unit-2 | Crew & Flight Scheduling Flight Duty Time Limitations – Crew Salary Structure – Hotel & Ground Transportation – Layover – Dead Heading – Split Duty – Break – Consecutive Night Flying – Over fly permission – Landing Permission – Landing Slot Arrangement – Revenue & Yield Management |
| Unit-3 | Aircraft Specifications of ATR, Cessna, Airbus A320 / B737 – Dimensions – Weight – Performance Data – Cabin Data – Operations Limitations |
| Unit-4 | Flight Planning Fuel Plan & Calculation – Navigation Plan – Weight and Balance – Jet Routes – Navigation Log – NOTAM – Crew Briefing & Flight Release sheet – Alternates – Coded ICAO Flight Plan – FBO's / Ground Handlers – AIP – Weather Charts – Filing Flight plan to the ATC – Load Manifest Form – Computerized Flight Plan – Objects and Methods of Flight Planning – Flight Plan exercises |
| | using Performance Data, Tables, Range Tables & Graphs - Advanced flight operation knowledge (PBN, ETOPS, RNP, RNAV) |

PRACTICALS

- > Role in Flight Operations
- > Flight Duty Time Limitations
- Weather Charts
- > Navigation Plan

RECOMMENDED BOOK:-

- Flight Without Formulae- By- Alfred Cotterill Kermode
- Aircraft Electricity and Electronics- By *Thomas K. Eismin*
- Objective and Subjective Civil Aviation Requirements By D.P. Sabharwal
- Boeing versus- By John Newhouse

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4 - FUNDAMENTALS OF TOURISM

Course Contents

| S.No. | Unit | Topic |
|-------|--------|---|
| 1 | Unit-1 | Meaning, concept, definition, characteristics, scope and types of Tourism, components, significance and W.T.O. classification of tourist |
| 2 | Unit-2 | History of tourism through ages, System and Linkages of tourism with other subjects like history, sociology, geography etc. Tourism as an industry. |
| 3 | Unit-3 | Tourism Organization: origin, organization and function of UNWTO, IATA, as International organizations while DOT, TAAI, IATO, ITDC and FHRAI as Domestic Organization |
| 4 | Unit-4 | Explaining terms- Tours, Tourists, Visitor, Traveler, Excursionists, Leisure, Infrastructure of tourism, facilitators of tourism, Problems and prospects of tourism. |
| 5 | Unit-5 | Impacts of Tourism, Economic Impacts. Political Impacts ,Environmental Impacts ,Socio-cultural Impacts |

PRACTICALS

- Classification of tourist
- > Problems and prospects of tourism.
- > Political Impacts
- > Environmental Impacts

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber.
- The Development and Management of Visitors Attraction by Jhon Swarbrooke

SEMESTER - 4

THEORY PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|----------------------------|
| 1 | | AIR CARGO MANAGEMENT |
| 2 | | AVIATION WEATHER AND METAR |
| 3 | | AIR REGULATION |
| 4 | | ADVENTURE TOURISM |

PRACTICAL PART

| S. NO. | SUBJECT CODE | SUBJECT NAME |
|--------|--------------|----------------------------|
| 1 | | AIR CARGO MANAGEMENT |
| 2 | | AVIATION WEATHER AND METAR |
| 3 | | AIR REGULATION |
| 4 | | ADVENTURE TOURISM |

SEMESTER 4

1 - AIR CARGO MANAGEMENT

Course Contents

| Unit | Topic |
|--------|--|
| Unit-1 | Concept of Logistics – Introduction – Components, Advantage & Growth-Logistics in Global Organization – Marketing and Logistics Channel – Environmental and Marketing Issue – Inventory Management – Purpose, Type, Objective and Cost- Model of Inventory Management – MRP, DRP & JIT |
| Unit-2 | Transport System Model and Warehousing – Deregulation and Government Rule – Transport Security – Product Packaging and Pricing – Role of Warehouse –Alternative Warehousing – Trend in Material Handling – Inbound Logistics and Purchasing |
| Unit-3 | Global Environment & Strategy – Global Supply Chain – International Documentation- Strategy Formulation & Implementation – Quality Concept & TQM – Improving Logistics Performance |
| Unit-4 | Air Cargo Concepts – Introduction – Operations and Industry Regulations – Service Function, Organization and Liability – SLI, Types of cargo-Handling of Perishable, Valuable Cargo and Special Cargo – Air cargo Tariff, Rates & Charges – Valuation charges and Disbursement – Airway Bill, Function, Purpose and Validation |
| Unit-5 | Handling Facilities – Airport Cargo Activity & Cargo Zone – Aircraft Handling with Cargo – Cargo Terminals and Facilities – Emerging trend in Cargo & Cargo Carriers |

- The Air Logistics Handbook: Air Freight and the Global Supply Chain, Michael Sales, Routledge Publications, 2013.
- Air Cargo Management: Air Freight and the Global Supply Chain, Michael Sales, Routeledge Publications, 2016.
- Aviation Logistics: The Dynamic Partnership of Air Freight and Supply Chain, Michael Sales, Kogan page, 2016

2 - AVIATION WEATHER AND METAR

Course Content

| Unit | Topic | | |
|---------|---|--|--|
| Unit-1 | Introduction to Aviation Weather-Geography Basic – Earth's atmosphere – Troposphere – Stratosphere – Mesosphere – Thermosphere – The Coriolis Effect – Hemisphere | | |
| UNIT -2 | Weather Hazards-Thunderstorms – Turbulence – Icing Conditions – Low Visibility – Wind shear / Micro Burst | | |
| UNIT -3 | Air Temperature, Density & Pressure-Measuring Temperature – Surface Air Temperature – Upper Air Temperature – Diurnal Variation of surface Temperature – Temperature Variation – Inversions – Isothermal Layers – Density of Dry Air – Density of Moist Air – Variation of Air Density with Height – Variation of Pressure with altitude – Variations of surface pressure – Pressure Gradient – Altimetry | | |
| UNIT -4 | Clouds & Winds-Basics of Clouds – Cloud formation – Low level Clouds – Mid level Clouds – High Level Clouds – Cloud Base and Tops – Turbulent Mixing – Convective ascent – Basics of Wind – Wind above the friction layer – Convergence – Divergence – Backing and Veering – Gusts and Squalls – Wind Shear – Sea Breezes – Land Breezes – Katabatic and Anabatic winds – Downslope Winds – Jet Stream – Micro Burst | | |
| UNIT -5 | Meteorology-Weather Reports - METAR/ SPECI – TAF – Weather Codes – PIREP – SIGMET - Observation – Significant Weather charts – Surface Charts – Upper air charts – Symbols and Signs – Information for Flight Planning - Surface Weather Observations – Upper Air Observations – Balloon and radio sonde weather radar – Meteorological Satellite and Satellite Cloud Imageries - Synoptic Charts – Legends – Prognostic Charts – Pressure Charts – Satellite Weather Image for the flight operations | | |

- Aviation Weather for Pilots and Flight Operations Personnel, FAA, B/W Illustrator, 1975.
- Aviation Weather (FAA Handbook), FAA, Snowball Publishing, 2012.
- Aviation Meteorology for pilots, Om Prakash Agarwal, Blue Rose Publisher, 2018.

3 - AIR REGULATIONS

Course Contents

| S.No. | Unit | Topic |
|-------|--------|--|
| 1 | Unit-1 | Indian Civil Aviation - Civil Aviation Regulations Authority — DGCA Introduction to Directorate General of Civil Aviation - DGCA functions-DGCA Organization-DGCA as Regulatory Authority — Liabilities and Limitations of DGCA — National Legislation |
| 2 | Unit-2 | Aircraft Rules - Aircraft Act 1934 - The Aircraft Rules 1937 - 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) |
| 3 | Unit-3 | 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) |
| 4 | Unit-4 | Civil Aviation Requirements (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 |
| 5 | Unit-5 | . 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 |

PRACTICALS

- > Liabilities and Limitations of DGCA
- > Aircraft Rules
- > Flight crew standards
- > Airports Authority of India

4 - ADVENTURE TOURISM

Course Contents

| S.No. | Unit | Topic |
|-------|--------|--|
| 1 | Unit-1 | Definition, nature and scope of Adventure tourism. Geographical Diversities and Opportunities for Adventure Tourism in India |
| 2 | Unit-2 | Land based Adventure activities; Mountaineering, trekking in Himalayan states. Necessary equipment, techniques and problems |
| 3 | Unit-3 | Water based activities- water resources of India; river- lakes and sea water. Rafting, Kayaking Boating, SCUBA diving and coastal activities |
| 4 | Unit-4 | Air based activities, hang gliding, ballooning and sky diving. Places, organizations and equipment's associated with above activities. |
| 5 | Unit-5 | Existing Adventure Tourism in Rajasthan & Future Prospects |

PRACTICALS

- > Scope of Adventure tourism
- > Necessary equipment
- > Tourism in Rajasthan & Future Prospects

SEMESTER-V

TRAINING

SEMESTER - 6

THEORY PART

| S. NO. | SUBJECT CODE | SUBJECT NAME | | |
|--------|--------------|---------------------------------------|--|--|
| 1 | | Aviation Security & Safety Management | | |
| 2 | | Aircraft Load Operations | | |
| 3 | | Travel Agency And Tour Operations | | |
| 4 | | Air Travel Management | | |

PRACTICAL PART

| S. NO. | SUBJECT CODE | SUBJECT NAME | |
|--------|--------------|---------------------------------------|--|
| 1 | | Aviation Security & Safety Management | |
| 2 | | Aircraft Load Operations | |
| 3 | | Travel Agency And Tour Operations | |
| 4 | | Air Travel Management | |

SEMESTER 6

1 - AVIATION SECURITY & SAFETY MANAGEMENT

Course Contents

| Unit | Topic |
|--------|---|
| Unit-1 | Overview of International civil aviation security, Working at the Airport, Access control people, Access control vehicle. |
| Unit-2 | Landside Security, recognition of Explosive devices & other prohibited articles, Buildings & Area search procedures, Patrolling & guarding. |
| Unit-3 | Screening & Searching of Pax & bag, Conventional x-ray, Protection of parked aircraft, Physical Inspection of Bag. |
| Unit-4 | Dangerous goods & articles, carriage of arms & ammunitions by air, Emergency & , Protecting cargo mail & courier. |
| Unit-5 | Protecting aircraft catering uplift, Behavior detection, Profiling, Cyber Security. |

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Arora Krishna, Theory of Cookery, Frank Brothers,
- Pervinder Singh Bali- Food Production Operation
- Food & Beverage Service R. Singaravelavan
- Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber.
- Introduction to Aviation Management Paperback By Andreas Wald (Editor), Christoph Fay (Editor), Ronald Gleich (Editor)
- International Airfare and Ticketing Methods and Techniques- By S. K. Gupta.

2 - AIRCRAFT LOADS OPERATIONS

Course Contents

| Unit | Topic |
|--------|--|
| Unit-1 | Weight & Balance Control of Aircraft, Definitions ,Weight Schedules, Standard Weights, Seating's |
| Unit-2 | Introductions of Aviation, Forces of Flight ,Theory of Flight Components of Aircraft |
| Unit-3 | Primary Control of Aircraft, Flight Controls, |
| Unit-4 | Airfoil, Center of Gravity, Weight & Balance |
| Unit-5 | Lateral Balance, Fuel Dumping & Overweight Operation basic Questions & Answers |

PRACTICALS

- Components of Aircraft
- > Flight Controls
- ➤ Operation basic Questions & Answers
- Weight Schedules

- Aircraft Design A conceptual Approach by Daniel P.Raymer
- Airplane Flight Dynamics & Automatic Flight Controls by Jan Roskam, J. Roskam
- Aircraft Contol and Simulation Dynamics, Control Design and Autonomous System by Brian L. Stevens, Frank L.Lewis, Eric N Jhonson

3 - TRAVEL AGENCY ANT TOUR OPERATIONS

Course Contents

| Unit | Topic |
|---------|--|
| | Introduction, History &, Growth of Travel Agency business. Meaning &, |
| Unit-1 | Classification of Travel Agency, Functions of Travel Agency. Organization - |
| | Proprietorship, Partnership, Corporate |
| linit 3 | Tour operator: Meaning and types of Tour operators, Differences between Tour |
| Unit-2 | Operators & Travel Agents. FIT &, GIT, popular TA &, TO of India |
| Unit-3 | Setting up of a Travel Agency. Government approval. IATA rules regulations for |
| | accreditation, Incentives offered by Central & State governments. Sources of |
| | Earning & Commission. |
| | Itinerary preparation, examples of itinerary (Domestic &, International) Package |
| Unit-4 | tour, tour costing, types of tariff Voucher - for Hotel & Airline, Designing & Writing |
| | Voucher, Brochure |
| Unit-5 | Tour Package- Definition & Forms, costing, Quotation, and Confidential Tariff. Study |
| | of Tour packages offered by major travel agencies of India and state tourism |
| | development corporations. Suggested |

- Michael L. Kasavana, Richard M. Brooks, Managing Front Office Operations, EIAH&LA,
- Arora Krishna, Theory of Cookery, Frank Brothers,
- Pervinder Singh Bali- Food Production Operation
- Food & Beverage Service R. Singaravelavan
- Fundamentals of Planning and Developing Tourism by Bulent I. Kastarlak, Brian Barber.
- Introduction to Aviation Management Paperback By Andreas Wald (Editor), Christoph Fay (Editor), Ronald Gleich (Editor)

4 - AIR TRAVEL MANAGEMENT

Course Contents

| S.No. | Unit | Topic |
|-------|--------|---|
| 1 | Unit-1 | Air Transportation Industry - Land Transportation Industry - Sea Transportation Industry - Multi-modal Transportation - Marketing and Marketing mix – Application of Marketing Principles to Airline management-Airline Business and its Customers – Market segmentation -PESTE Analysis |
| 2 | Unit-2 | Passport – VISA's - Airlines Ticket or Authorization - Health Documents - Michel Porter's Five Factors and their Application to Airline – Cost leadership –Focus strategies- Airline Business and Market Strategies – Common Mistake-Concept of Product and Relation to Airline – Fleet and schedules Related Product Features Customer Service and Controlling Product Quality-Air Freight Product |
| 3 | Unit-3 | Referring the TIM - Passport Requirements: Different Nations - VISA Requirements: Different Nations - Tax, Currency, Customs, Immigration requirements - Referring the OAG - Aircraft Types and Codes - World Terminals - Calculation of Flying time, Ground Time and Elapsed Time. |
| 4 | Unit-4 | 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 |
| 5 | Unit-5 | . Building Block in Airline Pricing Policy-Uniform and Differential Pricing- The Structure of Air Freight Policy- Distribution Channel Strategies-Travel Agency Distribution System- Selling & Distribution Channel in Air Freight Market- Brand Building Strategies in Airline Industry- Relationship Marketing and Components of Marketing Strategies. |

PRACTICALS

- > Principles to Airline management
- > Airline Business and Market Strategies
- > Immigration requirements
- > Strategies in Airline Industry