

**BHARATHIAR UNIVERSITY COIMBATORE - 641 046**  
**CENTER FOR COLLABORATION OF INDUSTRY AND INSTITUTION (CCII)**  
**DIPLOMA IN CABIN CREW AND GROUND OPERATIONS**  
 (For the CCII candidates admitted from the academic year 2014-15 & Onwards)

**SCHEME OF EXAMINATION**

SL. NO	NAME OF THE SUBJECT	TOTAL
		MARKS
<b>SEMESTER-I</b>		
1.	Personality Development and Communicative English	100
2.	Introduction to Aviation	100
3.	Cabin crew Training - I	100
4.	Information Technology	100
5.	Aviation Law and Aircraft Rules and Regulations	100
6.	Practical-I	100
<b>SEMESTER-II</b>		
7.	Cabin crew Training - II	100
8.	Air Transportation Safety and Security	100
9.	Customer Relationship Management	100
10.	Airline and Travel and Tourism Industry-Introduction	100
11.	Logistics & Air Cargo Management	100
12.	Practical-II	100
	TOTAL	1200

**SEMESTER – I****PERSONALITY DEVELOPMENT & COMMUNICATIVE ENGLISH****UNIT-I**

Listening - Observation – Communication- Stages of listening process- Barriers of listening-observation- Positive outlook- Communication- Barriers of communication- Communication Skill

**UNIT-II**

Empathy - Emotional Intelligence- Emotional Intelligence- Emotional Competencies- Measurement of the Emotional Competencies-

**UNIT-III**

Management Skills – Leadership – Motivation - Management skill- The Top 10 Leadership Qualities- Types of leadership styles- Seven Rules of Motivation-Time Management- Importance of time- What are our time wasters-

**UNIT-IV**

Interview Skills- 10 Rules of Interviewing - 5 Steps to Effective Preparation- \*Illegal Questions- 7 Steps to Success at the Interview- 3 Steps to Effective Follow-up- Thank-You Letters - Cabin Crew - Job Interview - Goal Orientation- Success Tips – Creativity- Personal Goal Setting - Basic methods to improve creativity - 10 blocks that affects creativity

**UNIT -V**

Landing the Job- Attires and professionalism - Grooming and Personal Appearance - Soft Skills- Grooming- Group Discussion- Interview Training & Mock Interviews-- Resumes and applications - Training and Certification. Presentation and Seminars-Project

**References:**

1. Richard De Neufville – Airport Systems: Planning, Design, and Management.-McGraw-Hill, London- 2007
2. Kent Gouiden- Global Logistics Management –Wiley Black Well
3. Lambert –Strategic Logistic Management – Academic Intl Publishers
4. Alan Ruston & John Oxley, Hand book of Logistics & Distribution –Kogan Page
5. Paul R.Murphy, JR and Donal & F.Wood-Contemporary Logistics –Prentie Hall.9 thEdn.2008

## **INTRODUCTION TO AVIATION**

### **UNIT-I**

Overview of Aviation - Means and Modes of Transport; Definition & Scope; The Air Transportation Industry; Role of Transport in the economic development of country  
Air Transport; Advantages & Limitation of Air Transport; General Aviation-Ground and Airport Operations Terminology; Theory of Flight and How Aircraft Fly; Take Offs and Landings; Introduction to world geography; Economic and physical geography; IATA and geography; Planning itineraries by Air, Time differences.

### **UNIT-II**

Air Travel Formalities and Facilities- The passport visas, Health Certificates; Taxes, customs and currency; Travel Insurance; General preventive measures; Consequence of negligence  
Types of Aircraft; In-flight services; Airport facilities; Facilities provided to special passengers  
Baggage: Definition and rule, free baggage allowance, Excess baggage, Dangerous goods

### **UNIT-III**

Reservation, Fare Construction and Ticketing- General Reservation Rules  
Computer Reservation system (CRS); Arrangement of the Tariff manuals; Airfares - IATA-UFTAA fare formula; Taxes, Ticketing, Billing and settlement plan (BSP), Stock control & security of accountable documents

### **UNIT-IV**

Emergency procedures, safety and First Aid  
Emergency procedures & Equipment; Evacuation of passenger on land and water; First Aid- General Rules- Treatment of bleeding; Bruises and unconsciousness; Artificial Respiration; Treatment of minor emergencies; Death On-board; Emergency child Birth

### **UNIT-V**

Air Transportation: Regulators and Association- International Civil Aviation Organization (ICAO)  
International Air Transport Association (IATA); World Trade Organization  
World Tourism Organization; Federal Aviation Administration (FAA)  
Civil Aviation Authority (CAA); Director General of Civil Aviation (DGCA)  
Customs and Immigration for Air Travel

### **REFERENCE BOOKS:**

1. Trends in Indian Transport Systems - D. Panduranga Rao - Inter-India Publications
2. Air Transportation: A Management Perspective- J. G. Wensveen-Ashgate Publishing, Ltd.
3. Fundamentals of Air Transport Management- P.S. Senguttuvan-Excel Books, 2006
4. Introduction to Air Transport Economics-Bijan Vasigh, Thomas Tacker, and Ken Fleming  
Ashgate
5. IATA Training Manual – latest amended

## **CABIN CREW TRAINING –I**

### **Unit I**

Introduction to the Cabin Crew Profession - History and Origin of Profession; Key Historical; Milestones; A Day in the Life of a Crewmember - A Day in the Life - Benefits and Challenges of the Cabin Crew Profession

Landing the Job - Landing a Job; Resumes and applications; Training and Certification  
 Minimum Requirements - Minimum Requirements; What Skills Do You Have?  
 Grooming and Personal Appearance - Good Grooming Practices; Personal Hygiene;  
 Hair and Hairstyles; Make-Up and Cosmetics Jewelry; Prescription Eyewear

### **Unit II**

Cabin Crew Healthy Living/Lifestyle - Healthy Crew Lifestyle - Nutrition and Exercise; Proper Lifting Techniques; Adapting to Lifestyle Changes- The Lifestyle of Cabin Crew; the Pressures of Frontline Work; Personal Health - Health Risks Associated with Travel and Flying; Other Recognized Effects from Flying; Security and Safety While Away From Base; In Transit and in the Hotel; When Sightseeing or Leaving Your Room; Emergency Situations to Prepare for When Traveling

### **Unit III**

Introduction to the Aviation Industry - Airlines, Charters, Private and Corporate Jets; Scheduled Airlines and Alliances; Charters and Corporate and Private Jets; Regulatory Agencies and Aviation Regulations; What Is ICAO? Government Agencies in Aviation Safety - CAAs, FAA, and JAA; IATA - International Air Transport Association; Customs and Immigration for Air Travel - Customs and Immigration

### **Unit IV**

Introduction to Aircraft and Aviation – Familiarization; Aircraft Familiarization; Aircraft Types; Aircraft Layout and Terminology; Aircraft Furnishings, Systems and Terminology  
 General Aviation and Ground and Airport Operations  
 Theory of Flight and How Aircraft Fly - Take Offs and Landings; Movement of an Aircraft in Flight  
 Using Time Zones - 24-Hour Clock; Greenwich Mean Time (GMT) and Time Zones; International Date Line; World Airport Codes and Airline Codes - World Airport Codes- Airline Designators

### **Unit V**

Crew Member Coordination and Communication - Roles and Responsibilities Cabin Crew;  
 Flight Preparations - Pre-flight Crew Briefing; Pre-flight Preparations-Flight Preparation;  
 Boarding Process; Pre Take-Off Preparations; Passenger Safety Briefing; Preparing for Take-off;  
 Preparing for Landing; Introduction to Crew Resource Management (CRM) - Communication, Interpersonal Skills and Handling Information; Basics of Crew Resource Management (CRM)

### **Text Books:**

1. IATA Manual on Diploma in Travel & Tourism Management - latest amended
2. ICAO Manuals - latest amended

## **INFORMATION TECHNOLOGY**

### **UNIT-I**

Introduction to computer, Definition of a computer, Computer generations, Classification of a computer, Areas of application; Information Technology

Components of a computer system: CPU, input devices, output devices, storage devices and memory

Software: System software, Application software. Programming languages, Packages

Operating system: Functions of an Operating System, Classification of Operating Systems

Introduction to DOS - Graphical User Interface Systems, Basic components of a GUI system -

Advantages of GUI over CUI

Introduction to Windows-Window Explorer, Managing files and folders, Using Paint, WordPad & Notepad

### **UNIT-II**

Microsoft Word; Introduction to Word Processor, Overview of Word Processor Packages, Use of word in different areas; Document concept (Creating, Saving, Opening, Closing Document), Formatting document. Copy, cut and paste. Working with margins and page setup. Tables, Uses of drawing toolbar, Columns, header & footers. Printing procedure, Spell Check & Thesaurus Mail Merge

### **UNIT-III**

Microsoft Excel: Introduction to spread sheet; Overview of spread sheet packages; Understanding Excel Sheet - Inserting, deleting and hiding columns/Rows, Printing a sheet Manipulating formulas and functions working with charts Sort & Filter

### **UNIT-IV**

Microsoft PowerPoint: Presentation - Explain its need, Overview of presentation packages. Use of power point, Making Presentation; Different types of slide layouts; Slide view, slide sorter view and slide show buttons. Setup show- Applying design templates and backgrounds; Transitions & custom animation effects

### **UNIT-V**

Internet: Introduction to Networks, Need for Networks; Introduction to Internet, History of Internet, the World Wide Web, Internet browsers; Internet Tools – E-Mail, Search engines. Introduction to E – commerce

Virus, Types of viruses, How do virus spread, Symptoms of a virus attack, Prevention of virus attack, Detection of viruses, Removing viruses.

### **Reference Books:**

1. Peter Norton's Introduction to Computers- Peter Norton -TMGH
2. Fundamentals of Information Technology -Alexis Leon, Mathews Leon-Vikas Publishing House
3. Microsoft Office Word 2007 Plain & Simple - Jerry Joyce, Marianne Moon- Microsoft Press
4. Windows - Andy Rathbone -Wiley Publishing, Inc.,

## **AVIATION LAW AND AIRCRAFT RULES AND REGULATIONS**

**Aim** To enable the Students to learn the legal background of this Aviation World and all the Rules and Regulations connected with Air Transportation including the International Regulations as well as all the relevant State Acts passed in this respect

### **UNIT –I: Civil Aviation Regulations Authority**

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

### **UNIT – II: Aircraft Rules**

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 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

Section 7-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

**Text Books:** Aircraft Manual, C.A.R. Sec. II – Latest Amended

**SEMESTER-II****CABIN CREW TRAINING –II****Unit I**

Customer Service - Passengers are Guests

Managing Passenger Interactions – Care Giving; Giving a Command and Making a Request; Flight and Fight Reactions; Fear of Flying; Passenger with Special Needs

**Unit II**

Safety and Emergency Procedures-Accidents and Survivability; Routine Preparation; Evacuation and Emergency Procedure; Unplanned or Planned Evacuations; Emergency Landings Turbulence-Air Turbulence; Turbulence Related Incidents; Injury Prevention; Response to Turbulence; Emergency Equipment- Types of Emergency Equipment; Types of Evacuation Equipment and Use; Firefighting Equipment; Emergency Equipment for Ditching; Responding to Fires- Classification of Fires; Decompression-What is Decompression? Basic Response Procedures in a Decompression; Hypoxia and How to recognize it – Hypoxia; Rapid/Explosive Decompression; the Effect of Decompression on the Flight Crew: TUC or Time of Useful Consciousness

**Unit III**

Medical Emergencies and Medical Training - Emergency equipment on board (First Aid Kit, Emergency Medical Kit, Automatic Defibrillator, Personal Protection); First Aid and Medical Equipment; Basic First Aid and Personal Protection; Check-Call-Care: First Aid Primer; Protect Yourself!; CPR, AED and Heimlich Maneuver-Assisting Someone Who Has Stopped Breathing CPR; AED (Automated External Defibrillator) Heimlich maneuver; Sample Cabin Crew Medical Training Syllabus

**Unit IV**

Introduction to Dangerous Goods; Dangerous Goods; what are Dangerous Goods?; Regulations and Standards; Classifications of Dangerous Goods; Why Dangerous Goods At All? Hazard Class Definitions - Identification and Recognition; Dangerous Goods or Hazard Class Definitions; Precautionary Measures - Enforcement and Reporting

**Unit V**

Aviation Security - Threats to the Industry - Bomb Threats, Hostage/Hijacking, Threatening or Abusive Passengers; Who Poses a Threat? Major Threats to the Aviation Industry; Recognizing and Responding to Suspicious Activities, Disruptive Passengers and Other threats; Disruptive Passengers- Response to Disruptive Passengers; Cabin Crew's Role in Aviation Security Airline Catering; Food Service in the Airline Industry Caterers; Galleys and Equipment-Familiarization; Delivery and Loading of Catering Services; Security Procedures; Types and Codes for Special Meals; Service Types and Levels; Service Levels; Types of Meal Service; Food and Service Hygiene

**Text Books:**

1. IATA Manual on Diploma in Travel & Tourism Management - latest amended
2. ICAO Manuals - latest amended

## **AIR TRANSPORTATION SAFETY AND SECURITY**

### **AIM**

To enable the Students to learn about the importance of Safety and Security in Air Transportation, the study of which is of vital importance to Aviation Students, where they will be learning about the techniques and methodologies used in protecting passengers, crew, baggage , cargo, mail, ground personnel, aircraft and property of Airports.

### **UNIT-I: Importance of Air Transportation Safety and Security-Airport- Airways.**

- Protecting Public Transportation
- Screening- Personnel's and Baggage's – Metal Detectors-X ray Inspections, Passive and Active Millimeters-Trace- Detection Techniques.
- The way on Drug and Explosives.

### **UNIT-II Terrorism**

- Terrorism – Introduction- Causes of Terrorism
- Rival claim of palestine- Palestine Liberation Organization
- Nuclear Terrorism
- Aircraft as Missiles
- 9/11 Terrorist Act and its Consequences
- Biological & Chemical Warfare
- Steps to Combat Terrorism

### **UNIT-III: Hijacking**

- Hijacking – Security measures- Airport Security Programmed a Steps taken to Contend with Hijacking- Cockpit doors- Sky Marshal Program me
- Public Law about Hijacking
- Air Transportation Security Act of 2001
- Crimes against Humanity
- The Tokyo Convention and Summit

### **UNIT-IV: Legislations and Regulations**

- ICAO/ECAC
- Transportation security administration – International aviation safety assessment program
- Legislation after 9 Sep 2001

### **UNIT-V: Technological Improvements on Aviation Safety and Security**

- Technological Improvements on Aviation Safety and Security
- Introduction- Microwave Holographic Imaging
- Body or Fire Security Scanner
- New Generation of video Security Systems
- Biosimmer – Biometric Systems

**Text Book:** 1. Aviation and Airport Security – Kathleen M. Sweet –edition-2, year 2009, Pearson Education Inc.

### **Reference Books:**

1. Aviation in Crisis – Ruwantissa I.R. Abeyratne – Ashgate Publishing Ltd., year2003.
2. Aviation Safety Programs – Richard H. Wood – Jeppesen Sanderson Inc. edition-3, 2003



## **CUSTOMER RELATIONSHIP MANAGEMENT**

### **UNIT-I**

Customer Relationship Management: Definition of CRM, Components of CRM, Need for CRM  
Role of CRM in Improving, Customer Relationships, CRM and Marketing

### **UNIT-II**

CRM in Travel and Tourism: CRM in Travel and Tourism Industry, CRM in the Front Office of the Hotel Industry' Role of CRM in the Airline Industry

### **UNIT-III**

Communication Skills: Meaning and Definition, Process, Functions, Objectives; Importance, Essentials of good communication; Communication barriers - Overcoming communication barriers; Principles of Communication or 7 Cs; Media of Communication; Types of Communication

### **UNIT-IV**

Oral Communication: Meaning, nature and scope, Principles of effective oral communication  
Techniques of effective speech The art of listening, Principles of good listening.

### **UNIT-V**

Personality Development: Body Language Non verbal communication, Etiquette Good Manners  
Mind Mapping, Writing Skills, Resume Preparation, Facing Interview

### **Reference Books:**

1. Customer Relationship Management: Modern Trends and Perspectives –Shanmugasundaram 2008, PHI Learning Pvt. Ltd
2. Customer Relationship Management - Rajendra Kumar Sugandhi – 2003, New Age International
3. Customer Relationship Management: Concepts and Cases- Rai – 2<sup>nd</sup> edition PHI Learning Pvt. Ltd 2011
4. Business Communication (Principles, Methods and Techniques) - Nirmal Singh- Deep & Deep Publications Pvt. Ltd., New Delhi.(2006)

## **LOGISTICS & AIR CARGO MANAGEMENT**

### **UNIT: I 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: II 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: III Global Environment & Strategy**

- Global Supply Chain – International Documentation- Strategy Formulation & Implementation
- Quality Concept & TQM – Improving Logistics Performance

### **UNIT: IV 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: V Handling Facilities**

- Airport Cargo Activity & Cargo Zone
- Aircraft Handling with Cargo
- Cargo Terminals and Facilities
- Emerging trend in Cargo & Cargo Carriers

### **References:**

1. Kent Gourdin, Global Logistics Management, Wiley Blackwell, 2<sup>nd</sup> edition, 2006
2. Lambert, Strategic Logistic Management, Academic Int Publisher, year 2004
3. Alan Rushton & John Oxley, — Hand Book of Logistic and Distribution, Kogan Page, Edition-3, year 2000
4. John F Magee & William C Copalino, Modern Logistics Management, John Wiley & Sons
5. Paul R. Murphy, Jr and Donald F. Wood, Contemporary Logistics, Prentice Hall, 9th edition, 2008
6. Edward J Bardi / John J Coyle / Robert A Novack, — Management of Transportation, Thomson – South- Western, 2006.

## **AIRLINE AND TRAVEL AND TOURISM INDUSTRY**

### **UNIT -I:**

Commercial Aviation-Air Taxi Operations-  
Private Operation- Airport Handling  
Functions of IATA-ICAO - Aims and Objectives  
IATA Geography and Global indicators

### **UNIT -II:**

Airlines Terminal Management- Airline Operational Management-  
Domestic- International Departure Formalities,  
Security Check- In. Hand Baggage Screening  
Personal Frisking- Boarding the Plane, Ground Announcements  
Handling of Delayed Flight-Disruptive Flights  
Ramp Handling & Ramp Safety- Procedure

### **UNIT -III:**

Travel Documents- Passport – Visa-  
Tim- Currency Regulations-IATA Rate of Exchange  
Banker's Buying Rate- Banker's selling rate-Currency Conversion  
Departure Control System-ATC

### **UNIT - IV:**

Travel Agent Management- Travel Partners  
IATA Approved Travel Agency Appointment and Control  
Bank guarantee - IATA Billing and Settlement Plan  
Credit Period - Customer Service-Service Provider  
Training and Development of Travel agent-GDS

### **UNIT -V:**

Tourism Management-  
Domestic and International Tourism  
Discover India-Government Regulations on Tourism Management  
Exploring new Destinations-Foreign Currency Earner

### **Text Books:**

1. IATA Manual on Diploma in Travel & Tourism Management –latest Amended
2. ICAO Manuals –latest Amended

## **List of Practical**

### **Practical -1:**

Practical 1.1: Preparation of Application and Projection of Skills, Grooming, Makeup and Hair Style

Practical 1.2: Attending passenger complaints and interaction

Practical 1.3: Airport Code, Station Code and related terms familiarization from internet, Visit to Aircraft

Practical 1.4: Aircraft familiarization, - familiarization with Galley and its equipments

Practical 1.5: Familiarization with aircraft emergency equipments operation

### **Practical – 2:**

Practical 2.1: Communication between crew members and passengers, Crew Resource Management

Practical 2.2: Swimming

Practical 2.3: Handling and operation of fire fighting equipments

Practical 2.4: First Aid and Identification of dangerous goods

Practical 2.5: Demonstration of emergency equipments deployment, and passenger evacuation procedure