CURRICULUM FOR POST GRADUATE and ND DIPLOMA IN AIRPORT OPERATIONS

SEMESTER

1 1. Introduction to Airport Operations ϖ Introduction to Aviation Industry ϖ Familiarization with Terminal Operations ϖ Role of Regulatory bodies / Agencies (BCAS/DGCA/AAI/ACI/IATA/ICAO) and their regulation / prescriptions. ϖ Passenger Handling procedures ϖ Check-in & Documentation procedures ϖ Handling of passenger with special needs/attention

2. Airport Information Management – I ϖ Resource & Capacity Planning – Landside / Airside ϖ Software development & Integration ϖ Quality Consulting ϖ Business Analysis ϖ Passenger Flow 3. Airport Engineering System – I ϖ Aircraft Ground Handling ϖ Hydrant Fuelling ϖ Visual Docking Guidance System ϖ Equipment Handling & Maintenance Records ϖ Safety procedures (Equipment’s)

4. Security Management and Airport Service Operations ϖ Terminology and definitions ϖ Security Awareness ϖ Access Control – People & Vehicle ϖ Passenger- “Entry up to the Embarkation in the aircraft” ϖ Baggage Handling System (BHS) with multi – level high tech screening system ϖ CCTV and AOCC familiarization

5. Cargo Operations: Planning, Designing & Control ϖ Genesis and evolution of Cargo Terminal ϖ Concept of Single handling Agency ϖ Role of Cargo Terminal Operator ϖ Role of Facilitating / Handling Agencies ϖ Role of Aircraft Operator

6. Managerial Communication – I ϖ Business communication & its scope for aviation industry ϖ Basic Ingredients of communication ϖ Barriers to communication ϖ Non – Verbal Conversation & cultivating Body Language ϖ Report writing

7. Fundamentals of Organisational Behaviour ϖ Introduction ϖ Organisational Behaviour ϖ Managing the demographic & cultural diversity ϖ Understanding people at work; Managing individuals and preparations ϖ Individual attitudes & behaviours ϖ Theories of Motivation ϖ Designing a motivating work environment ϖ Managing Stress & Emotions ϖ Organizational structure & change ϖ Conflict Management & Negotiation Skills ϖ Cultivation Leadership skills within the organisation

8. Airport Economic and Finance ϖ Airport Revenue and Expenditure Models ϖ Ownership control and governance of airports ϖ Commercialization of Airports ϖ Airport economic and financial management ϖ Financial airport infrastructure ϖ Measuring airport economic performance ϖ Calculation of the Weightage Average Cost of Capital Case Studies

9. Customer Relationship Management ϖ What is CRM? Origin of CRM, Features of CRM ϖ Types of customers, Customer Profiling ϖ Customer Orientation, Customer relationship Measurement ϖ Advantages and disadvantages of CRM ϖ What is the Customer Development Process? ϖ Importance of Customer Retention ϖ Strategies for Customer Retention ϖ Types of CRM ϖ Technological applications of CRM ϖ Electronic Customer Relationship Management

10. Airport Service Quality ϖ Purpose of the Airport Service Quality ϖ Dimensions of Service Quality ϖ Methodology of the ASQ programme at a glance general information

11. Mini Project Based on any of the topic in the Curriculum

12. Airport Familiarization visit / Short Internship at airports during the semester break

SEMESTER – 2

1. Civil Aviation laws and Regulatory Frame Work ϖ Introduction to Law ϖ Types of law ϖ Space Law Vs. Aviation Law. The Requirement for Regulation for Civil Aviation ϖ The Aircraft (Carriage of Dangerous Goods) Rules ϖ Aviation Laws Specific to India: National Legislations

2. Air Traffic Services, CNS and Aviation Meterology ϖ Definition of terms commonly used in ATM ϖ Evolution and need of Air Traffic Services/Management ϖ Concept of ATM and division of services and airspace ϖ Concept and use of NDB, VOR, DME, ILS ϖ Principles of Radar and its uses ϖ Common Codes used in Aviation Meteorology messages and their interpretations ϖ Different types of Met forecasts

3. Airline Management ϖ Introduction to Ramp Safety ϖ Types of Aircraft and their Handling Procedures ϖ Ground Handling Equipment’s ϖ Basic Load Control

4. Dangerous Goods Regulations ϖ Indian legal regime on carriage of dangerous goods by air ϖ Applicability, Limitations, Classification, Identification, Marking and Labelling Storage and Loading ϖ Provision of Information ϖ Dangerous Goods Emergency Response

5. Safety Management System ϖ Definitions, Introduction to SMS ϖ ICAO Safety Management Requirements ϖ Safety Policies and Objectives ϖ Safety Objective of AA ϖ Understanding Hazards and Identification ϖ Hazard Identification Methodologies ϖ The Five Fundamentals of Safety Risk Management

6. Airline Economics and Route Development ϖ Introduction to Airline Business Model and Product ϖ Market Segmentation and strategies ϖ Fundamentals of Airline Economics ϖ Supply – Demand Dynamic & Elasticity ϖ Understanding Airline Cost Structure

7. Airport Operation Control Center ϖ Why AOCC?, Need for AOCC ϖ Major Airports with AOCC establishments ϖ Constituents of Airport operation ϖ Roles & Responsibilities of Functionaries, Role of AOCC ϖ Objectives of AOCC

8. Transportation, Warehouse and Cargo Management ϖ Export and Import Cargo Handling Procedures & related documentation ϖ Warehouse procedure for both Public & Private ϖ Types of Transhipment Cargo & Handling ϖ Handling of Special cargo ϖ Handling of Domestic cargo ϖ Disposal of Unclaimed or Uncleared Cargo ϖ Processing of Claims

9. RFFS & Crisis Management at Airport ϖ Introduction, Administration of RFFS ϖ Level of Protection to be provided ϖ Airport Category for RFF ϖ Airport Fire Station ϖ Communication and Alarm Requirements

10.Airport Engineering & Systems – II ϖ ICAO Annexure 14 ϖ Aerodrome Data ϖ Physical Characteristics ϖ Obstacle restriction and removal ϖ Indicators ϖ Approach Lighting Systems ϖ Visual Aids for Denoting Obstacles ϖ Physical characteristics ϖ Visual Aids for denoting restricted use of areas ϖ Electrical Systems ϖ Aerodrome Maintenance ϖ Air Traffic Management ϖ Introduction to Air Traffic Services ϖ ATS Airspace Classes – Services provided to flight ϖ Rules of the Air – General ϖ Navigational Aids ϖ Non- Directional Beacon (NDB) ϖ Progressive establishment of Air Traffic Services ϖ Very High frequency Omni – Range (VOR) ϖ Distance Measuring Equipment (DME) ϖ Instrument Landing System (ILS) ϖ Radar ϖ Aviation Metrological Messages and their codes 11. Mini Project Based on any of the topic in the Curriculum 12.Airport Familiarization visit / Short Internship at airports during the semester break

SEMESTER - 3

1. Internship at GMR Airports (IGI Airport & RGI Airport)