## नेपाल नागरिक उड्डयन प्राधिकरण

# प्राविधिक सेवा, एरोनिटकल इन्फरमेशन सिर्भसेस समूह, आठौं तह, उपप्रबन्धक पदको खुला प्रतियोगितात्मक परीक्षाको पाठयक्रम

# द्वितीय पत्र :- सेवा सम्बन्धी खण्ड (क) - ५० अङ्क

### 1. Regulatory framework for Aeronautical Information Services (AIS)

- 1.1. States responsibilities: State safety oversight system and overviews
- 1.2. Critical Element (CE) 1 Aviation legislation: International Aviation Legislation applicable to AIS
- 1.3. Critical Element (CE) 2 Specific operating regulations: Specific State operating regulations regarding formal arrangement, AIS, QMS
- 1.4. Organization of AIS: The responsibility and functions of and AIS, AIS mode of operation, organization setup, QMS and SMS, QMS Implementation for AIS organization, Aeronautical information products and services, Key control elements (AIRAC, Coordination, Need of control and update, AIRAC Cycle), Automation concepts with workflow, software and tools

### 2. Aeronautical Information Management (AIM)

- 2.1. AIM concepts: Transition from AIS to ATM Roadmap, Quality assured data in ATM, Key issues for AIM environment, Data quality, Formal agreements, QMS, Digitalization, Feedback mechanism, Authentication of sources and security, Change management consideration, Implementation of AIM
- 2.2. Data originators responsibilities: Role and responsibility of data originators
- 2.3. Human factors: Human factors in AIM environment
- 2.4. Security and safety: Security and Safety of Aeronautical Information

### 3. Processing Aeronautical Data

- 3.1. Overview of the aeronautical data process, AIS Data Management, Collection, Processing and Distribution
- 3.2. Scope of aeronautical data, Use of data catalogue, Data quality requirement and refresh system
- 3.3. Quality assurance and control, Control Techniques and methods, Correctives actions and feedback mechanism, Error reporting

### 4. Aeronautical information Products

- 4.1. AIP, AIP Supplement, Amendment, AIRAC and AIC
- 4.2. NOTAM, Trigger NOTAM, SNOWTAM, ASSTAM, NOTAM Check-List, PIB (Preflight and post flight Information Bulletin Services)
- 4.3. Aeronautical Charts

### 5. Navigation

- 5.1. Aeronautical charts, Air Navigation, Radio Navigation, Magnetic Declination (True, Magnetic, Gride and geodetic system WGS 84
- 5.2. Radio NAVAID, GNSS, Aeronautical ground lights, Special navigation systems

### 6. Air Traffic Management (ATM)

- 6.1. ATS airspace, Special activities airspace, Aerial sporting activities, Other regulated airspace, ATC sectors
- 6.2. ATS route, Waypoint, En-route holding
- 6.3. Procedure, Fix, Procedure holding, Helicopter procedure, Notes on charts

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- 6.4. Obstacles
- 6.5. Topographical and Geographical data
- 6.6. Terrain data

### खण्ड ख - ५० अङ्क

### 7. Rules of the air

7.1. Definitions, Applicability of the rules of air, General rules, Visual flight rules, Instrument flight rule, Signals, Table of cruising levels, Unlawful interference

### 8. Aerodrome

8.1. Aerodrome and heliport, Runway, Apron-taxiway

### 9. Meteorology

9.1. Atmosphere, Wind Temperature and Pressure, Cloud types and characteristics, Precipitation, METAR, TAF, SPECI

### 10. Altimetry

10.1. Altimeter, Pressure, Elevation, Heights, Altitude and Flight Levels, Transition Altitude/ Level/layer, Pressure Datum

### 11. Aeronautical Telecommunication

11.1. Communication procedure with PANS status (VOL II), Definition, Provision to International Telecommunication services, Aeronautical fixed service, Aeronautical Mobile Service, Voice Communication, Aeronautical Broadcasting service

### 12. Information and Communication Technology

- 12.1. Introduction to Computer Basics and Information Technology; Computer Operating Systems
- 12.2. Windows Operating System
- 12.3. Application Software: Word Processing; Spread Sheet & Presentation Software
- 12.4. Networking: LAN, WAN, MAN; Internet and Intranet
- 12.5. Graphical Package
- 12.6. Utility Software: Memory, Trouble, Viruses
- 12.7. Database Management System
- 12.8. Information and Communication Management, Web Designing
- 12.9. Trouble Shooting in IT, Computer Security and Networking
- 12.10. IT policy and Cyber Law in Nepal; E-governance in Nepal

# द्वितीय पत्रबाट निम्नानुसार प्रश्न सोधिनेछ :

द्वितीय पत्र (विषयगत)				
विषय	खण्ड	अङ्गभार	तर्कयुक्त विश्लेषणात्मक प्रश्न	समस्या समाधानमूलक प्रश्न
सेवा सम्वन्धी	<b>(क</b> )	५०	३ प्रश्न x १० अङ्क = ३०	9 प्रश्न x २० अङ्क = २०
	(ख)	५०	३ प्रश्न x १० अङ्क = ३०	9 प्रश्न x २० अङ्क = २०
जम्मा		900	६ प्रश्न x १० अङ्क = ६०	२ प्रश्न x २० अङ्क = ४०