

नेपाल नागरिक उड्डयन प्राधिकरण
प्राविधिक सेवा, ईलेक्ट्रोनिक एण्ड टेलिकम्युनिकेशन इन्जिनियरिङ्ग समूह, दशौं तह, उपनिर्देशक पदको
खुला/आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र : सेवा सम्बन्धी

खण्ड (क) : ६० अङ्क

1. Airport Environment

- 1.1. Airport power supplies and grounding, matching with CNS/ATM systems; electrical codes, standards and applicability in the installation and maintenance of CNS/ATM systems
- 1.2. Operations and maintenance plans for typical airport equipment and facilities, installation and environment conditioning requirements for CNS/ATM systems and components
- 1.3. Communications and coordination with stakeholders for installation and maintenance activities

2. Airport Information Systems

- 2.1. Information systems for landside operations including passenger processing, baggage tagging and handling, terminal information management and integration with flight data processing systems, IATA AIDX standards and recent developments related to Airport –CDM, associated cyber security aspects
- 2.2. Billing and invoicing automation systems for aeronautical and non-aeronautical revenue and dependencies
- 2.3. IATA technical standards and recommended practices in the standardization of airport information systems, relevant IATA resolutions; Status of compliance by Nepali airports and challenges

3. CNS/ATM systems

- 3.1. ICAO global, regional and nation air navigation plans and planning process; role of PIRGs
- 3.2. Global Air Navigation Plan-Performance improvement areas, Global Air Traffic Management Operational Concept, BBB framework, ASBU framework; Aviation System Block Upgrades-blocks and modules, threads, elements, enablers and dependencies with focus on information and technology-groups threads
- 3.3. APAC Seamless ATM/ANS Plan- PARS and PASL implementation framework; Relationship with GANP, Status of compliance by Nepal and challenges
- 3.4. ICAO regional initiatives for communication, navigation and surveillance in the APAC region, services currently availed, future applications; Status of compliance by Nepal and challenges
- 3.5. Aviation radio spectrum management and roles of ICAO, ITU and WRC;
- 3.6. Standardization of CNS/ATM systems- MOPS/MASPS, TSO, RTCA/EUROCAE standards;
- 3.7. Planning of airways facilities and their maintenance with regard to reliability, availability and maintainability, human factors related dependencies
- 3.8. Induction and safety assessment of CNS/ATM systems, standards as well as best industry practices, including ED-109, ED-153, RTCA-278 compliance
- 3.9. Ground and flight checks of airways facilities and facility status determination
- 3.10. Competency based training and assessment for ATSEP –phases, concept and design; Status of compliance by Nepal and challenges
- 3.11. Major technology trends in safety and security areas of international civil aviation and the way forward for Nepal

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4. Project Management and Procurement

- 4.1. Preparing business case and budgetary estimates for acquisition of ICAO compliant CNS/ATM systems; Stages in implementation process; Best practices from ICAO/CANSO
- 4.2. Project initiation and development, costing, timescales and project plan, monitoring and evaluation, progress reporting, quality control and assurance, evaluation and testing for acceptance, Contract management and dispute resolution, National Standard Bidding Document and International Standard Bidding Document, PPMO guidelines, Procurement of Goods/Services/Consulting Services

खण्ड (ख) : ४० अङ्क

5. Safety oversight of Air Navigation Services

- 5.1. Organizational structure for safety oversight of ANS, distinction between the regulator and service providers, Oversight surveillance programme
- 5.2. SMS legislation and regulations for ANS providers and implementation
- 5.3. ICAO Universal Safety Oversight Audit Programme (USOAP) framework

6. Human Factors issues in CNS/ATM systems

- 6.1. Automation in advanced aviation systems
- 6.2. Human-centered technology
- 6.3. Principles of human-centered automation
- 6.4. Qualities of human-centered automation

7. ICAO Annexes and Documents

- 7.1. ICAO Annexes 10 Volumes 1-6, Annex 11, 15 and Documents 4444, 8071, 9750, 9613, 9683, 9694, 9718, 9758, 9854, 9859, 9868, 9869, 9882, 9883, 9924, 9880, 9906, Circulars- 241, 247, 249, 326
- 7.2. ICAO Safety Management System framework
- 7.3. Convention on International Civil Aviation, 1944

द्वितीय पत्रबाट निम्नानुसार प्रश्न सोधिनेछ :

द्वितीय पत्र					
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