लोक सेवा आयोग

नेपाल इञ्जिनियरिङ्ग सेवा, सिभिल समूह, एयरपोर्ट उपसमूह, राजपत्राङ्कित तृतीय श्रेणी, इञ्जिनियर पदको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

द्वितीय पत्र :– एयरपोर्ट इञ्जिनियरिङ्ग सम्वन्धी विषय

Section A – 30 Marks

1. Airport Planning

1.1 Planning consideration: information required, preliminary feasibility, role of financing

1.2 Forecasting for planning purpose: forecasts required, accuracy and limitations of forecasts, factors affecting traffic growth, principles of forecasting, forecasting methods

1.3 Airport site evaluation: factors affecting airport location

1.4 Airside development: runway and taxiway physical characteristics, airport capacity

1.5 Landside development: passenger processing, baggage processing, passenger waiting, passenger amenities

1.6 Environment and aviation activities: aircraft noise, air quality in the vicinity of airports, global environment problem arising from airport use, water and soil pollution in the vicinity of airports

1.7 Land-use planning: assessing noise for land-use planning, risk of accident around airports

Section B – 20 Marks

2. Geometric Design of Aerodrome

2.1 Design of Runways: Definitions, aerodrome reference code, factors affecting the sitting, orientation and number of runway, factors affecting length of runway, actual length of runways, runways with stop-ways and clearways, take-off length requirement, landing length requirement, physical characteristics of : - runways, runway shoulders, runway strips, clearways, stopways, Obstacle limitation surfaces

2.2 Design of taxiways, aprons and holding bays: functional requirements, taxiway width, taxiway curves, junction and intersection, rapid exit taxiways, passenger terminal apron, cargo terminal apron, size of apron, need of holding bays and other bypasses, types of bypass, size and location of holding bays

Section C – 30 Marks

3. Design of aerodrome pavement:

Procedure for pavement design (Aircraft Classification Number (ACN) - Pavement Classification Number (PCN) method), Elements of pavement Evaluation, USA practices: design of flexible and rigid pavements, design examples (FAA method, FAAR FIELD method)

4. Design of visual aids:

Operational factors, operating requirements, additional marking of pavement shoulders, apron marking, taxiway edge marking, visual approach slope indicators system (T-VASIS, PAPI), runway and taxiway lighting, surface movement guidance and control system, Signs, Frangibility

5. Airport drainage:

Purpose, determination run-off (FAA method), typical drainage layout, sub-surface drainage

Section D – 20 Marks

6. Introduction

6.1 Role and functions of Ministry of Culture, Tourism and Civil Aviation (MoCTCA) and Civil Aviation Authority of Nepal (CAAN)
6.2 History of civil aviation in Nepal
6.3 Role of International Civil Aviation Organization (ICAO)
6.4 Aircraft Characteristics Related to Airport Design

7. Safety management system

7.1 Introduction to State Safety Program
7.2 Introduction to Safety Management System

8. Aerodrome Certification

8.1 Introduction to Aerodrome Certification
8.2 ICAO Requirements on Certification of Aerodromes
8.3 Aerodrome Certification Requirements in Nepal
8.4 Audit and Inspection of Aerodromes for the Certification

---The end---

द्वितीय पत्रका एकाइहरुबाट सोधिने प्रश्नहरु यथासम्भव निम्नानुसार हुनेछन् ।

द्वितीय पत्रका खण्ड	A	B	C			D		
द्वितीय पत्रका एकाई	1	2	3	4	5	6	7	8
प्रश्न संख्या	3	2	2	1		1		1

लोक सेवा आयोग

नेपाल इञ्जिनियरिङ्ग सेवा, सिभिल समूह, एयरपोर्ट उपसमूह, राजपत्राङ्कित तृतीय श्रेणी, इञ्जिनियर पदको खुला र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

नेपाल आर्थिक योजना तथा तथ्याङ्क, इन्जिनियरिङ्ग, कृषि, वन, विविध र शिक्षा सेवाका सबै समूह/उपसमूह,
राजपत्रांकित तृतीय श्रेणी र एवं स्वास्थ्य सेवाको सातौं र आठौं तहका पदहरुमा
प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र
लिइने **सामूहिक परीक्षण (Group Test)** को लागि

सामूहिक छलफल (Group Discussion)

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहिन सामूहिक छलफल (Leaderless Group Discussion) को रुपमा अवलम्वन गरिने छ । दिइएको प्रश्न वा Topic का विषयमा पालैपालोसँग निर्दिष्ट समयभित्र समूहवीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति (Individual Presentation) गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनको लागि देहाय अनुसारको ३ जना भन्दा बढीको समिति रहनेछ ।

आयोगका सदस्य	-	अध्यक्ष
आयोगका सदस्य	-	सदस्य
मनोविज्ञ	-	सदस्य
दक्ष/विज्ञ (१ जना)	-	सदस्य

सामूहिक छलफलमा दिइने नमुना प्रश्न वा Topic

उदाहरणको लागि - उर्जा संकट, गरीबी निवारण, स्वास्थ्य बीमा, खाद्य सुरक्षा, प्रतिभा पलायन जस्ता Topics मध्ये कुनै एक Topic मात्र दिइनेछ ।