

Nepal Airlines Corporation
Syllabus for Manager Flight Dispatcher, Grade VIII
Aviation Service, Aviation Technical Group

Internal Competition

Stages and Procedure of Examination System

First Stage: Written Examination - Full Marks 200

Weightage Allocation and Marks Distribution

S.No.	Paper	Subject	Time	Full Mark	Section	Marks
1	I	Institutional Awareness and Management	3 Hrs.	100	Section "A" Institutional Awareness	Long Answer 5x10=50
					Section "B" Management	Long Answer 5x10=50
2	II	Service Related	45 Min.	100	Multiple Choice Questions	50x2=100

Second Stage - Interview

Individual Interview

Full Marks - 30

द्रष्टव्य :

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी वा दुबै हुनेछ ।
- प्रथम, द्वितीय र तृतीयपत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- लिखित परीक्षामा यथासम्भव पाठ्यक्रमका सबै एकाइबाट प्रश्नहरू सोधिनेछ ।
- वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- विषयगत प्रश्नमा प्रत्येक पत्र/विषयका प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तर पुस्तिकाहरू हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डका उत्तर पुस्तिकामा लेख्नुपर्नेछ ।
- यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मितिभन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाइएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- यस भन्दा अगाडि लागू भएका माथि उल्लिखित सेवा/समूहको पाठ्यक्रम खारेज गरिएको छ ।
- पाठ्यक्रम लागू मिति :- २०७९।०५।०४

Paper I

Subject: Institutional Awareness and Management

Full Marks: 100

Time: 3hrs.

खण्ड (क) :- संस्थागत ज्ञान (५० अङ्क)

१. संस्थागत ज्ञान (३x१०=३० अङ्क)

- १.१ नेपाल वायुसेवा निगमको स्थापनाको उद्देश्य, संगठनात्मक संरचना, कार्यक्षेत्र, SWOT Analysis, समस्या र चुनौती
- १.२ नेपाल वायुसेवा निगमको पुनर्संरचनाको आवश्यकता र औचित्य
- १.३ नेपाल वायुसेवा निगमबाट प्रवाह हुने सेवाको गुणस्तर, गुणस्तर नियन्त्रण तथा सेवाग्राहीको सन्तुष्टि तथा सेवाको मूल्य निर्धारण सम्बन्धी व्यवस्था
- १.४ अन्य वायुसेवाहरू सँगको प्रतिस्पर्धा, चुनौती तथा भावी कार्यदिशा
- १.५ अन्तर्राष्ट्रिय नागरिक उड्डयन संगठनको स्थापना, लक्ष्य तथा उद्देश्य
- १.६ नेपाल नागरिक उड्डयन प्राधिकरणको स्थापना, लक्ष्य, उद्देश्य, कार्यहरू र नियमनकारी भूमिका
- १.७ नेपालमा सार्वजनिक संस्थानको आवश्यकता, उद्देश्य, स्वायत्तता, उत्तरदायित्व, समस्या र चुनौती
- १.८ संस्थागत सुशासनको अवधारणा र नेपाल वायुसेवा निगमको संस्थागत सुशासनको अवस्था
- १.९ आवधिक योजनामा हवाई क्षेत्र
- १.१० नेपाल वायुसेवा निगमको नेपाल सरकार तथा सम्बद्ध निकायहरूसँगको सम्बन्ध र समन्वय

२. संविधान र सम्बद्ध कानूनहरू (२x१०=२० अङ्क)

- २.१ नेपालको वर्तमान संविधान
- २.२ नेपाल वायुसेवा निगम ऐन, २०१९
- २.३ नेपाल वायुसेवा निगमका कर्मचारीहरूको सेवा, शर्त सम्बन्धी विनियमावली र आर्थिक विनियमावली
- २.४ भ्रष्टाचार निवारण ऐन, २०५९
- २.५ आवश्यक सेवा सञ्चालन ऐन, २०१४
- २.६ सुशासन (व्यवस्थापन तथा सञ्चालन) ऐन, २०६४ र सुशासन (व्यवस्थापन तथा सञ्चालन) नियमावली, २०६५
- २.७ सूचनाको हक सम्बन्धी ऐन, २०६४
- २.८ सार्वजनिक खरिद ऐन, २०६३

खण्ड (ख) :- व्यवस्थापन (५० अङ्क)

3. General Management 3x10=30 Marks

- 3.1 Modern Approaches to Management
- 3.2 Motivation, Leadership, Control, Coordination and Team Work
- 3.3 Role of Manager and Managerial Functions
- 3.4 Managerial Decision Making and Problem Solving
- 3.5 Managing Workforce Diversity
- 3.6 Succession Planning
- 3.7 Quality Management and TQM Techniques

- 3.8 Corporate Planning, Strategic Management and Corporate Social Responsibility
- 3.9 Forces of Organizational Change
- 3.10 Resistance to Change and Overcoming the Resistance to Change
- 3.11 Concept and Characteristics of Organizational Development
- 3.12 Stress Management
- 3.13 Crisis Management

4. Management Information System (MIS) 1x10=10 Marks

- 4.1 Information and Decision Making
- 4.2 Role and Importance of MIS
- 4.3 Managers and Environment
- 4.4 Management as a Control System
- 4.5 System View of Business
- 4.6 Impact of Information System in the Organization and the Society
- 4.7 MIS as a Tool for Management Process
- 4.8 Basic Knowledge of IT
- 4.9 Role of IT in Employee and Organizational Performance
- 4.10 Use of IT in HRM and Accounting System of Nepal Airlines Corporation
- 4.11 ERP (Enterprise Resource Planning)

5. Project Management and Project Evaluation 1x10=10 Marks

- 5.1 Project Concept, Objectives, Project Implementation Schedule, Project Implementation Alternative Solutions and Project Leadership
- 5.2 Preparation of Cost Estimate and Budget, Variation in Project Cost, Opportunity Cost Concept, Incremental Cost and Revenue Analysis, Cost Benefit Analysis, Present Value of Project Cost, Internal Rate or Return, Average Rate of Return and Investment, Network, Cost of Capital

Paper II
Service Related

Full Mark: 100 (Multiple Choice Questions 50x2)

Time: 45 minutes

1. Aviation General Knowledge (5x2=10 Marks)

- 1.1 Air Operator Certificate
- 1.2 Certificate of Airworthiness
- 1.3 Noise Certificate
- 1.4 Mobile Radio Station License
- 1.5 Types of Aircraft
- 1.6 Crew License
- 1.7 Crew Medical
- 1.8 Height
- 1.9 Elevation
- 1.10 ICAO
- 1.11 ALPT
- 1.12 ATPL
- 1.13 Runway Markings
- 1.14 Threshold
- 1.15 Taxiway
- 1.16 Holding Point
- 1.17 Wind
- 1.18 Characteristics of Head wind and tail wind
- 1.19 Wind sock

2. Atmosphere (3x2=6 Marks)

- 2.1 Composition of Atmosphere
- 2.2 International Standard Atmosphere
- 2.3 Density Altitude
- 2.4 Pressure Altitude
- 2.5 Lapse Rate

3. Rules of Air (3x2=6 Marks)

- 3.1 Definition
- 3.2 General Rules
- 3.3 Visual Flight Rules
- 3.4 Instrument Flight rules
- 3.5 Aerodrome operating minima
- 3.6 Weather minima
- 3.7 RVR

4. Aeronautical Publication of Nepal (AIP) (3x2=6 Marks)

- 4.1 General
- 4.2 En-route
- 4.3 Aerodromes

5. Commercial Air Transportation (3x2=6 Marks)

- 5.1 Operators Responsibilities

- 5.2 Documents to be carried on board
- 5.3 Flight Duty Time Limitation
- 6. Flight Performance Calculation and Planning Procedures (5x2=10 Marks)**
 - 6.1 Effects of loading and mass distribution on aircraft performance and flight characteristics
 - 6.2 Declared Distances, TORA, TODA, ASDA, etc
 - 6.3 Mass and balance calculations
 - 6.4 Operational flight planning
 - 6.5 Aircraft Take-off performance including field length, climb and obstacle criteria and limitation
 - 6.6 Aircraft Climb Performance including minimum altitudes, decompression/engine out/gear down scenario planning
 - 6.7 Aircraft Landing Performance including approach climb and field length criteria and limitations
 - 6.8 Fuel consumption and endurance calculations
 - 6.9 Alternate airport selection procedures
 - 6.10 En-route cruise control
 - 6.11 Extended range operation
 - 6.12 Preparation and filing of air traffic services flight plans
 - 6.13 Basic principles of computer-assisted planning systems
- 7. Meteorology (5x2=10 Marks)**
 - 7.1 Types of cloud
 - 7.2 Thunderstorm and Aircraft icing
 - 7.3 Turbulence, CAT, Jet streams
 - 7.4 Wind Shear and microburst
 - 7.5 Met Service (HZ, DZ, etc)
 - 7.6 Aeronautical Meteorological reports, METAR, SPECI, TAF, SIGMET, VOLMET
 - 7.7 Met Briefing for pilots
 - 7.8 Measurement of cloud base
 - 7.9 The movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
 - 7.10 Interpretation and application of aeronautical meteorological reports, charts and forecasts, codes and abbreviations; use of and procedures for obtaining, meteorological information
- 8. Navigation (3x2=6 Marks)**
 - 8.1 Principles of air navigation with particular reference to instrument flight
 - 8.2 Navigation equipment: VOR, DME, ILS,
 - 8.3 Area Navigation: RNAV
 - 8.4 Required Navigation Performance: RNP
- 9. Operational Procedures (3x2=6 Marks)**
 - 9.11 Use of aeronautical documentation
 - 9.12 Operational procedures for the carriage of freight and dangerous goods
 - 9.13 Procedures relating to aircraft accidents and incidents; emergency flight procedures;
 - 6.9. Procedures relating to unlawful interference and sabotage of aircraft;

- 10. Principles of Flight (2x2=4 Marks)**
 - 10.1 Principles of flight relating to the appropriate category of aircraft;
 - 10.2 Four Forces: Lift, Drag and type of drag, Weight, Thrust
 - 10.3 WAT Limitations
- 11. Radio Communication (2x2=4 Marks)**
 - 11.1 Procedures for communicating with aircraft and relevant ground stations
 - 11.2 HF, VHF, UHF
 - 11.3 ACARS
- 12. Safe transportation of Dangerous Goods by air and emergency procedures (2x2=4 Marks)**
 - 12.1 Classes of DG
 - 12.2 NOTOC
- 13. Air Traffic Service (3x2=6 Marks)**
 - 13.1 ATC Service
 - 13.2 Flight Information Service
 - 13.3 ATC Service Require for Communication
 - 13.4 ATC Service Require for Information
- 14. Search and Rescue (2x2=4 Marks)**
 - 14.1 Definition
 - 14.2 Phases
 - 14.3 Organization
 - 14.4 Co-operation
- 15. Security (1x2=2 Marks)**
 - 15.1 Definition
 - 15.2 Emergency Procedures
- 16. Regulatory framework (3x2=6 Marks)**
 - 16.1 Role of ICAO/ Role of CAA Nepal (CAAN)
 - 16.2 General Information on ICAO Annexes
 - 16.3 General understanding of CAAN Regulations
 - 16.4 Flight Operations Requirement (FOR)
 - 16.5 Personal Licensing Requirements (PeLR)
 - 16.6 Dangerous Goods Handling Requirements (DGHR)
- 17. Performance of Aircraft Types operated by Nepal Airlines (2x2=4 Marks)**
 - 17.1 DHC-6/300 Aircraft Limitation, Performance and weight and balance
 - 17.2 Airbus A320 Aircraft Limitation, Performance and weight and balance
 - 17.3 Airbus A330 Aircraft Limitation, Performance and weight and balance
 - 17.4 Other Aircraft performance as applicable