

नेपाल टेलिकम
(नेपाल दूरसंचार कम्पनी लिमिटेड)
प्राविधिक सेवा, सिभिल ईन्जिनियरिङ्ग समूह, तह ढ बरिष्ठ ईन्जिनियर पदको खुल्ला
प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

प्रथम पत्र :

समूह -क (Section A) - ऐन नियम, विनियम तथा नीतिहरु

समूह -ख (Section B) व्यवस्थापन र सामान्य ज्ञान (Management and General Knowledge)
तथा समसायमयिक विषयहरु (Contemporary Issues)

Full Marks: 100

Pass Mark: 40

Time: 3 hours

1. समूह -क (Section A) अन्तरगत निम्न अनुसार प्रश्न सोधिनेछ :

S. No.	Type of question	No. of Questions	Weightage / question	Total Marks
1	Short Answer questions	4	5	20
2	Long Answer questions	2	10	20
	Total			40

Note: Only one short question shall be prepared for each topic group.

2. समूह -ख (Section -B) अन्तरगत निम्न अनुसार प्रश्न सोधिनेछ :

S. No.	Type of question	No of Questions	Weightage / question	Total Marks
1	Short Answer questions	6	5	30
2	Long Answer questions	3	10	30
	Total			60

Note:

- Only one short question shall be prepared for each topic group.
- There should be one long question for each of the topic group (General management, Project management / contemporary issues).
- One of the long questions should be Comprehensive type with problem presentation seeking answers on problem analysis and solutions.

१. दूरसञ्चार सेवा सम्बन्धि नीति

- दूरसञ्चार नीति, २०६०
- सूचना तथा सञ्चार क्षेत्रको दिर्घकालिन नीति, २०५९
- सूचना प्रविधि नीति, २०६७
- रेडियो फ्रिक्वेन्सि नीति, २०६९
- VOIP को नियमन सम्बन्धी विद्यमान व्यवस्था (Call Bypass, Grey market of VOIP)

२. दूरसञ्चार सेवा सम्बन्धि ऐन, नियम तथा विनियम

Weightage- 50% - 60%

- नेपाल दूरसञ्चार कम्पनी लिमिटेडको प्रबन्ध पत्र
- नेपाल दूरसञ्चार कम्पनी लिमिटेडको नियमावली
- नेपाल दूरसञ्चार कम्पनी लिमिटेडको आर्थिक विनियमावली, २०७१
- नेपाल दूरसञ्चार कम्पनी लिमिटेडको कर्मचारी विनियमावली, २०६१
- सञ्चार संस्थान ऐन, २०२८
- दूरसञ्चार ऐन, २०५३ र दूरसञ्चार नियमावली २०५४
- विद्युतीय (इलेक्ट्रोनिक) कारोबार ऐन, २०६३
- नेपाल ईन्जिनियरिङ्ग परिषद ऐन, २०५५ तथा आचार संहिता

३. आर्थिक कारोबार सम्बन्धि ऐन, नियम तथा विनियम

Weightage-10%-20%

- सार्वजनिक खरिद ऐन, २०६४ र सार्वजनिक खरिद नियमावली, २०६४
- भ्रष्टाचार निवारण ऐन, २०५९
- मूल्य अभिवृद्धि कर ऐन, २०५३ र मूल्य अभिवृद्धि कर नियमावली

४. अन्य

Weightage- 10%-20%

- कम्पनी ऐन, २०६३
- उपभोक्ता संरक्षण ऐन, २०५४ तथा नियमावली
- सूचनाको हक सम्बन्धी ऐन, २०६४ र सूचनाको हक सम्बन्धी नियमावली, २०६४
- जग्गा प्राप्ति ऐन, २०३४
- आवश्यक सेवा सञ्चालन ऐन, २०१४
- करार ऐन, २०५६

5. Telecom Development Organization, Regulators and operators

Weightage-10%-20%

- International Agencies : ITU, APT, WTO - their major roles and relations with telecom operators, Network Readiness Index, Digitization Index
- UAO, USO, USF
- Telecom regulations : Regulatory Objectives, Sector Reform Initiatives in Nepal
- National Regulator: Nepal Telecom Authority (NTA) - Organization and functional role in sector development
- Major National Telecom Operators: Their Services and market Shares Comparative strengths and weaknesses

Section- B (समूह - ख) - व्यवस्थापन र सामान्य ज्ञान (Management and General Knowledge) तथा समसामयिक विषयहरू (Contemporary Issues)

पूर्णाङ्क -६०

1. Engineering Economics

Weightage (5%-15%)

- Capital Investment, Decision, Analysis and evaluation Techniques (NPV, IRR, PBP, PI)
- Life cycle management (MTTF/MTTR)
- Inventory management
- Depreciation, capitalization, amortization

2. General Management

Weightage (15%-25%)

- Roles and responsibilities of team leader
- Team building & synergy creation
- Delegation of Authority
- Management of time
- Problem solving and decision making
- Team Management
- Motivation
- Communication Skill & Interpersonal Relation
- Performance appraisal
- Staff discipline
- Total Quality management
- Industrial Relation/Peace
- Productivity Management

3. Project Management

Weightage (20%-40%)

- Concept of project planning and management
- Project goal setting
- Recent project planning approaches
- Project feasibility study- demand /need forecasting and analysis, Technical Analysis and economic analysis, environmental analysis
- Project scheduling
- Project life cycle
- Project Implementation plan (PERT, CPM, Network diagram, Gantt Chart)
- Project evaluation indicators/ techniques
- Project proposal & reporting, control & monitoring
- Basics of procurement of goods, services and civil works
- Contract negotiation
- Conflict issue in construction site

4. Marketing Management

Weightage (5%-15%)

- Marketing concept & Strategies- Product / service, Pricing & promotion & marketing channels
- Customer relationship Management- Concept, roles & functions Branding and its importance
- Competition, Competitive advantage, Competitor analysis
- Market demand and segmentation
- Service Marketing
- Marketing management issues and challenges of NT

5. Financial Management

Weightage (5%-15%)

- Capital Structure planning
- Budgeting and budgetary control
- Financial Statement and financial Ratio analysis
- Working Capital management
- Financial, Technical and Performance auditing

6. Risk Management

Weightage (5%-15%)

- Concept, Identification and Measurement
- Types of risks (Business, Project, System, Market)
- Risk Analysis and risk factors
- Techniques of managing risks
- Emergency management

7. Contemporary issues

Weightage (5%-15%)

- Current organization and management issues and challenges facing NT
- General Organizational structure of telecom company
- Outsource principle & current trend
- Media relationship management
- Inter- organizational relations
- Collective decision
- Other current issues

महत्वपूर्ण जानकारीहरू

- प्रश्नहरूसँग सम्बन्धित ऐन, नीति, नियम तथा प्रचलित नेपाल कानूनहरू (नेपाल दूरसंचार कम्पनी लिमिटेडसँग सम्बन्धित समेत) मा परीक्षा मिति भन्दा तीन महिना अघिसम्ममा संसोधन भई कायम रहेको व्यवस्था लागू हुनेछ ।
- परीक्षार्थीहरूले नेपाली वा अंग्रेजी मध्ये कुनै एक भाषामा उत्तर दिन सक्नेछन

नेपाल टेलिकम
(नेपाल दूरसंचार कम्पनी लिमिटेड)
प्राविधिक सेवा, सिभिल ईन्जिनियरिङ्ग समुह, तह- ८, वरिष्ठ ईन्जिनियर पदको खुल्ला
प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

दोश्रो पत्र :

1. समूह -ग (Section -C) अन्तरगत निम्न अनुसार प्रश्न सोधिनेछ :

S. No.	Type of question	No of Questions	Weightage / question	Total Marks
1	Short Questions	12	5	60
2	Analytical and Solution oriented questions	2	20	40
	Total			100

Note:

- At least one question should be comprehension type.
- There should be questions seeking case study.
- Answers on problem resolutions should be divided in four parts as following
 - Problem identification
 - Relate problem resolution with appropriate government & company rules and regulations
 - Strategies & suggestions for problem resolutions
 - Methods for strategy implementation, monitoring and evaluation

Section- C (समूह - ग) - प्राविधिक सेवा सम्बन्धि (Technical Service Related)

पूर्णाङ्क -१००

- 1. Theory of Structures** (Weightage 5% - 15%)
Area, Volume, Centroid, Moment of Inertia, Forces and Moments, Bending Moment and Shear Force, Frictional Forces, Basic Concepts of deflection
- 2. Design of Reinforced Concrete and Steel Structures** (Weightage 5% - 15%)
Concrete Structures and Design Concepts, Working Stress and Limit State Method, Design of Slabs, Simply Supported and cantilever beams, Detailing of structural members, Basic concept of Steel Structures
- 3. Surveying and urban Development issue** (Weightage 5% - 15%)
 - a) Linear measurements, Chain and Compass Survey, Leveling and contouring, Plain table survey, Traversing

b) Master planning, Structure Planning, Local area Planning, Guided Land Development (GLD), Land pooling

4. Architecture & Building Construction (Weightage 5% - 15%)

Local and modern building materials in Nepal, Present status of office building and the need for standardization, prospects and challenge for maintenance and rehabilitation of buildings, Evaluation of building construction technology in Nepal and its relation to modern Structural Engineering

5. Telecom Related Infrastructure (Weightage 10% to 15%)

Equipment building, underground pipe laying, Tower erection, Tower foundation, Machine foundation .

6. Water Supply and Sanitation (Weightage 5% - 10%)

Sources of water, Water quality, Intakes, Pipelines design, design of distribution system, Pipe materials and jointing, Environmental health engineering, waste management

7. Estimating and valuation (Weightage 5% - 15%)

Method of Estimating, Preparation of Detailed Quantity and Cost Estimate, Analysis of rates, Valuation .

8. Environment Impact Assessment (Weightage 5% - 10%)

Concept of EIA (Environment Impact Assessment), IEE (Initial Environmental Examination) and their principles, Screening, scoping, initial impact identification, TOR (Terms of Reference) preparation, Environmental auditing.

9. Construction Management (Weightage 10% - 20%)

Specifications and Contractual Procedures, Contract Management, Plant and machineries, Construction Process, Construction Planning, Quality Control and assurances,

10. Maintenance and Safety Engineering (Weightage 5% - 10%)

Occupational Health and Safety (OHS), Types of Maintenance (Preventive and Corrective), Emergency, Hazards and risks in construction and safety measures

महत्वपूर्ण जानकारीहरू

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- परीक्षार्थीहरूले नेपाली वा अंग्रेजी मध्ये कुनै एक भाषामा उत्तर दिन सक्नेछन