

देवदह नगरपालिका  
नगर कार्यपालकाको कार्यालय  
केरवानी, रुपन्देही

वन प्राविधिक (अधिकृतस्तर छैठौं) पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

पाठ्यक्रमको रूपरेखा:- यस पाठ्यक्रमको आधारमा निम्नानुसार चरणमा परीक्षा लिइने छ ।

लिखित परीक्षा - पूर्णाङ्क:- १००

लिखित परीक्षा योजना (Written Examination Scheme)

विषय	परीक्षा प्रणाली		परीक्षा प्रणाली	पूर्णाङ्क	उत्तीर्णाङ्क	प्रश्न संख्या × अङ्क	समय
General Subject	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	Part I: General Awareness & General Ability Test	१००	४०	५०×१ अङ्क=५०	१ घण्टा ३० मिनेट
			Part II: General Technical Subject			५०×१ अङ्क=५०	

द्रष्टव्य:-

- 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 ।
- यस पाठ्यक्रम योजना अन्तर्गत पत्र/ विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- परीक्षामा परीक्षार्थीले मोबाइल वा यस्तै प्रकारका विद्युतीय उपकरण परीक्षा हलमा लैजान पाइने छैन ।
- लिखित परीक्षामा उत्तीर्ण मध्ये सबै भन्दा बढी अंक ल्याउने उम्मेदवारलाई करार सेवा नियुक्तिको लागि सिफारिस गरिनेछ । तर सबै भन्दा बढी बराबर अंक ल्याउने उम्मेदवार एक भन्दा बढी भएमा तोकिएको न्यूनतम शैक्षिक योग्यताको प्राप्त प्रतिशतलाई आधार मानि उम्मेदवारलाई नियुक्तिको लागि सिफारिस गरिनेछ ।
- न्यूनतम शैक्षिक योग्यताको प्राप्ताङ्क CGPA मा लब्धांक हुनेहरूको हकमा तपशिल बमोजिमको सुत्रमा आधारित रहि प्रतिशत निर्धारण गरिनेछ ।  
 $50 + 5X^2 - 90X$  (X भनेको GPA बुझिनेछ ।)
- न्यूनतम शैक्षिक योग्यताको प्राप्ताङ्क प्रतिशत पनि बराबर भएमा उमेरको आधारमा जेष्ठ उम्मेदवार नियुक्तिको लागि सिफारिस गरिनेछ ।

**Part (I) : - General Awareness & General Ability Test (50 Marks)**

**1. General Awareness and Contemporary Issues (25 ×1 Mark = 25 Marks)**

- 1.1 Physical, socio-cultural and economic geography and demography of Nepal
- 1.2 Major natural resources of Nepal
- 1.3 Geographical diversity, climatic conditions, and livelihood & lifestyle of people
- 1.4 Notable events and personalities, social, cultural and economic conditions in modern history of Nepal
- 1.5 Current periodical plan of Nepal
- 1.6 Information on sustainable development, environment, pollution, climate change, biodiversity, science and technology
- 1.7 Nepal's international affairs and general information on the UNO, SAARC & BIMSTEC
- 1.8 The Constitution of Nepal (From Part 1 to 5 and Schedules)
- 1.9 Governance system and Government (Federal, Provincial and Local)
- 1.10 Provisions of civil service act and regulation relating to constitution of civil service, organizational structure, posts of service, fulfillment of vacancy and code of conduct
- 1.11 Functional scope of public services
- 1.12 Public Service Charter
- 1.13 Concept, objective and importance of public policy
- 1.14 Fundamentals of management: planning, organizing, directing, controlling, coordinating, decision making, motivation and leadership
- 1.15 Government planning, budgeting and accounting system
- 1.16 Major events and current affairs of national and international importance

**2. General Ability Test (25 ×1 Mark = 25 Marks)**

**2.1 Verbal Ability Test (8×1 Mark= 8 Marks)**

Jumble words, Series, Analogy, Classification, Coding-Decoding, Matrix, Ranking Order Test, Direction and Distance Sense Test, Common Sense Test, Logical Reasoning, Assertion and Reason, Statement and Conclusions

**2.2 Numerical Ability Test (9×1 Mark = 9Marks)**

Series, Analogy, Classification, Coding, Arithmetical reasoning/operation, Percentage, Ratio, Average, Loss & Profit, Time & Work, Data interpretation & Data verification

**2.3 Non-verbal/Abstract Ability Test (8×1 Mark = 8 Marks)**

Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion/ Finding, Analytical Reasoning Test, Figure Formation and Analysis, Rule Detection, Water images, Mirror images, Cubes and Dice & Venn-diagram

**Part (B) : - General Technical Subject (50 Marks)**

**1. Silviculture (5 Marks)**

- 1.1 Common silvicultural terms
- 1.2 Forest types of Nepal
- 1.3 Concept and principle of forest ecosystem, normal forest and locality factors
- 1.4 Silvicultural practices adopted for the management of different categories of forests (e.g. community forests, collaborative forests, block forest, leasehold forests, religious forests, plantation forests, natural forests)

- 1.5 Seed collection, handling, storage and certification
- 1.6 Principles and practices of natural and artificial regeneration, various techniques of plant propagation, plantation establishment at different sites, types of tending operation and forest rotations
- 1.7 Principles and methods of tree improvement
- 1.8 Silviculture of commercial tree species of Nepal

## **2. Forest Management (5 Marks)**

- 2.1 Understanding about common forest management terms.
- 2.2 Principles and practices of management of different types of natural and manmade forests in general and in Nepal in particular
- 2.3 Principles and practices of tree and forest measurement; diameter and height measurement; volume calculation of standing trees, logs and converted timber; measurement of growing stock and yield regulation
- 2.4 Concepts and methods of timber stand improvement and shrubland management
- 2.5 Protection of forests from fire, grazing, illegal felling, disease and pest, forest encroachment and invasive species
- 2.6 Preparation and implementation of forest operational plan and forest management plans
- 2.7 Principles and methods of community based forest and natural resource management systems in Nepal
- 2.8 Contemporary issues in Community, collaborative and leasehold forestry Methods and approaches to inventory of community forest and various NTFPs

## **3. Forestry Research (5 Marks)**

- 3.1 Concept and methods of experimental design (Blocking, replications, treatments, randomization)
- 3.2 Designs used in forestry experiments- Randomized block design, Split plot design, factorial designs
- 3.3 Statistical methods used in forestry research – statistical parameters, F-test, t- test, analysis of variance, covariance analysis, correlation and regression.
- 3.4 Theory and principles of tree selection, progeny and provenance trial
- 3.5 Tools and techniques of socio-economic surveys – PRA, RRA, D&D
- 3.6 Preparation of simple experimental protocols for forestry research
- 3.7 Theory and skills in review of literature, field data collection, analysis, report writing and referencing

## **4. Forest resource surveying and mapping (5 Marks)**

- 4.1 Forest statistics of Nepal
- 4.2 Principles and methods of forest sampling– size, intensity, unit, simple random sampling, stratified random sampling, systematic sampling
- 4.3 Principles of forest biometrics, tree and forest growth models, volume and yield tables
- 4.4 Principles, tools and techniques used in Remote Sensing, GIS and photo interpretation
- 4.5 Use of surveying and mapping instruments and preparation of forest maps
- 4.6 Theory and practice of National Forest Inventory and role of ground verification

## **5. Soil Conservation (5 Marks)**

- 5.1 Soil types, formation and profile, physical and chemical properties and classification

- 5.2 Land use and land capability classification
- 5.3 Concept of hydrological cycle
- 5.4 Types of soil erosions and their preventive and control measures
- 5.5 Soil and water conservation structures - breast walls, retention wall, check dams, ponds, slope stabilization, methods of top soil cover, roadside stabilization
- 5.6 Bioengineering, Soil fertility and indigenous soil fertility management practices in Nepal
- 5.7 Concepts and basics of soil loss assessment and soil analysis

#### **6. Watershed management (5 Marks)**

- 6.1 Concept and approaches to sustainable watershed management
- 6.2 Identification, planning and management of micro and macro watershed areas
- 6.3 Interrelationship between forestry, agriculture, livestock and development & infrastructure activities with respect to integrated watershed management
- 6.4 Early warning and prevention from natural hazards, measuring water discharge, water quality analysis and checking water runoff and erosions.
- 6.5 Concept and approaches to water harvesting and conservation farming
- 6.6 Agroforestry systems and practices in Nepal. Criteria for selection of fuelwood, fodder, bamboo and other NTFP species and their production techniques for rural income and employment for poverty reduction
- 6.7 Participatory approaches to soil and watershed management

#### **7. Planning and management of National Parks and Protected Areas (5 Marks)**

- 7.1 Concepts, approaches and evolution in Protected Area management systems
- 7.2 Status and classification of Protected Areas in Nepal (National Park, Conservation Area, Hunting reserves, Wildlife Reserve, Buffer Zone)
- 7.3 Preparation and implementation of management plans for different types of Protected Areas. Principles and practice of eco-tourism, visitors' management, conflict resolution and monitoring of Protected Areas and wildlife census
- 7.4 Conservation education, motivation, communication, exhibition and public relations
- 7.5 Fundamentals of ecosystems (population ecology, population density, carrying capacity, population census, predation, reintroduction and relocation)

#### **8. Management of specific habitat and biodiversity conservation (5 Marks)**

- 8.1 Landscape level conservation and ecosystem services
- 8.2 Approaches for in-situ and ex-situ biodiversity conservation at ecosystem, species and genetic level
- 8.3 Geographical distribution, habitat and behavior of common and endangered wild mammals, birds, reptiles, insects and fish in Nepal.
- 8.4 Types of wildlife habitats, habitat analysis and management techniques
- 8.5 General understanding about IUCN red list, Environmental Impact Assessment (including IEE)
- 8.6 Strategy and Action Plans for the management of rare and endangered wildlife species of Nepal (including Tiger, Rhino, Elephant, Snow leopard, Pangolin, Red Panda, Gharial)

#### **9. Forest Utilization (5 Marks)**

- 9.1 Non-timber forest products of economic importance in Nepal
- 9.2 Forest based industries in Nepal

- 9.3 Management, collection, processing and marketing of high value NTFPs in Nepal, value chain of high value wood and non-wood products
- 9.4 Role and function of private sector, cooperatives and parastatal institutions
- 9.5 Scope and potential role of different forest products in poverty reduction

**10. Current Forestry Sector Policy, Strategy, Acts and Regulations (5 Marks)**

- 10.1 Forest Act, 2076 and Regulation
- 10.2 Buffer Zone Management Regulations, 2052
- 10.3 Environment Protection Act, 2076 and Regulation
- 10.4 Soil and Water Conservation Act, 2039
- 10.5 National Parks and Wildlife Conservation Act and Regulation
- 10.6 National Biodiversity Strategy and Action Plan, 2014
- 10.7 National Forest Policy, 2075 and Forest Sector Strategy, 2072
- 10.8 REDD strategy, 2018
- 10.9 Climate Change Policy, 2076 (2019)
- 10.10 National Adaptation Plan of Action, 2010
- 10.11 Nationally Determined Contributions, 2016
- 10.12 CITES Act, 2073
- 10.13 Wetland Policy, 2069