## प्रदेश लोक सेवा आयोग, प्रदेश नं.२ वन सेवाका जनरल फरेष्ट्री, फरेष्ट रिसर्च र स्वायल एण्ड वाटर कन्जरभेशन समूहका अधिकृत सातौं तहका पदहरुको खुला तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

यस पाठ्यक्रम योजनालाइ दुई चरणमा विभाजन गरिएको छ :								
प्रथम चरण :-	लिखित परीक्षा (Written Examination)	पूर्णाङ्क :– २००						
द्वितीय चरण :-	(क)सामूहिक परीक्षण (Group Test)	पूर्णाङ्क :– १०						
	(ख) अन्तर्वार्ता(Interview)	पूर्णाङ्क :– ३०						
	<u>परीक्षा योजना (Examination Scheme)</u>							

# प्रथम चरण : लिखित परीक्षा (Written Examination)

पूर्णाङ्क :– २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्ष	झा प्रणाली	प्रश्नसख्या ×अङ्क	समय
प्रथम	General Subject Part I: General Awareness & General Ability Test Part II: General Technical Subject	General Awareness		80	वस्तुगत	बहुवैकल्पिक प्रश्न (MCOr)	५० प्रश्न×१ अङ्क	१घण्टा
				(Objective)	(MCQs)	<b></b> ≮०प्रश्न×१ अङ्घ	३० मिनेट	
द्वितीय	Technica	l Subject	900	80	विषयगत (Subjective)	छोटो उत्तर लामा उत्तर	४ प्रश्न × ४ अङ्ग ८ प्रश्न × १०अङ्ग	३ घण्टा

द्वितीय चरण : सामूहिक परीक्षण (Group Test) र अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ४०

पत्र ∕विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	१०		सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तर्वार्ता (Interview)	३०		बोर्ड अन्तर्वार्ता(Board Interview)	-

द्रष्टव्य :

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी द्वै हुनेछ ।
- २. प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुड्डाछुड्टै हुनेछ ।
- वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरुको 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 ।
- ४. बहुवैकल्पिक प्रश्नहरु हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।
- १. विषयगत प्रश्नहरुको हकमा तोकिएको अंकका एउटा लामो प्रश्न वा एउटा प्रश्नको दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरु (Short notes) सोध्न सकिने छ।
- ६. द्वितीय पत्रमा (विषयगत प्रश्न हुनेका हकमा) प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन । परीक्षार्थीले प्रत्येक खण्डको प्रश्नहरुको उत्तर सोहीखण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- ७. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठयक्रममा परेका कानून, ऐन, नियम तथा नीतिहरु परीक्षाका मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भइ हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठयक्रममा परेको सम्भनु पर्दछ ।
- प्रथमचरणको परीक्षाबाट छनौट भएको उम्मेदवारहरुलाई मात्र द्वितीयचरणको परीक्षामा सम्मिलित गराइनेछ ।
- ९. पाठ्यकम लागू मिति : २०७⊏।०३।२७ गते देखि ।

# प्रथम पत्र (Paper I): General Subject

# 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, organisational 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
- 1.17 Province no2, Province Civil Service Act, 2077
- 1.18 Federal, Province and local level co-ordination and co-operation
- 1.19 Conflict management
- 1.20 Disaster management

# 2. General Ability Test

2.1 **Verbal Ability Test**  $(8 \times 1 \text{ Mark} = 8 \text{ Marks})$ 

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

# (25 ×1 Mark = 25 Marks)

# 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

- 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

- 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 Contemprorary issues in Community, collaborative and leasehold forestry Methods and approaches to inventory of community forest and various NTFPs

# 3. Forestry Research

- 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

(5 Marks)

# (5 Marks)

(5 Marks)

## प्रदेश लोक सेवा आयोग, प्रदेश नं २

## वन सेवाका जनरल फरेष्टी, फरेष्ट रिसर्च र स्वायल एण्ड वाटर कन्जरभेशन समहका अधिकृत सातौं तहका पदहरुको खुला तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठुयक्रम

Theory and skills in review of literature, field data collection, analysis, report 3.7 writing and referencing

## 4. Forest resource surveying and mapping

- Forest statistics of Nepal 4.1
- 4.2 Principles and methods of forest sampling-size, intensity, unit, simple random sampling, stratified random sampling, systematic sampling
- Principles of forest biometrics, tree and forest growth models, volume and yield 4.3 tables
- 4.4 Principles, tools and techniques used in Remote Sensing, GIS and photo interpretation
- Use of surveying and mapping instruments and preparation of forest maps 4.5
- 4.6 Theory and practice of National Forest Inventory and role of ground verification
- 4.7 Province no.2, Forest Status and Statists.

## 5. **Soil Conservation**

- Soil types, formation and profile, physical and chemical properties and 5.1 classification
- 5.2 Land use and land capability classification
- Concept of hydrological cycle 5.3
- Types of soil erosions and their preventive and control measures 5.4
- Soil and water conservation structures breast walls, retention wall, check dams, 5.5 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

- Concept and approaches to sustainable watershed management 6.1
- 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
- Early warning and prevention from natural hazards, measuring water discharge, 6.4 water quality analysis and checking water runoff and erosions.
- Concept and approaches to water harvesting and conservation farming 6.5
- Agroforestry systems and practices in Nepal. Criteria for selection of fuelwood, 6.6 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)

- Concepts, approaches and evolution in Protected Area management systems 7.1
- 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
- Fundamentals of ecosystems (population ecology, population density, carrying capacity, 7.5 population census, predation, reintroduction and relocation)

# (5 Marks)

(5 Marks)

(5 Marks)

# वन सेवाका जनरल फरेष्ट्री, फरेष्ट रिसर्च र स्वायल एण्ड वाटर कन्जरभेशन समूहका

# अधिकृत सातौं तहका पदहरुको खुला तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम Management of specific habitat and biodiversity conservation (5 M

- 8.1 Landscape level conservation and ecosystem services
- 8.2 Approaches for in-situ and ex-situ biodiversity conservationat 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 Utilisation

8.

- 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 parastal 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
- 10.14 Province no.2, forest and soil conservation related plans and policies .
- 10.15 Province no.2, forest and soil conservation related Acts, Rules and Regulations .
- 10.16 Nepal Biodiversity Strategy and Action Plan, 2014
- 10.17 चुरे, तराई, मधेश संरक्षण तथा व्यवस्थापन गुरु योजना, २०७४
- 10.18 जलवाय् परिवर्तन नीति, २०७६ र राष्ट्रिय वन नीति, २०७६
- 10.21 स्थानीय सरकार संचालन ऐन, २०७४
- 10.22 क्योटो प्रोटोकल/नागोया सम्भौता
- 10.23 कार्यविधि कानून
- 10.24 वैज्ञानिक प्रतिवेदन तयारी, प्रस्तुतिकरण, अभिलेखिकरण तथा Dissemination सम्बन्धी ज्ञान र अभ्यासको परीक्षण।

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(5 Marks)

# (5 Marks)