

**प्रदेश लोक सेवा आयोग, बागमती प्रदेश**  
वन सेवा अन्तर्गत जनरल फरेष्ट्री, स्वायल एण्ड वाटर कञ्जरभेशन र फरेष्ट रिसर्च समूह, पाँचौं तह, रेञ्जर वा सो सरह पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको छ :

प्रथम चरण :- लिखित परीक्षा (Written Examination)

पूर्णाङ्क :- २००

द्वितीय चरण :- अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ३०

**परीक्षा योजना (Examination Scheme)**

प्रथम चरण : लिखित परीक्षा (Written Examination)

पूर्णाङ्क :- २००

पत्र	विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली		प्रश्नसंख्या × अङ्क	समय
प्रथम	<b>भाग : १</b> सामान्य ज्ञान र सामान्य अभिज्ञता परीक्षण (Part-I: General Awareness & General Aptitude Test)	100	40	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	२५ प्रश्न × २ अङ्क	४५ मिनेट
	२५ प्रश्न × २ अङ्क						
द्वितीय	<b>भाग: २</b> सेवा सम्बन्धित कार्य-ज्ञान (Part-II: Job related functional knowledge)	100	40	विषयगत (Subjective)	छोटो उत्तर (Short Answer) लामो उत्तर (Long Answer)	१२ प्रश्न × ५ अङ्क ४ प्रश्न × १० अङ्क	२ घण्टा १५ मिनेट

द्वितीय चरण : अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ३०

पत्र	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा	समय
अन्तर्वार्ता (Interview)	30		बोर्ड अन्तर्वार्ता (Board Interview)	-

**द्रष्टव्य :**

- यस पाठ्यक्रम योजनालाई प्रथम चरण र द्वितीय चरण गरी दुई भागमा विभाजन गरिएको छ ।
- लिखित परीक्षाको प्रश्नपत्रको माध्यम भाषा पाठ्यक्रमको विषयवस्तु जुन भाषामा दिइएको छ सोही भाषाको आधारमा नेपाली वा अङ्ग्रेजी मध्ये कुनै एक मात्र भाषा हुनेछ । तर विषयवस्तुलाई स्पष्ट गर्नुपर्ने अवस्थामा दुवै भाषा समेत प्रयोग गर्न सकिने छ ।
- लिखित परीक्षाको माध्यम भाषा नेपाली वा अङ्ग्रेजी अथवा नेपाली र अङ्ग्रेजी दुवै हुनेछ ।
- प्रथम पत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- प्रथम पत्रको सेवा सम्बन्धित कार्य-ज्ञान (Job related functional knowledge) अन्तर्गतको २५ प्रश्नको पाठ्यक्रम द्वितीय पत्रको सेवा सम्बन्धी कार्य-ज्ञान (Job related functional knowledge) मा निर्धारण गरिएको पाठ्यक्रम नै हुनेछ ।
- 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 ।
- वस्तुगत बहुवैकल्पिक हुने परीक्षामा परीक्षार्थीले उत्तर लेख्दा अङ्ग्रेजी ठूलो अक्षरहरू (Capital letters): A, B, C, D मा लेख्नुपर्नेछ । सानो अक्षरहरू (Small letters): a, b, c, d लेखेको वा अन्य कुनै सङ्केत गरेको

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- भए सबै उत्तरपुस्तिका रद्द हुनेछ । साथै OMR sheet प्रयोग हुने परीक्षामा परीक्षार्थीलाई दिइएको निर्देशन अनुसारको सङ्केत प्रयोग गर्नु पर्नेछ ।
8. बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।
  9. परीक्षामा परीक्षार्थीले मोबाइल लगायत कुनै प्रकारका विद्युतीय उपकरण परीक्षा हलमा लैजान पाइने छैन ।
  10. विषयगत प्रश्नहरूको हकमा तोकिएको अङ्कको एउटा लामो प्रश्न वा एउटै प्रश्नको दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सकिने छ ।
  11. विषयगत प्रश्न हुनेको हकमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परीक्षार्थीले प्रत्येक खण्डको प्रश्नहरूको उत्तर सोहीखण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
  12. परीक्षामा सोधिने प्रश्नसङ्ख्या, अङ्क र अङ्कभार यथासम्भव सम्बन्धित पत्र/विषयमा दिइए अनुसार हुनेछ ।
  13. यस पाठ्यक्रम योजना अन्तर्गतका 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 हटाइएका वा थप गरी संशोधन भइ) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
  14. प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
  15. यस भन्दा अगाडि लागु भएका माथि उल्लेखित सेवा, समूहको पाठ्यक्रम खारेज गरिएको छ ।
  16. पाठ्यक्रम लागु मिति : - २०७९/९/१०

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**प्रथम पत्र (Paper I) :-**  
**सामान्य ज्ञान र सामान्य अभिक्षमता परीक्षण तथा सेवा सम्बन्धित कार्य-ज्ञान**

**भाग (Part I) :**

**सामान्य ज्ञान र सामान्य अभिक्षमता परीक्षण**  
**(General Awareness and General Aptitude Test)**

(२५ प्रश्न × २ अङ्क = ५० अङ्क)

**1. सामान्य ज्ञान (General Awareness) (८ × २ अङ्क = १६ अङ्क)**

- 1.1 नेपालको भौगोलिक अवस्था, प्राकृतिक स्रोत र साधनहरू
- 1.2 नेपालको ऐतिहासिक, सांस्कृतिक र सामाजिक अवस्था सम्बन्धी जानकारी
- 1.3 नेपालको आर्थिक अवस्था र चालु आवधिक योजना सम्बन्धी जानकारी
- 1.4 जैविक विविधता, दिगो विकास, वातावरण, प्रदूषण, जलवायु परिवर्तन र जनसंख्या व्यवस्थापन
- 1.5 मानव जीवनमा प्रत्यक्ष प्रभाव पार्ने विज्ञान र प्रविधिका महत्वपूर्ण उपलब्धिहरू
- 1.6 जनस्वास्थ्य, रोग, खाद्य र पोषण सम्बन्धी सामान्य जानकारी
- 1.7 नेपालको संविधान (भाग १ देखि ५ सम्म र अनुसूचीहरू)
- 1.8 संयुक्त राष्ट्रसंघ र यसका विशिष्टीकृत संस्था सम्बन्धी जानकारी
- 1.9 क्षेत्रीय सङ्गठन (सार्क, बिमस्टेक, आसियान र युरोपियन संघ) सम्बन्धी जानकारी
- 1.10 राष्ट्रिय र अन्तर्राष्ट्रिय महत्वका समसामयिक गतिविधिहरू

**2. सार्वजनिक व्यवस्थापन (Public Management) (८ × २ अङ्क = १६ अङ्क)**

- 2.1 कार्यालय व्यवस्थापन (Office Management)
  - 2.1.1 कार्यालय (Office) : परिचय, महत्व, कार्य र प्रकार
  - 2.1.2 सहायक कर्मचारीका कार्य र गुणहरू
  - 2.1.3 कार्यालय स्रोत साधन (Office Resources): परिचय र प्रकार
  - 2.1.4 कार्यालयमा सञ्चारको महत्व, किसिम र साधन
  - 2.1.5 कार्यालय कार्यविधि (Office Procedure) : पत्र व्यवहार (Correspondence), दर्ता र चलानी (Registration & Dispatch), परिपत्र (Circular), तोक आदेश (Order), टिप्पणी लेखन र टिप्पणी तयार पार्दा ध्यान दिनुपर्ने कुराहरू
  - 2.1.6 अभिलेख व्यवस्थापन (Record Management)
- 2.2 निजामती सेवा ऐन र नियमावलीमा भएका देहायका व्यवस्थाहरू
  - 2.2.1 निजामती सेवाको गठन, सङ्गठन संरचना, पदपूर्ति गर्ने तरिका र प्रक्रियाहरू
  - 2.2.2 कर्मचारीको नियुक्ति, सरुवा, बढुवा, बिदा, विभागीय सजाय र अवकाश
  - 2.2.3 कर्मचारीले पालन गर्नुपर्ने आचरण र कर्तव्यहरू
- 2.3 सरकारी बजेट, लेखा र लेखापरीक्षण प्रणाली सम्बन्धी सामान्य जानकारी
- 2.4 सार्वजनिक सेवा प्रवाहको अर्थ, सेवा प्रवाह गर्ने निकाय, तरिका र माध्यमहरू
- 2.5 सार्वजनिक बडापत्र (Public Charter) : महत्व र आवश्यकता
- 2.6 व्यवस्थापनका अवधारणा तथा सार्वजनिक व्यवस्थापनमा निर्देशन, नियन्त्रण, समन्वय, निर्णय प्रक्रिया, उत्प्रेरण र नेतृत्व सम्बन्धी जानकारी
- 2.7 मानवीय मूल्य मान्यता (Human Values), नागरिकका कर्तव्य र दायित्व तथा अनुशासन

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3. सामान्य अभिक्षमता परीक्षण (General Aptitude Test) (५ × २ अङ्क=१० अङ्क)

- 3.1 शाब्दिक अभिक्षमता परीक्षण (Verbal Aptitude Test) : यस परीक्षणमा शब्दज्ञान, अनुक्रम, समरूपता, वर्गीकरण, कोडिङ-डिकोडिङ, दिशा र दुरी ज्ञान परीक्षण (direction & distance sense test), तर्क विचार सम्बन्धी (logical reasoning), पङ्क्तिक्रम (ranking order) आदि विषयवस्तुबाट प्रश्नहरू समावेश गरिनेछ ।
- 3.2 संख्यात्मक अभिक्षमता परीक्षण (Numerical Aptitude Test) : यस परीक्षणमा अनुक्रम, समरूपता, वर्गीकरण, कोडिङ, मेट्रिक्स, अङ्कगणितीय तर्क /क्रिया सम्बन्धी, प्रतिशत, भिन्न, अनुपात, औसत, समय र काम, आदि विषयवस्तुबाट प्रश्नहरू समावेश गरिनेछ ।
- 3.3 अशाब्दिक अभिक्षमता परीक्षण (Non-Verbal/Abstract Aptitude Test) : यस परीक्षणमा अनुक्रम, समरूपता, वर्गीकरण, भेन चित्र, मेट्रिक्स, त्रिभुज र वर्गहरूको रचना, चित्र वा आकृति बनावट र विश्लेषण, आदि विषयवस्तुबाट प्रश्नहरू समावेश गरिनेछ ।
- 3.4 रुजु गर्ने (Verification test) र फाइलिङ अभिरुचि परीक्षण (Filing aptitude test): रुजु गर्ने (Verification test), परीक्षणमा तथ्याङ्क, सङ्ख्या वा शाब्दिक सूचनालाई जाँच गर्ने वा त्रुटी पत्ता लगाउने अथवा समानता वा भिन्नता पत्ता लगाउने किसिमका प्रश्नहरू समावेश हुनेछन् । फाइलिङ अभिरुचि परीक्षण (Filing aptitude test) मा शाब्दिक र सङ्ख्यात्मक फाइलिङ वस्तु वा प्रक्रियालाई वर्णमालाक्रम, सङ्ख्यात्मकक्रम वा कालक्रम अनुसार समाधान गर्ने किसिमका प्रश्नहरू समावेश हुनेछन् ।
- 3.5 निर्देशन अनुसरण गर्ने (Follows the instructions) र विश्लेषणात्मक तार्किकता परीक्षण (Analytical reasoning test): निर्देशन अनुसरण गर्ने (Follows the instructions) परीक्षणमा दिइएका लिखित निर्देशनलाई हबहु अनुसरण गरी समाधान गर्ने किसिमका प्रश्नहरू समावेश हुनेछन् । विश्लेषणात्मक तार्किकता परीक्षण (Analytical reasoning test) मा शाब्दिक वा सङ्ख्यात्मक वा अशाब्दिक (चित्रात्मक) किसिमका विश्लेषणात्मक तार्किकता सम्बन्धी प्रश्नहरू समावेश हुनेछन् ।

4. नेपाली र अङ्ग्रेजी भाषा: (४ × २ अङ्क=८ अङ्क)

4.1 English: Knowledge on writing correct English sentences, letters, and reports according to English grammar based on the following syntactic functions: (२ × २ अङ्क=४ अङ्क)

- a. Parts of Speech:  
b. Noun  
c. Pronoun  
d. Adjective  
e. Determiner  
f. Verb  
g. Adverb  
h. Preposition  
i. Conjunction and  
j. Interjection  
k. Infinitives and gerunds, reported speech and tenses

4.2 नेपाली: नेपाली भाषामा स्तरीय शुद्ध शब्द, वाक्यांश र वाक्य लेखनको लागि आवश्यक पर्ने ह्रस्व दीर्घ, ब र व, तथा श, ष, स लगायतका व्याकरणगत शुद्ध लेखनशैलीमा केन्द्रित शुद्ध शब्द, वाक्यांश र वाक्य लेखनसहितको नेपाली भाषाको शुद्धाशुद्धिको ज्ञान (२ × २ अङ्क=४ अङ्क)

**भाग (Part II) :-**

**सेवा सम्बन्धित कार्य-ज्ञान (Job related functional Knowledge)**

(२५ प्रश्न × २ अङ्क = ५० अङ्क)

- 1. Principle and Practice of Silviculture**
  - 1.1 General concept of Silviculture
  - 1.2 Common silvicultural terms
  - 1.3 Locality factors affecting forest and vegetation
  - 1.4 Silvicultural systems ( focusing on Clear felling, Shelterwood, Coppice and Selection systems and their variants)
  - 1.5 Silviculture of major forest tree species (e.g. Sal, Sissoo, Khotasalla, Khair, Utis, Deodar, Gobresalla, Chilaune, Katus, Saj, Simal, Champ, Abis species)
  - 1.6 Silviculture of exotic species (e.g. Teak, Eucalyptus, *Pinuspatula*, Poplar)
  - 1.7 Silviculture of commercial NTFP species
  - 1.8 Silvicultural systems applied in different types of forests of Nepal
  - 1.9 Protection of forest from insect, pest, diseases and pathogens
- 2. Forest Management**
  - 2.1 History of forest management in Nepal
  - 2.2 High forest
    - 2.2.1 Silvicultural operations in high forest system
    - 2.2.2 Tending operations
  - 2.3 Plantation Forest
    - 2.3.1 Understanding of forest nursery
    - 2.3.2 Seed collection, treatment and storage techniques of commonly planted tree species in Nepal.
    - 2.3.3 Nursery techniques of commonly planted tree species in Nepal.
    - 2.3.4 Plantation techniques of commonly planted tree species in Nepal.
    - 2.3.5 Plantation management (e.g. weeding, cleaning, thinning, pruning, lopping, pollarding)
    - 2.3.6 Plantation forest in Nepal (e.g. Sagarnath, Ratuwamai)
  - 2.4 Harvesting and distribution systems of forest products in Nepal (e.g. construction wood, fire wood etc.)
  - 2.5 Harvesting system and procedures in government management and community managed forest
  - 2.6 Harvesting tools and techniques in Nepal
  - 2.7 Harvesting and distribution systems of non-woody forest products (e.g. Medicinal and aromatic plants, Sal seed and Resin collection)
  - 2.8 Agencies involved in harvesting and distribution of forest products in Nepal.
  - 2.9 Forest management practices and emerging problems in Terai, Midhills and High Himalayas
  - 2.10 Role of forest ranger in forest and biodiversity conservation and management
  - 2.11 Management of forest fire and application of integrated pest management in forestry
  - 2.12 Forest encroachment
- 3. Forest Mensuration**
  - 3.1 Measurement of standing trees.
  - 3.2 Measurement of felled trees and logs
  - 3.3 Concept on volume table and yield table.

- 3.4 Calculation of tree volume by different methods, tree basal area, volume of stacked woods and biomass.
- 4. Forest Survey and Inventory**
- 4.1 Concept of forest survey and its use in forest management
  - 4.2 Compass survey and general concept of leveling
  - 4.3 Instrument used for forest survey and inventory in Nepal
  - 4.4 Use of GPS for forest survey
  - 4.5 Concept of forest inventory
  - 4.6 Sampling and its types
  - 4.7 General information on various Forest Resource Assessments in Nepal
  - 4.8 Introduction to Geographical Information System and remote sensing
  - 4.9 Use of GIS and remote sensing in natural resources management
- 5. Policy, Acts, Regulation and Institutions**
- 5.1 National Forest Policy, 2075
  - 5.2 Forestry Sector Strategy (2016-2024)
  - 5.3 Forest act 2076 and Forest regulations
  - 5.4 Soil conservation and watershed management act 2039
  - 5.5 National Park and Wildlife conservation act 2029 and regulation
  - 5.6 Salient features of Nepal Biodiversity Strategy and Action Plan 2014-2020
  - 5.7 Salient features of forest product sales and distribution guidelines
  - 5.8 Community Forestry Inventory Guideline
  - 5.9 Understanding of NTFP Inventory Guideline
  - 5.10 Community Forestry Guidelines
  - 5.11 International conventions and treaties such as CITES, Ramsar, CBD, UNCCD, UNFCCC
- 6. Forest Researches in Nepal**
- 6.1 General concept of forest research
  - 6.2 Some example of forest researches done in Nepal
  - 6.3 Current issues and challenges of forestry research in Nepal
  - 6.4 Ways of dissemination of forestry research
- 7. Forest Extension**
- 7.1 Concept of forest extension
  - 7.2 Need and importance of extension in forest management, biodiversity conservation and watershed management
  - 7.3 Mode of forestry extension in Nepal
  - 7.4 Extension activities adopted by ongoing community and private forestry development projects.
- 8. Wildlife and Protected Area Management**
- 8.1 Rare and endangered wildlife in Nepal
  - 8.2 Geographical distribution, habitat and behavior of common, rare and endangered wild mammals, birds and reptiles in Nepal.
  - 8.3 National Parks, wildlife Reserves, Conservation Areas and buffer zones in Nepal.
  - 8.4 Understanding on wildlife hunting or fishing
  - 8.5 Internationally important wetlands in Nepal and their significance
- 9. Biodiversity Conservation and Management in Nepal**
- 9.1 Concept and significance of biological diversity

- 9.2 Status of biodiversity in Nepal
- 9.3 Challenges, opportunity and threats for conservation of biodiversity in Nepal
- 9.4 Approaches for biodiversity conservation in Nepal
- 9.5 Parks and people conflicts and its impact on conservation
- 9.6 *In situ* and *ex situ* conservation in Nepal

## **10. Soil Conservation and Watershed Management**

- 10.1 General concept of soil conservation watershed management in Nepal
- 10.2 Concept of soils
- 10.3 Physical and chemical properties of soil
- 10.4 Soil erosion and its types
- 10.5 Problem of soil erosion in Nepal
- 10.6 Hydrological cycle and its importance in soil conservation and watershed management
- 10.7 Concept of integrated watershed management
- 10.8 Agencies involved in soil conservation and watershed management in Nepal
- 10.9 Techniques of soil conservation
- 10.10 Concept of bioengineering
- 10.11 Low-cost soil conservation techniques and their application for soil conservation
- 10.12 General situation of soil conservation and watershed management in Nepal
- 10.11 Conservation farming and sustainable land management
- 10.12 Programs and efforts in conserving soil and water resources in Chure region in Nepal

## **11. Non Timber Forest Products (NTFPs) and Medicinal and Aromatic Plants (MAPs)**

- 11.1 Important NTFPs and medicinal and aromatic plants of Nepal
- 11.2 Identification, use and value addition of important NTFPs and medicinal and aromatic plants
- 11.3 Current practice of harvesting of NTFPs and MAPs in Nepal.
- 11.4 NTFPs and MAPs restricted for collection and export in crude form.
- 11.5 NTFP/MAP based income generation activities in Nepal
- 11.6 Forest based industries in Nepal
- 11.7 Management, collection, processing and marketing of high value NTFPs in Nepal,
- 11.8 Value chain of major NTFPs and MAPs in Nepal

## **12. Community Based Forest Management (CBFM) in Nepal**

- 12.1 Concept of community based forest management
- 12.2 Various types of CBFM model like community forest, collaborative forest, buffer zone community forest and leasehold forest ( both pro-poor and commercial)
- 12.3 Challenges and opportunities of CBFM in Nepal
- 12.4 Provisions related in to CBFM in Forest Act, National Park and Wildlife Conservation Act

## **13. Forest Administration in Nepal**

- 13.1 General information on government institution involved in forest management, biodiversity conservation and watershed management in Nepal (DoFSC,

प्रदेश लोक सेवा आयोग, बागमती प्रदेश  
वन सेवा अन्तर्गत जनरल फरेष्ट्री, स्वायल एण्ड वाटर कञ्जरभेशन र फरेष्ट रिसर्च समूह, पाँचौं तह, रेञ्जर  
वा सो सरह पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

DNPWC)

13.2 General information on province level forestry sector structure and organization

13.3 General concept of legal procedures and preparation of legal documents like muchulka, bharpai

**14. Agroforestry and Private Forestry**

14.1 Concept and importance of agroforestry and private forestry

14.2 Species selection criteria and various species used for agroforestry and private forestry in Nepal

14.3 Role of agroforestry and private forestry in forest and biodiversity conservation

**15. Cross cutting Areas in Forestry, Biodiversity Conservation and Watershed Management**

15.1 Concept of climate change and REDD in Nepal

15.2 Practice of good governance in natural resource conservation and management

15.3 Participatory watershed management in Nepal

15.4 Major projects and donor agencies involved in forestry development in Nepal.

15.5 Forest parastatals in Nepal focusing on Ban Nigam and Forest Product Development Board

15.6 Land use and land cover in Nepal

15.7 Vegetation and forest types of Nepal

15.8 Understanding of ecosystems of Nepal

15.9 General concept of agro ecological zone

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प्रथम पत्रको लागि यथासम्भव निम्नानुसार प्रश्नहरू सोधिने छ :

भाग	विषयवस्तु	परीक्षा प्रणाली	अङ्कभार	प्रश्न संख्या × अङ्क
<b>I</b>	सामान्य ज्ञान र सामान्य अभिक्षमता परीक्षण (General Awareness & General Aptitude Test)	बहुवैकल्पिक प्रश्न (MCQs)	५०	२५ प्रश्न × २ अङ्क= ५०
<b>II</b>	सेवा सम्बन्धित कार्य-ज्ञान (Job related functional knowledge)		५०	२५ प्रश्न × २ अङ्क= ५०

प्रथम पत्रको **भाग (Part II)** सेवा सम्बन्धित कार्य-ज्ञान (Job related functional knowledge) को पाठ्यक्रमको एकाइबाट परीक्षामा यथासम्भव देहाय बमोजिम प्रश्नहरू सोधिने छ :

पाठ्यक्रमको एकाइ	१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४	१५
प्रश्न संख्या	२	२	१	२	२	१	१	२	२	३	१	१	१	१	३



**द्वितीय पत्र (Paper II) :-**  
**सेवा सम्बन्धित कार्य-ज्ञान (Job related functional knowledge)**  
**खण्ड (Section) (A) : - ५० अङ्क**

**1. Principle and Practice of Silviculture**

- 1.1 General concept of Silviculture
- 1.2 Common silvicultural terms
- 1.3 Locality factors affecting forest and vegetation
- 1.4 Silvicultural systems ( focusing on Clear felling, Shelterwood, Coppice and Selection systems and their variants)
- 1.5 Silviculture of major forest tree species (e.g. Sal, Sissoo, Khotasalla, Khair, Utis, Deodar, Gobresalla, Chilaune, Katus, Saj, Simal, Champ, Abis species)
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- 1.7 Silviculture of commercial NTFP species
- 1.8 Silvicultural systems applied in different types of forests of Nepal
- 1.9 Protection of forest from insect, pest, diseases and pathogens

**2. Forest Management**

- 2.1 History of forest management in Nepal
- 2.2 High forest
  - 2.2.1 Silvicultural operations in high forest system
  - 2.2.2 Tending operations
- 2.3 Plantation Forest
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  - 2.3.6 Plantation forest in Nepal (e.g. Sagarnath, Ratuwamai)
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- 2.6 Harvesting tools and techniques in Nepal
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- 2.12 Forest encroachment

**3. Forest Mensuration**

- 3.1 Measurement of standing trees.
- 3.2 Measurement of felled trees and logs
- 3.3 Concept on volume table and yield table.

3.4 Calculation of tree volume by different methods, tree basal area, volume of stacked woods and biomass.

#### **4. Forest Survey and Inventory**

- 4.1 Concept of forest survey and its use in forest management
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- 4.5 Concept of forest inventory
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- 5.9 Understanding of NTFP Inventory Guideline
- 5.10 Community Forestry Guidelines
- 5.11 International conventions and treaties such as CITES, Ramsar, CBD, UNCCD, UNFCCC

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- 6.1 General concept of forest research
- 6.2 Some example of forest researches done in Nepal
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- 7.1 Concept of forest extension
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- 9.4 Approaches for biodiversity conservation in Nepal
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- 9.6 *In situ* and *ex situ* conservation in Nepal

**खण्ड (Section) (B) : - ५० अङ्क**

**10. Soil Conservation and Watershed Management**

- 10.1 General concept of soil conservation watershed management in Nepal
- 10.2 Concept of soils
- 10.3 Physical and chemical properties of soil
- 10.4 Soil erosion and its types
- 10.5 Problem of soil erosion in Nepal
- 10.6 Hydrological cycle and its importance in soil conservation and watershed management
- 10.7 Concept of integrated watershed management
- 10.8 Agencies involved in soil conservation and watershed management in Nepal
- 10.9 Techniques of soil conservation
- 10.10 Concept of bioengineering
- 10.11 Low-cost soil conservation techniques and their application for soil conservation
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**15. Cross cutting Areas in Forestry, Biodiversity Conservation and Watershed Management**

15.1 Concept of climate change and REDD in Nepal

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15.3 Participatory watershed management in Nepal

15.4 Major projects and donor agencies involved in forestry development in Nepal.

15.5 Forest parastatals in Nepal focusing on Ban Nigam and Forest Product Development Board

15.6 Land use and land cover in Nepal

15.7 Vegetation and forest types of Nepal

15.8 Understanding of ecosystems of Nepal

15.9 General concept of agro ecological zone

द्वितीय पत्रको लागि यथासम्भव निम्नानुसार प्रश्नहरू सोधिनेछ :

द्वितीय पत्र (विषयगत)					
पत्र	विषय	खण्ड	अङ्कभार	छोटो उत्तर	लामो उत्तर
द्वितीय	सेवा सम्बन्धित कार्य-ज्ञान (Job Based-Knowledge)	(A)	५०	६ प्रश्न × ५ अङ्क = ३०	२ प्रश्न × १० अङ्क = २०
		(B)	५०	६ प्रश्न × ५ अङ्क = ३०	२ प्रश्न × १० अङ्क = २०