

प्रदेश लोक सेवा आयोग

कोशी प्रदेश, विराटनगर

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

पाठ्यक्रमको रूपरेखा: यस पाठ्यक्रमको आधारमा निम्नानुसार दुई चरणमा परीक्षा लिइने छ :

प्रथम चरण: लिखित परीक्षा

पूर्णाङ्क: २००

द्वितीय चरण: कम्प्युटर सीप परीक्षण र अन्तर्वार्ता

पूर्णाङ्क :- ४०

परीक्षा योजना (Examination Scheme)

प्रथम चरण: लिखित परीक्षा

पत्र	विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या अङ्कभार	समय
प्रथम	सेवा सम्बन्धित कार्य-ज्ञान (Job related-knowledge)	१००	४०	वस्तुगत (बहुवैकल्पिक) प्रश्न (MCQs)	Section A: २० प्रश्न x २ अङ्क = ४० अङ्क Section B: २० प्रश्न x २ अङ्क = ४० अङ्क Section C: १० प्रश्न x २ अङ्क = २० अङ्क	४५ मिनेट
द्वितीय		१००	४०	विषयगत (Subjective)	Section A: २ प्रश्न x १० अङ्क = २० अङ्क ४ प्रश्न x ५ अङ्क = २० अङ्क Section B: २ प्रश्न x १० अङ्क = २० अङ्क ४ प्रश्न x ५ अङ्क = २० अङ्क Section C: ४ प्रश्न x ५ अङ्क = २० अङ्क	२ घण्टा ३० मिनेट

द्वितीय चरण: कम्प्युटर सीप परीक्षण र अन्तर्वार्ता

विषय	पूर्णाङ्क	परीक्षण प्रणाली	समय
कम्प्युटर सीप परीक्षण (Computer Skill Test)	१०	प्रयोगात्मक (Practical)	२० मिनेट
व्यक्तिगत अन्तर्वार्ता (Individual Interview)	३०	मौखिक (Oral)	-

द्रष्टव्य :

- यो पाठ्यक्रमको योजनालाई प्रथम चरण र द्वितीय चरण गरी दुई चरणमा विभाजन गरिएको छ।
- लिखित परीक्षाको प्रश्नपत्रको माध्यम भाषा पाठ्यक्रमको विषयवस्तु जुन भाषामा दिइएको छ सामान्यतया सोही भाषा नेपाली वा अंग्रेजी मध्ये कुनै एक भाषा हुनेछ। तर विषयवस्तुलाई स्पष्ट गर्नुपर्ने अवस्थामा दुवै भाषासमेत प्रयोग गर्न सकिने छ।
- परीक्षार्थीले उत्तर नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै भाषामा लेख्न सक्नेछन्।
- प्रथम पत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ।
- वस्तुगत वा बहुवैकल्पिक (Multiple Choice) प्रश्नको उत्तर गलत दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ। उत्तर नदिएको अवस्थामा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन।
- वस्तुगत (बहुवैकल्पिक) प्रश्न हुने परीक्षामा OMR उत्तरपुस्तिका प्रयोग हुनेछ। OMR उत्तरपुस्तिकाको विवरण खण्डमा सबै विवरण कालो मसी भएको कलम/डटपेनले लेखी उत्तरपुस्तिकामा दिइएको निर्देशन बमोजिम निर्दिष्ट गरिएको घेराभित्र नमूनामा देखाइए अनुसार पूरा भरिने गरी Bubble लगाउनु पर्नेछ। उत्तरपुस्तिकामा लेखनुपर्ने विवरण बाहेक अन्यत्र दाग लगाउन वा कोर्न वा पट्याउन वा खुम्च्याउन हुँदैन। उत्तरपुस्तिकामा अन्य कुनै सङ्केत गरेको भए त्यस्तो उत्तरपुस्तिका रद्द हुनेछ।
- बहुवैकल्पिक प्रश्न हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन।
- विषयगत प्रश्नहरूको हकमा तोकिएको अङ्कको एउटा लामो प्रश्न वा एउटै प्रश्नका दुई वा दुईभन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सकिने छ।
- विषयगत प्रश्न हुने पत्रमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन्। परीक्षार्थीले प्रत्येक खण्डका प्रश्नको उत्तर सोही खण्डको उत्तरपुस्तिकामा लेखनुपर्नेछ, अन्यथा उक्त उत्तरपुस्तिका परीक्षण हुनेछैन। थप कपीको प्रयोग भएमा सोही खण्डको उत्तरपुस्तिकामा नत्थी गर्नु पर्नेछ।
- परीक्षामा सोधिने प्रश्नसङ्ख्या, अङ्क र अङ्कभार यथासम्भव परीक्षा योजनामा उल्लेख भए अनुसार हुनेछ।
- यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जुनसुकै कुरा लेखिएको भए तापनि पाठ्यक्रममा परेका ऐन, नियम तथा नीतिहरू परीक्षाको मितिभन्दा तीन महिना अगाडि संशोधन भएका वा संशोधन भई हटाइएका वा थप गरी संशोधन भई कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ।
- प्रथम चरण (First Phase) अन्तर्गत प्रथम पत्रको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरू मात्र द्वितीय पत्रको लिखित परीक्षामा सम्मिलित हुन पाइने छ।
- परिमार्जित यो पाठ्यक्रम आ.व. २०८३/०८४ देखि प्रकाशित हुने विज्ञापनहरूमा लागू हुनेछ।

पाठ्यक्रम लागू हुने मिति: २०८३/४/१

प्रदेश लोक सेवा आयोग
कोशी प्रदेश, विराटनगर
प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक
परीक्षाको पाठ्यक्रम
प्रथम र द्वितीय पत्र
सेवा सम्बन्धित कार्य-ज्ञान (Job based knowledge)

Section- A

1. Introduction

1.1. Forestry Organization in Nepal

- 1.1.1 Federal Structure:** Roles of the Ministry of Forests and Environment (MoFE), Department of Forests and Soil Conservation (DoFSC), Department of National Parks and Wildlife Conservation (DNPWC), Forest Research and Training Centre (FRTC).
- 1.1.2 Koshi Province Structure:** Ministry of Tourism, Forests and Environment (MoTFE), Provincial Forest Directorate and Division Forest Offices (DFOs).
- 1.1.3 Devolution of Power:** Jurisdictional functions and coordination among Federal, Provincial, and Local Government.

1.2. Legal Framework and Legislation

- 1.2.1 Forest Act, 2076:** National Forest classification, forest ownership structures, user group registration and handing over procedures, and basic conservation strategies.
- 1.2.2 Forest Regulations, 2079:** Procedural frameworks governing the commercial sale, internal distribution, spatial mapping, boundary demarcation, and structural layout of government and community forest lands.
- 1.2.3 Province Forest Act, 2077 (Koshi Province):** Local structural systems, specific tax collection regimes, and regulatory mechanism and procedures.

1.3. Forest Products Collection and Marketing Guidelines

- 1.3.1 Harvesting and Collection Procedure:** Regulatory mechanisms, specific harvesting seasons and extraction criteria for timber and non-timber forest products (NTFPs).
- 1.3.2 Transportation and Depot Mechanisms:** Official procedures for securing transportation permits (*Chhodpurji*), timber grading practices, wood marking methods, and cross-district checkpoint controls.
- 1.3.3 Royalty Valuation:** Royalty valuation charts for specific wood gradings and high-valued medicinal herbs.
- 1.3.4 Marketing and Trading:** Bidding, forest auctions at local level, priority rules, and knowledge on international trade systems.

1.4. Wildlife and Conservation Jurisprudence

- 1.4.1 National Parks and Wildlife Conservation Act, 2029 (With Amendments):** Legal parameters defining protected areas, wildlife protection systems, and definitions of wildlife crimes.
- 1.4.2 Wildlife Regulations:** Legal systems on hunting bans, scientific research permits, conservation tourism and entry passes, and buffer zone community's rights.

1.5. Investigation of Forest Offences and Legal Procedures

- 1.5.1 Crime Detection and Arrest Orders:** Search protocols, arrest warrant process, and rules for seizure of materials (timber, vehicles, tools) during illegal operations.
- 1.5.2 Evidence Collection and Documentation:** Draft writing for the crime scene report (*Muchulka*), recording suspect's confessions, and gathering technical testimony.
- 1.5.3 Case Filing and Prosecution:** Official charge sheet (*Abhiyog-patra*) preparation, presenting cases to judicial authorities, tracking time-limits, and managing evidence

1.6. Major Forest Types of Nepal

- 1.6.1 Climate-Based Classification of Forests:** Detailed study of the 35 forest types across 5 ecological zones: Tropical, Sub-tropical, Temperate, Sub-alpine, and Alpine.
- 1.6.2 Tenure-Based Classifications:** Management, legal rights, and use-based rights, differences between National Forests (Community, Collaborative, Leasehold, Religious, Protected) and Private Forests.

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेस्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 1.7. **Scientific Names and Silviculture of tree species**
 - 1.7.1 **Key Tree Species:** Botanical attributes, structural parameters, geographic ranges, and usage of commercial species (e.g., *Shorea robusta*, *Dalbergia sissoo*, *Acacia catechu*, *Pinus roxburghii*, *Alnus nepalensis*).
 - 1.7.2 **Key NTFP Species:** Scientific names, collection methods, and commercial value of high-priority non-timber species.
- 1.8. **Deforestation and Forest Degradation**
 - 1.8.1 **Drivers of Forest Loss:** Analysis of major drivers - infrastructure expansion, shifting agricultural borders, urbanization, and illegal logging.
 - 1.8.2 **Ecological Impacts:** Disruption of natural ecosystems, landscape fragmentation, soil carbon loss, and changes to water catchments.
- 1.9. **Soil Erosion and Conservation Methods**
 - 1.9.1 **Types of Soil Erosion:** Geomorphic study of splash, sheet, rill, gully, and mass-wasting.
 - 1.9.2 **Engineering Interventions:** Structural parameters of check dams, retaining walls, gully lining, and contour bunds.
 - 1.9.3 **Bio-engineering Interventions:** Root-binding vegetation selection, palisades fascines, brush-layering, live-fencing, and slope-stabilization.
- 1.10. **Agro-Forestry, Private Forestry, and Urban Forestry**
 - 1.10.1 **Agro-Forestry:** Structural design patterns for Agrisilvicultural, Silvopastoral, and Agrosilvopastoral.
 - 1.10.2 **Private Forestry Promotion:** Legal registration process, subsidies, tax exemptions, and technical support frameworks for private plant growers.
 - 1.10.3 **Urban Forestry and Forest Engineering:** Designing roadside greenbelts, municipal parks, urban watershed buffers, and air-quality corridor.
- 1.11. **Regional Forest Management and its Challenges**
 - 1.11.1 **Terai Lowlands:** Combating massive illegal logging, organized land encroachment, boundary shifts, and over-aged plantations.
 - 1.11.2 **Mid-Hills Zone:** Forest fire management, controlling invasive weeds, pine plantation single-crop issues, and demographic shifts due to out-migration.
 - 1.11.3 **High Himalayas:** Adapting to harsh regeneration conditions, open alpine grazing pressures, unsustainable harvesting of medicinal plants, and high climate sensitivity.
- 1.12. **Critical Challenges of the Chure Region in Koshi Province**
 - 1.12.1 **Fragile Geology:** High vulnerability of the upper Siwalik beds to rapid mass erosion and land degradation.
 - 1.12.2 **Exploitative Pressures:** Managing illegal riverbed mining, flash-flood control downstream - upstream relationships.
 - 1.12.3 **Conservation Initiatives:** Strategic planning under the President Chure-Terai Madhesh Conservation Program, check-dam design, and multi-tier conservation initiatives.
- 1.13. **Climate Change**
 - 1.13.1 **Core Mechanics:** Responsible entity, scientific analysis of greenhouse gas emission, international temperature tracking, and changing pattern of monsoon.
 - 1.13.2 **Mitigation and Adaptation:** Practical field applications under the National Adaptation Programme of Action (NAPA) and Local Adaptation Plans for Action (LAPA).
 - 1.13.3 **Forest Carbon Credits:** Clean development mechanisms (CDM), understanding REDD+, monitoring of baseline carbon inventory and international climate finance.

2. **Silviculture**

2.1. **Fundamental Principles**

- 2.1.1 **Concepts:** Growth curves, stand dynamics, and the biological principles governing forest crops.
- 2.1.2 **Ecological Applications:** Managing tree growth to optimize biomass production, balance water cycles, and preserve forest floor ecosystems.

2.2. Locality Factors

- 2.2.1 Climatic:** Temperature patterns, annual rainfall distribution, light intensity, and impact of local wind.
- 2.2.2 Physiographic:** Altitude and aspect variations, slope gradients, and landform structures.
- 2.2.3 Edaphic:** Soil texture, depth profiles, structural types, soil chemical composition, and nutrient availability.
- 2.2.4 Biotic:** Human interference patterns, cattle grazing footprints, wildlife browsing, and micro-faunal soil networks.

2.3. Regeneration

- 2.3.1 Natural:** High forests, managing natural seed fall, coppicing, root sucker, and seedling establishment.
- 2.3.2 Artificial:** Direct seeding, planting root-shoot cuttings, and managing bare-root or polybag seedlings.

2.4. Forest Nursery Management and Plantation Forestry

- 2.4.1 Planning and Layout:** Site selection criteria, water supply networks, structural design of nursery beds (germination vs. transplant beds), and soil-compost ratio.
- 2.4.2 Seed Handling:** Provenance collection protocols, seed purity checks, viability testing, and dormancy-breaking treatments.
- 2.4.3 Seedling Production Processes:** Sowing schedules, root-pruning schedules, weeding routines, shading adjustments, and hardening-off techniques.
- 2.4.4 Plantation:** Grid layout design, pit digging sizes (30cm × 30cm × 30cm or 45cm × 45cm × 45cm), planting schedules, spacing patterns (2m × 2m or 2.5m × 2.5m), and initial mortality replacement (*Bejuwara*), enrichment plantation.

2.5. Tending Operations

- 2.5.1 Early-Stage:** Weeding schedules, cleaning out competing non-crop vegetation, and sapling-stage cuttings.
- 2.5.2 Late-stage:** Stand Improvement Techniques, Systematic thinning systems (mechanical, elite (mother) tree selection, low/high thinning), pruning methods to improve timber quality and climber cutting.

2.6. Silvicultural Systems and Management

- 2.6.1 Even-Aged:** Technical application of Clear-Felling systems, Shelterwood systems, and Seed-Tree methods.
- 2.6.2 Uneven-Aged:** Shelterwood system, Selection Felling systems and group-selection systems.
- 2.6.3 Coppice:** Simple coppice methods and coppice-with-standards.

2.7. Species-Specific Silvicultural System

- 2.7.1 Sal (*Shorea robusta*):** High light requirements, fire resistance features, frost vulnerability, seed viability constraints, and regeneration.
- 2.7.2 Sissoo (*Dalbergia sissoo*):** Pioneer characteristics, choice of riverbed sites, root-sucker management, and dieback disease prevention.
- 2.7.3 Khayar (*Acacia catechu*):** Colonizing gravelly soils, light-demanding nature, and heartwood development factors for *Katha* extraction.
- 2.7.4 Other Key Species:** Management guides for Teak (*Tectona grandis*), Masala (*Eucalyptus spp.*), Asna (*Terminalia alata*), Poplar (*Populus spp.*), Khote Salla (*Pinus roxburghii*), Utish (*Alnus nepalensis*), Champ (*Michelia champaca*), Gobre Salla (*Pinus wallichiana*), Deodar (*Cedrus deodara*), and Guras (*Rhododendron arboreum*).

2.8. Silvicultural Applications in Koshi Province (Regional adaptation): Applying Shelterwood systems in Sal forests, Selection systems in the high hills, managing uneven-aged natural stands, and implementing block plantation models in southern plains.

3. Forest Inventory and Mensuration

3.1. Accessories of Forest Mensuration

- 3.1.1 Diameter Measurement:** Practical calibration and use of Diameter Tapes, Callipers, and specialized optical instruments.

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 3.1.2 **Height Measurement:** Mathematical principles and field application of Abney's Levels, Sunto Clinometer, and laser hypsometers.
- 3.1.3 **Crown and Age Analysis:** Spherical densiometer for canopy coverage and Pressler's Increment Borers for calculating tree age.
- 3.2. **Standing Tree Mensuration**
 - 3.2.1 **Diameter at Breast Height (DBH):** Standard calibration rules at 1.3 meters above the ground, adjusting measurements for leaning trees, slope distortions, and irregular trunks.
 - 3.2.2 **Standing Tree Height:** Differentiating between total tree height, commercial merchantable height, and crown height parameters.
- 3.3. **Volume, Basal Area, and Biomass Calculation**
 - 3.3.1 **Basal Area:** Understanding and Parameters needed for Basal Area Calculation
 - 3.3.2 **Volume:** Calculating volume using Quarter-Girth formulas and volumetric equations.
 - 3.3.3 **Biomass and Carbon:** Using allometric equations, converting raw volume to dry weight mass, and multiplying by standard carbon fraction values (≈ 0.47).
- 3.4. **Growing Stock Assessment**
 - 3.4.1 **Sampling Methodologies:** Layout systems for fixed-radius circular plots, rectangular blocks, stratified random sampling, and systematic transects.
 - 3.4.2 **Stand Density Calculations:** Extrapolating inventory data to calculate number of stems per hectare, basal area per hectare, and total wood volume per hectare.
- 3.5. **Forest Growth Dynamics**
 - 3.5.1 **Mean Annual Increment (MAI):** Cumulative volume divided by total stand age.
 - 3.5.2 **Current Annual Increment (CAI):** Specific volume growth observed over a single-year period.
 - 3.5.3 **Rotation Determination:** Pinpointing the optimal biological rotation age where the CAI curve culminates the MAI curve.
- 3.6. **Measurement Unit Conversions**
 - 3.6.1 **Conversion:** Multi-directional metric transformations between Foot-Pound-Second (FPS), Centimeter-Gram-Second (CGS), Meter-Kilometer-Second (MKS), and International System (SI) metrics.
 - 3.6.2 **Local Units:** Hand-calculation conversions cubic feet (*Cft*) to cubic meters (m^3), hectares to *Bigha-Katha* or *Ropani-Aana* and local units on biomass weight.
- 3.7. **Log and Stacked Wood Calculations**
 - 3.7.1 **Log Volume:** Applying Huber's, Smalian's, and Newton's equations using mid-diameter or end-diameter inputs.
 - 3.7.2 **Stacked Fuelwood Volume:** Measuring gross stack volume ($L \times W \times H$ in feet or meters), applying standard solid wood conversion factors, and converting to *Chatta* or air-dry metric tons.

Section- B

- 4. **Forest Protection and Utilization**
 - 4.1. **Forest Protection attributes**
 - 4.1.1 **Encroachment and Illegal Logging:** Deployment of forest patrols, setting up remote lookouts, boundary trenching, and legal counter-encroachment steps.
 - 4.1.2 **Forest Fire Management:** Building fire lines, fuel load reduction clearing, setting up early-warning networks, and tactical back-firing operations.
 - 4.1.3 **Grazing Control:** Managing rotational grazing plots, enforcing community stall-feeding methods, and setting carrying-capacity limits.
 - 4.1.4 **Pathology and Pest Control:** Life cycle studies, damage symptoms, and integrated control measures for pests (e.g., *Sal* heartwood borer) and common nursery root-rot fungi.
 - 4.2. **Important NTFPs of Koshi Province (NTFPs Catalogues):** Distribution maps, sustainable harvesting seasons, and sorting systems for high-value alpine medicinal plants, resin-producing pines, and local wild bamboo and their varieties.

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 4.3. **Post-Harvest activities and Supply Chain**
 - 4.3.1 **Harvesting Systems:** Felling directions to minimize timber breakage, impact logging and logging procedures, and low-impact extraction routes.
 - 4.3.2 **Processing Protocols:** Log cross-cutting methods, sorting products by grade classes, air-drying stacking patterns, and regional warehouse and moisture control.
- 4.4. **Wood Seasoning and Preservation Technology**
 - 4.4.1 **Seasoning Methodologies:** Comparing open-air stack seasoning versus steam-heated kiln drying operations.
 - 4.4.2 **Preservation Treatments:** Chemical dipping methods, brush coatings, and vacuum pressure impregnation processes using eco-friendly wood preservatives.
- 4.5. **Forest-Based Industry**
 - 4.5.1 **Primary Industry:** Technical setup requirements, log intake flows and recovery rates for sawmills, veneer production and plywood factory.
 - 4.5.2 **Secondary Industry:** Small-scale processing units for herbal extraction, essential oil distillation plants, and handmade paper processing.
5. **Wildlife Management**
 - 5.1. **Wildlife Diversity (Population dynamics):** Ecological distribution and habitat tracking of large mammals, diverse habitat patterns of mammals, migratory bird species and river reptiles.
 - 5.2. **Protected Fauna of Nepal**
 - 5.2.1 **Schedule I Mammals:** Distribution, survival threats and conservation initiatives for the 27 legally protected mammal species (including Royal Bengal Tiger, One-horned Rhinoceros, Snow Leopard, Asian Elephant, and Red Panda).
 - 5.2.2 **Protected Avifauna and Reptiles:** Species profiles and protection measures for the 9 protected bird species (e.g. Danphe, Munal) and 3 protected reptile species (Gharial, Python, Monitor Lizard).
 - 5.3. **National Parks and Wildlife Reserves Management**
 - 5.3.1 **System Layout:** Detailed management plans for major parks (Chitwan, Bardia and Sagarmatha) and specialized reserves - Koshi Tappu Wildlife Reserve.
 - 5.3.2 **Conservation Infrastructure:** Developing waterholes, controlled grassland burning, removing invasive weeds, and anti-poaching programs.
 - 5.4. **Conservation Area Management (Co-Management and/or Partnerships):** Studying collaborative conservation models managed by local communities or NGOs (e.g., Annapurna, Manaslu, Kanchenjunga Conservation Areas).
 - 5.5. **Buffer Zone Area Management (Community benefits):** Setting up Buffer Zone User Committees, revenue sharing models (30-50% of park income goes to local development), and promoting sustainable eco-tourism.
 - 5.6. **Human-Wildlife Conflict Management**
 - 5.6.1 **Conflicts/disputes:** Analyzing wild elephant crop raiding, leopard livestock attacks, and crop destruction by wild boars, retaliation killings.
 - 5.6.2 **Mitigation Methods:** Solar-powered electric fencing, trench lines, biological barriers (mint/chamomile planting), relief compensation amount and process.
 - 5.7. **Understanding Biodiversity Profiles (Ecosystem Monitoring):** Tracking biodiversity hotspots across genetic, species, and community levels, mapping biological corridors, and setting up long-term ecosystem monitoring.
6. **Community-Based and Private Forest Management**
 - 6.1. **Community-Based Forestry**
 - 6.1.1 **Community Forests (CF):** Complete transfer of protection, management, and sustainable utilization, local Forest User Groups (CFUGs) and their rights.
 - 6.1.2 **Collaborative Forests (CFM):** Shared benefits among local communities, local governments, and the Department of Forests.
 - 6.1.3 **Leasehold Forests:** Target-group Forest allocations aimed at poverty reduction and restoring degraded forests.

प्रदेश लोक सेवा आयोग

कोशी प्रदेश, विराटनगर

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 6.1.4 Religious and Protected Forests:** Cultural heritage forest protection systems and designated ecological protection zones.
- 6.2. Handing over Administrative Process (Procedural Steps):** Community consensus building, physical boundary mapping, user identification, application filing, and handing over of certificate by the DFO.
- 6.3. Management Guidelines and Directives (Policy Compliance):** Practical implementation of the Community Forest Inventory Guidelines and updated Collaborative Forest Management Directives.
- 6.4. Constitution and Operational Plan (OP) Preparation:** Constitution writing by Community Group, forest background analysis, setting sustainable annual allowable cuts, calculating time pattern for block timber extraction, and adding biodiversity and climate issues in additional sections.
- 6.5. Challenges of Community Forestry**
- 6.5.1 Governance Issues:** Enforcing fair benefit distribution, elite capture prevention, maintaining financial transparency, and addressing gender inclusion.
- 6.5.2 Technical Challenges:** Re-calculating outdated inventory plans, introducing scientific forest management, and managing pest outbreaks.
- 6.6. Private Forest Enterprise Promotion in Koshi Province (Economic Drivers):** Differences between *Numbari Avadi* and Private Forests, Fast-growing short-rotation timber and markets (e.g., Malabar Neem, Poplar), setting up private timber yards, and simplified tree cutting and transport permits and establishing seasoning plants.
- 6.7. NTFP Production in Private Land and Trade Promotion (Market Integration):** Cultivating high-value medicinal plants on farm land, building local processing hubs, raw materials collection, and strengthening export trade in Koshi Province.

खण्ड (Section) (C)

१. नेपालको संविधानको भाग १ देखि ५ र भाग १३ देखि २२ सम्म तथा अनुसूचीहरू
२. प्रदेश निजामती सेवा ऐन, २०७९ (कोशी प्रदेश) सम्बन्धी सामान्य जानकारी
३. प्रदेश निजामती सेवा नियमावली, २०८१ (कोशी प्रदेश) सम्बन्धी सामान्य जानकारी
४. स्थानीय सरकारी सेवा (गठन तथा सञ्चालन) ऐन, २०८० (कोशी प्रदेश) सम्बन्धी सामान्य जानकारी
५. प्रदेश सुशासन (व्यवस्थापन तथा सञ्चालन) ऐन, २०७६ (कोशी प्रदेश) सम्बन्धी सामान्य जानकारी
६. प्रदेश सुशासन (व्यवस्थापन तथा सञ्चालन) नियमावली, २०७७ (कोशी प्रदेश) सम्बन्धी सामान्य जानकारी
७. प्रदेश लोक सेवा आयोग ऐन, २०७६ (कोशी प्रदेश) तथा नियमावली सम्बन्धी सामान्य जानकारी
८. प्रदेश आर्थिक कार्यविधि तथा वित्तीय उत्तरदायित्व ऐन, २०७८ (कोशी प्रदेश) को परिच्छेद १ र परिच्छेद ६ सम्बन्धी जानकारी
९. कोशी प्रदेशको योजनावद्ध विकास तथा चालु आवधिक योजनासम्बन्धी सामान्य जानकारी

नोट: प्रथमपत्रको वस्तुगत प्रश्न सामान्यतया देहाय अनुसारका इकाइबाट देहाय अनुसार प्रश्न सोधिने छ।

विवरण	खण्ड A			खण्ड B			खण्ड C					
इकाइ	१	२	३	४	५	६	१	२-३	४	५-६	७-८	९
प्रश्न संख्या	६	६	८	१०	५	५	२	२	२	२	१	१

द्वितीय पत्रको विषयगत प्रश्न सामान्यतया देहाय अनुसारका इकाइबाट देहाय अनुसार प्रश्न सोधिने छ।

विवरण	खण्ड A				खण्ड B				खण्ड C				
इकाइ	१	२	३		४	५	६		१	२-३-४	५-६-७	८-९	
पूर्णाङ्क	५	१०	१०	५	१०	५	१०	५	५	५	५	५	५
प्रश्न संख्या	२	१	१	२	१	१	१	१	२	१	१	१	१

कम्प्युटर सीप परीक्षण (Computer Skill Test)

परीक्षा योजना (Examination Scheme)

विषय	पूर्णाङ्क	विषयवस्तु शीर्षक	अङ्क	समय
कम्प्युटर सीप परीक्षण (Computer Skill Test)	१०	Devanagari Typing	२.५ अङ्क	५ मिनेट
		English Typing	२.५ अङ्क	५ मिनेट
		Word Processing	२ अङ्क	१० मिनेट
		Electronic Spreadsheet	१ अङ्क	
		Presentation System	१ अङ्क	
		Windows basic, Email and Internet	१ अङ्क	
जम्मा			१० अङ्क	२० मिनेट

Contents

1. Windows basic, Email and Internet

- Introduction to Graphical User Interface
- Use & Update of Antivirus
- Concept of virus, worm, spam etc.
- Starting and shutting down Windows
- Basic Windows elements - Desktop, Taskbar, My Computer, Recycle Bin, etc.
- Concept of file, folder, menu, toolbar
- Searching files and folders
- Internet browsing & searching the content in the web
- Creating Email ID, Using email and mail client tools
- Basic Network troubleshooting (checking network & internet connectivity)

2. Word processing

- Creating, saving and opening documents
- Typing in Devanagari and English
- Copying, Moving, Deleting and Formatting Text
- Paragraph formatting (alignment, indentation, spacing etc.)
- Creating lists with Bullets and Numbering
- Creating and Manipulating Tables
- Borders and Shading
- Creating Newspaper Style Documents Using Column
- Security Techniques of Document
- Inserting header, footer, page number, Graphics, Pictures, Symbols
- Page setting, previewing and printing of documents
- Mail merge

3. Presentation System

- Introduction to presentation application
- Creating, Opening & Saving Slides
- Formatting Slides, Slide design, Inserting header & footer
- Slide Show
- Animation
- Inserting Built-in picture, Picture, Table, Chart, Graphs, and Organization Chart etc.

4. Electronic Spreadsheet

- Organization of Electronic Spreadsheet applications (Cells, Rows, Columns, Worksheet, Workbook and Workspace)
- Creating, Opening and Saving Work Book

प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- Editing, Copying, Moving, Deleting Cell Contents
- Formatting Cells (Font, Border, Pattern, Alignment, Number, Protection, Margins and text wrap)
- Formatting Rows, Column and Sheets
- Using Formula with Relative and Absolute Cell Reference
- Using Basic Functions (IF, SUM, MAX, MIN, AVERAGE etc.)
- Sorting and Filtering Data
- Inserting Header and Footer
- Page Setting, Previewing and Printing

अंग्रेजी वा देवनागरी Typing Skill Test को लागि निर्देशन:-

1. देवनागरी Typing Skill Test को लागि देहाय अनुसार अंक प्रदान गरिनेछ:-

शुद्ध शब्द प्रति मिनेट (Correct Words/Minute)	पाउने अङ्क
५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	० अङ्क
५ वा सोभन्दा बढी ७.५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	०.५० अङ्क
७.५ वा सोभन्दा बढी र १० भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	०.७५ अङ्क
१० वा सोभन्दा बढी र १२.५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.०० अङ्क
१२.५ वा सोभन्दा बढी र १५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.२५ अङ्क
१५ वा सोभन्दा बढी र १७.५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.५० अङ्क
१७.५ वा सोभन्दा बढी र २० भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.७५ अङ्क
२० वा सोभन्दा बढी र २२.५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	२.०० अङ्क
२२.५ वा सोभन्दा बढी र २५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	२.२५ अङ्क
२५ वा सोभन्दा बढी शुद्ध शब्द प्रति मिनेट बापत	२.५० अङ्क

2. English Typing Skill Test को लागि देहाय अनुसार अंक प्रदान गरिनेछ:-

शुद्ध शब्द प्रति मिनेट (Correct Words/Minute)	पाउने अङ्क
६ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	० अङ्क
६ वा सोभन्दा बढी ९ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	०.५० अङ्क
९ वा सोभन्दा बढी र १२ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	०.७५ अङ्क
१२ वा सोभन्दा बढी र १५ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.०० अङ्क
१५ वा सोभन्दा बढी र १८ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.२५ अङ्क
१८ वा सोभन्दा बढी र २१ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.५० अङ्क
२१ वा सोभन्दा बढी र २४ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	१.७५ अङ्क
२४ वा सोभन्दा बढी र २७ भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	२.०० अङ्क
२७ वा सोभन्दा बढी र ३० भन्दा कम शुद्ध शब्द प्रति मिनेट बापत	२.२५ अङ्क
३० वा सोभन्दा बढी शुद्ध शब्द प्रति मिनेट बापत	२.५० अङ्क

3. अंग्रेजी वा देवनागरी Typing मा दिइएको Text लाई आधार मानी टाइप गरेको Text सँग भिडाई चेक गरिनेछ। दिइएको अंग्रेजी वा देवनागरी Text मा उल्लिखित स्थान बमोजिम परीक्षार्थीहरूले आफ्नो Text मा Punctuation टाइप नगरेको पाइएमा त्यसको शब्दमा गणना गरिने छैन। तत्पश्चात निम्न Formula प्रयोग गरी शुद्ध शब्द प्रति मिनेट (Correct Words/minute) गणना गरिनेछ।

Formula:

$$\text{शुद्ध शब्द प्रति मिनेट (Correct words/minute)} = \frac{(\text{Total words typed} - \text{Wrong words})}{5}$$

प्रदेश लोक सेवा आयोग
कोशी प्रदेश, विराटनगर
प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तर्गत वन सेवा, जनरल फरेष्ट्री समूह, चौथो तह, फरेष्टर पदको प्रतियोगितात्मक
परीक्षाको पाठ्यक्रम

नमूना प्रश्नहरू

Multiple Choice Questions

1. Which constitutional provision primarily guides forest conservation in Nepal?
(A) Right to Property
(B) Environmental protection and biodiversity
(C) Trade and Commerce
(D) Local Taxation
2. Which method is an example of artificial regeneration?
(A) Coppicing
(B) Natural seeding
(C) Plantation
(D) Root suckering
3. Basal area of a tree is calculated using which measurement?
(A) Crown width
(B) Diameter at breast height (DBH)
(C) Tree age
(D) Bark thickness
4. Which is a community-based forest management system in Nepal?
(A) Urban Forest
(B) Religious Forest
(C) Industrial Forest
(D) Coastal Forest
5. Human–wildlife conflict is most closely associated with:
(A) Protected area management
(B) Road construction only
(C) Cloud formation
(D) River navigation

Short Subjective Questions

1. Explain the major forest types of Nepal based on climate and land ownership. (5)
2. Describe the objectives and importance of forest nursery and seedling production. (5)

Long Subjective Questions

1. Discuss the major provisions of the Forest Act, 2076 and Province Forest Act, 2077 regarding sustainable forest management. (10)
2. Explain the different community-based forest management systems in Nepal and discuss their role in biodiversity conservation and local livelihoods (5+5)