# सुदुरपश्चिम प्रदेश

प्रदेश निजामती सेवा अन्तरगत वन सेवा, वातावरण समूह, सातौं तह, वातावरण निरीक्षक वा सो सरह पदको खुला, अन्तर तह र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

यस पाठ्यक्रम योजनालाई निम्न अनुसार दुई चरणमा विभाजन गरिएको छ:

प्रथम चरण: लिखित परीक्षा (Written Examination) द्वितीय चरण: (क) सामृहिक परीक्षण (Group Test)

(ख) अन्तरवार्ता (Interview) पूर्णांक : २५

# परीक्षा योजना (Examination Scheme)

### प्रथम चरण: लिखित परीक्षा (Written Examination)

पत्र	विषय	खण्ड	पूर्णांक	उत्तीर्णांक	परीक्षा प्रणाली		प्रश्न × अंक	समय
प्रथम	General Subject	खण्ड (क) General Awareness & General Reasoning Test खण्ड (ख) General Technical Subject	. 100	40	वस्तुगत (Objective)	(MCQs)	50 ×1	1:30 Hrs
द्वितीय	Technical Subject		100	40	विषयगत (Subjective)	छोटो उत्तर लामो उत्तर	4 × 5 8 ×10	3 Hrs

# द्वितीय चरण: सामूहिक परीक्षण (Group Test) र अन्तरवार्ता (Interview)

पत्र/विषय	पूर्णांक	उत्तीर्णांक	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	१०	- 4	सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तरवार्ता (Interview)	२५	-	मौखिक (Oral)	-

### द्रष्टव्य:

- १. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुबै हुन सक्नेछ।
- २. प्रथम पत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ।
- ३. वस्तुगत बहुवैकल्पिक प्रश्नहरू (Multiple Choice Questions) को गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अंक कट्टा गरिनेछ। तर उत्तर नदिएमा त्यस बापत अंक दिइने छैन र अंक कट्टा पनि गरिने छैन।
- ४. बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन।
- ५. विषयगत प्रश्नका लागि तोकिएका १० अंकका प्रश्नहरूको हकमा १० अंकको एउटा लामो प्रश्न वा एउटै प्रश्नका 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 सिकने छ।
- ६. द्वितीय पत्रमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तर पुस्तिकाहरू हुनेछन । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डको उत्तर पुस्तिकामा लेख्नु पर्नेछ ।
- ७. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापिन पाठ्यक्रममा परेका ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि संशोधन भएका वा संशोधन भई हटाइएका वा थप गरी संशोधन भई कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ।
- ८. प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको सामूहिक परीक्षण र अन्तरवार्तामा सिम्मिलित गराइनेछ।
- ९. पाठ्यक्रम लागु मिति : २०८१।११।०६ गते देखि

पूर्णांक : २००

पूर्णांक : १०

पूर्णांक : २००

पूर्णांक : ३५

# सुदुरपश्चिम प्रदेश

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प्रथम चरण : लिखित परीक्षा (Written Examination)

प्रथम पत्र: खण्ड (क)

### **General Awareness & General Reasoning Test (50 Marks)**

### 1. General Awareness and Contemporary Issues

(30 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 & personalities, social, cultural and economic conditions in modern history of Nepal
- 1.5 National and Sudurpashchim Province Current periodic plan
- 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, FAO, SAARC, WTO & 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 Sudurpashchim Province Civil Service Act, 2079 & Regulation, 2081
- 1.11 Local Government Operation Act, 2074
- 1.12 Sudurpashchim Province Good Governance Act, 2075
- 1.13 Functional scope of public services
- 1.14 Public Service Charter
- 1.15 Concept, objective and importance of public policy
- 1.16 Fundamentals of management: planning, organizing, directing, controlling, coordinating, decision making, motivation and leadership
- 1.17 Government planning, budgeting and accounting system
- 1.18 Major International Theories and agreements related to environment and climate change.
- 1.19 Major events and current affairs of national and international importance

### 2. General Reasoning Test

(20 Marks)

### 2.1. Logical Reasoning (7 Marks)

Verbal Ability, Alphanumeric series, Reasoning analogy, Classification, Coding-Decoding, Order & Ranking, Distance & Directions, Analytical and Logical Reasoning, Assertion and Reason, Statement and Conclusion, Input-output, Venn-diagram

### 2.2. Numerical Reasoning (7 Marks)

Arithmetic Series, Analogy, Classification, Arithmetical Reasoning, Fraction. Percentage, Ratio, Average, Profit & Loss, Time & Work, Date & Calendar, Data Sufficiency, Data Interpretation & Data Verification

### 2.3. Spatial Reasoning (6 Marks)

Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion, Embedded Images, Image Formation & Analysis, Mirror and Water Images, Cubes and Dices, Paper Folding & Cutting

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प्रथम पत्र: खण्ड (ख)

# **General Technical Subject (50 Marks)**

### Section (A) – 10 Marks

### 1. Environmental Facets

### 1.1. Environment: Concept, Scope and Practices

- 1.1.1. Development of human society and environment
- 1.1.2. Physical, biological and socio-economic aspects of environment and their inter relationships
- 1.1.3. Environmental degradation and manifestations (land, water and air)
- 1.1.4. Environmental movements and environmental ethics

### 1.2. Ecology

- 1.2.1. Population characteristics and regulations
- 1.2.2. Community characteristics, regulation and succession
- 1.2.3. Ecosystem dynamics: energy flow, biogeochemical cycles
- 1.2.4. Terrestrial biomes and characteristics

### 1.3. Environmental Geology

- 1.3.1. Geological materials and structures
- 1.3.2. Weathering and erosion: types, cycle and control
- 1.3.3. Mass movement: causes and mechanisms
- 1.3.4. Fluvial, glacial and Aeolian environmental processes

### 1.4. Climatology and Hydrometeorology

- 1.4.1. Weather and Climate in Sudurpashchim.
- 1.4.2. Mechanisms of wind development, air masses dynamics
- 1.4.3. Climatic systems, distribution and classifications
- 1.4.4. Floods: classification, causes, Triggering factors

### 1.5. Global Environmental Issues

- 1.5.1. Global warming
- 1.5.2. Land use change
- 1.5.3. Payment for ecosystem services
- 1.5.4. Ozone layer depletion and acid rain
- 1.5.5. Deforestation and forest degradation.

### 2. Environmental Resources

### 2.1. Water Resources

- 2.1.1. Water resources: sources, extent and assessment
- 2.1.2. Integrated Water Resource Management (IWRM)
- 2.1.3. Water resources of Nepal, focused on Sudurpashchim province
- 2.1.4. Problems of water resource management in Sudurpashchim Province

### 2.2. Food Resources

- 2.2.1. Major food resources and production
- 2.2.2. Human nutrition and health
- 2.2.3. Food resources of Nepal

### 2.3. Energy Resources

2.3.1. Energy resources: sources and classification

# सुदुरपश्चिम प्रदेश

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- 2.3.2. Alternative energy resources
- 2.3.3. Environmental issues of energy use
- 2.3.4. Energy resource conservation practices
- 2.3.5. Energy resources of Nepal

### 2.4. Forest and Biodiversity

- 2.4.1. Forest types and biodiversity status of Nepal
- 2.4.2. Ex-situ and in-situ conservation
- 2.4.3. Bio diversity conservation approaches
- 2.4.4. Carbon sequestration
- 2.4.5. Issues and challenges to sustainably manage forest and Biodiversity Resources in Nepal.

#### 2.5. Resource Economics

- 2.5.1. Micro-economic analysis for accounting environmental resources
- 2.5.2. Environmental Kuznets curve, cost –benefit analysis and resource accounting
- 2.5.3. Economic and regulatory instruments to control pollution

### Section (B) - 15 Marks

### 3. Environmental Pollution And Engineering

### 3.1. Water Pollution

- 3.1.1. Point and non-point sources and categories of water pollutants
- 3.1.2. Water pollutants effect on human health and ecosystems
- 3.1.3. Standard methods of water analysis
- 3.1.4. Water and waste water treatment technologies

### 3.2. Air Pollution

- 3.2.1. Sources and categories of air pollutants
- 3.2.2. Emission, transport, receptors of air pollutants, criteria air pollutants
- 3.2.3. Air pollutants effects on human health, property and visibility
- 3.2.4 Air pollution measurement and emission estimates
- 3.2.5 Air pollution control technologies

### 3.3. Noise Pollution

- 3.3.1. Noise sources and criteria
- 3.3.2. Health effects of noise and control mechanisms

### 3.4. Waste Management

- 3.4.1. Sources, types and composition of solid wastes
- 3.4.2. Solid waste management systems
- 3.4.3. Issue, generation and management of e-waste, hazardous and hospital waste
- 3.4.4. Management of industrial and agricultural chemical pesticides

### 3.5. Toxicology and Eco-toxicology

- 3.5.1. Acute, sub-acute and chronic toxicity
- 3.5.2. Dose and frequency response relationships
- 3.5.3. Bioassays and attributes for predicting species response to pollution stress

### 3.6. Climate Change

- 3.6.1. Climatic trend and climate Variability.
- 3.6.2. Theories of climate change
- 3.6.3. Climate models and models-based projections of greenhouse effect

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- 3.6.4. Climate change impacts: agriculture and food security, water resources, energy, human health, biodiversity, settlement and infrastructure and livelihood
- 3.6.5. Vulnerability assessment of climate change and mitigation and adaptation approaches (NAPA, LAPA, NDC, NAP)
- 3.6.6. Climate change, science, mitigation and adaption

### Section (C) - 10 Marks

### 4. Environmental Management Systems

#### 4.1. Environmental Assessment

- 4.1.1. Environmental assessment: evolution in global and national perspectives; IEE, EIA and SEA
- 4.1.2. Environmental assessment: process, practices, methods and tools
- 4.1.3. Strategic environmental assessment for decision making and integrated planning

### 4.2. Environmental Management Systems (EMS) & Modeling

- 4.2.1. Concept, components and stages of EMS
- 4.2.2. ISO 14000 series, standards and certification systems
- 4.2.3. Life cycle assessment and environmental labeling
- 4.2.4. Types and importance of environmental models

### 4.3. Remote Sensing &GIS

- 4.3.1. Concept, scope and stages in remote sensing and GIS
- 4.3.2. Remote sensing imagery: acquisition, resolution, analysis and interpretation
- 4.3.3. GIS applications in assessing environmental studies

### 4.4. Environmental Statistics

- 4.4.1. Sampling, data analysis and interpretation
- 4.4.2. Central tendency, measures of dispersion
- 4.4.3. Correlation and regression
- 4.4.4. Parametric and non-parametric tests.

### 4.5. Environmental Governance

- 4.5.1. Institutional arrangement (organ gram) and environmental governance; concerned stakeholders and networks
- 4.5.2. Governance tools and Strategies.
- 4.5.3. Adaptive management and sustainability

### Section (D)-15 Marks

### 5. Legal Frameworks

#### 5.1. Guidelines and Standards

Guidelines and standard Relating to Air (Ambient, Indoor and Stack) and Water (Tolerance Limits for Industrial Effluents to be Discharged into Public Sewers and Inland Surface Waters); Specific Industrial Effluent Standards, Nature conservation national strategic framework for sustainable development-SDG goals of Nepal.

### 5.2. Existing Legislations

Constitution of Nepal; Environmental Protection Act & Environment Protection Regulations; National EIA Guidelines; EIA Guidelines for Forestry Sector, EIA Guidelines for Industry Sector, Plant Protection Act, National Parks and Wildlife Conservation Act, Water Resources Act, Forest Act, Soil

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And Watershed Management Act, Solid Waste Management Act; Pesticide Act & Pesticide Regulation, Hydropower Development Policy, Climate Change Policy, Sudurpashchim Provincial forest Act & Regulation; Provincial Environment Act & Regulation, River based material (Stone, Gravel and Sand) management working procedure of Sudurpas\(\overline{\overli

### 5.3. International Treaties, Protocols & Conventions

Convention on Biological Diversity, 1992; United Nations Framework Convention on Climate Change, 1992; Paris Agreement, GHG Inventory, Nationally Determined contribution and climate finance Mechanism 2015, United National Convention to Combat Desertification, 1994; Kyoto Protocol, 1997; Vienna Convention for the Protection of the Ozone Layer, 1985; Montreal Protocol on Substances that Deplete Ozone Layer, 1987; Basel Convention on the Control of Trans boundary Movements of Hazardous Waste and Their Disposal, 1989; Stockholm Convention on Persistent Organic Pollutants, 2004

### 6. Current Environmental Issues

#### 6.1. Urban Environment

- 6.1.1. Urbanization and its implications on environment (sanitation, solid and hazardous waste, air pollution, water pollution, ground water depletion, food security)
- 6.1.2. Urbanization infrastructures and environment (housing, water supply and sanitation, waste management, transportation, electricity, markets and commercial areas, religious and heritage sites, open spaces and recreational areas)
- 6.1.3. Concept of urban planning and sustainable cities

### 6.2. Land use and Watershed Management

- 6.2.1. Land use and environment (land use pattern and zoning; Guided Land Development (GLD) and land pooling)
- 6.2.2. Principles of land use and land reclamation
- 6.2.3. Factors governing land utilization and land use pattern
- 6.2.4. Scenario of watershed management in Nepal and major watershed of Sudurpashchim province.
- 6.2.5. Development and conservation challenges in watershed management
- 6.2.6. Watershed as eco systems; Upstream-downstream linkages; Measures for watershed conservation

### 6.3. Agriculture and Food Security

- 6.3.1. Faming systems and major farming practices in Sudurpashchim Province.
- 6.3.2. Modern agriculture and its impacts on environment, green revolution
- 6.3.3. Sustainable agriculture and food aid policies
- 6.3.4. Food security in Nepal

### 6.4. Disaster Risks & Vulnerability Assessment

- 6.4.1. Hazard, disaster, risk, exposure and vulnerability analysis
- 6.4.2. Disasters due to earthquake, landslide and river bank erosion, flood, GLOF, drought, epidemics, fire and industrial accidents
- 6.4.3. Disaster risk management and practices
- 6.4.4. Nepal National REDD+ Strategy 2018
- 6.4.5. Sendai Framework

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# सुदरपश्चिम प्रदेश

# प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तरगत इन्जिनियरिङ सेवा, सर्भे समूह, नापी अधिकृत, सातौं तह वा सो सरह पदको खुला, अन्तर तह र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

# द्वितीय पत्र: Technical Subject

### Section (A) – 20 Marks

#### 1. Environmental Facets

### 1.1. Environment: Concept, Scope and Practices

- 1.1.1. Development of human society and environment
- 1.1.2. Physical, biological and socio-economic aspects of environment and their inter relationships
- 1.1.3. Environmental degradation and manifestations (land, water and air)
- 1.1.4. Environmental movements and environmental ethics

### 1.2. Ecology

- 1.2.1. Population characteristics and regulations
- 1.2.2. Community characteristics, regulation and succession
- 1.2.3. Ecosystem dynamics: energy flow, biogeochemical cycles
- 1.2.4. Terrestrial biomes and characteristics

### 1.3. Environmental Geology

- 1.3.1. Geological materials and structures
- 1.3.2. Weathering and erosion: types, cycle and control
- 1.3.3. Mass movement: causes and mechanisms
- 1.3.4. Fluvial, glacial and Aeolian environmental processes

### 1.4. Climatology and Hydrometeorology

- 1.4.1. Weather and Climate in Sudurpashchim.
- 1.4.2. Mechanisms of wind development, air masses dynamics
- 1.4.3. Climatic systems, distribution and classifications
- 1.4.4. Floods: classification, causes, Triggering factors

### 1.5. Global Environmental Issues

- 1.5.1. Global warming
- 1.5.2. Land use change
- 1.5.3. Payment for ecosystem services
- 1.5.4. Ozone layer depletion and acid rain
- 1.5.5. Deforestation and forest degradation.

### 2. Environmental Resources

### 2.1. Water Resources

- 2.1.1. Water resources: sources, extent and assessment
- 2.1.2. Integrated Water Resource Management (IWRM)
- 2.1.3. Water resources of Nepal, focused on Sudurpashchim province
- 2.1.4. Problems of water resource management in Sudurpashchim Province

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### 2.2. Food Resources

- 2.2.1. Major food resources and production
- 2.2.2. Human nutrition and health
- 2.2.3. Food resources of Nepal

### 2.3. Energy Resources

- 2.3.1. Energy resources: sources and classification
- 2.3.2. Alternative energy resources
- 2.3.3. Environmental issues of energy use
- 2.3.4. Energy resource conservation practices
- 2.3.5. Energy resources of Nepal

### 2.4. Forest and Biodiversity

- 2.4.1. Forest types and biodiversity status of Nepal
- 2.4.2. Ex-situ and in-situ conservation
- 2.4.3. Bio diversity conservation approaches
- 2.4.4. Carbon sequestration
- 2.4.5. Issues and challenges to sustainably manage forest and Biodiversity Resources in Nepal.

#### 2.5. Resource Economics

- 2.5.1. Micro-economic analysis for accounting environmental resources
- 2.5.2. Environmental Kuznets curve, cost –benefit analysis and resource accounting
- 2.5.3. Economic and regulatory instruments to control pollution

### Section (B) - 30 Marks

### 3. Environmental Pollution And Engineering

### 3.1. Water Pollution

- 3.1.1. Point and non-point sources and categories of water pollutants
- 3.1.2. Water pollutants effect on human health and ecosystems
- 3.1.3. Standard methods of water analysis
- 3.1.4. Water and wastewater treatment technologies

### 3.2. Air Pollution

- 3.2.1. Sources and categories of air pollutants
- 3.2.2. Emission, transport, receptors of air pollutants, criteria air pollutants
- 3.2.3. Air pollutants effects on human health, property and visibility
- 3.2.4. Air pollution measurement and emission estimates
- 3.2.5. Air pollution control technologies

### 3.3. Noise Pollution

- 3.3.1. Noise sources and criteria
- 3.3.2. Health effects of noise and control mechanisms

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# प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तरगत इन्जिनियरिङ सेवा, सर्भे समूह, नापी अधिकृत, सातौं तह वा सो सरह पदको खुला, अन्तर तह र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठयक्रम

### 3.4. Waste Management

- 3.4.1. Sources, types and composition of solid wastes
- 3.4.2. Solid waste management systems
- 3.4.3. Issue, generation and management of e-waste, hazardous and hospital waste
- 3.4.4. Management of industrial and agricultural chemical pesticides

### 3.5. Toxicology and Eco-toxicology

- 3.5.1. Acute, sub-acute and chronic toxicity
- 3.5.2. Dose and frequency response relationships
- 3.5.3. Bioassays and attributes for predicting species response to pollution stress

### 3.6. Climate Change

- 3.6.1. Climatic trend and climate Variability.
- 3.6.2. Theories of climate change
- 3.6.3. Climate models and models-based projections of greenhouse effect
- 3.6.4. Climate change impacts: agriculture and food security, water resources, energy, human health, biodiversity, settlement and infrastructure and livelihood
- 3.6.5. Vulnerability assessment of climate change and mitigation and adaptation approaches (NAPA, LAPA, NDC, NAP)
- 3.6.6. Climate change, science, mitigation and adaption

### Section (C) - 20 Marks

### 4. Environmental Management Systems

### 4.1. Environmental Assessment

- 4.1.1. Environmental assessment: evolution in global and national perspectives; IEE, EIA and SEA
- 4.1.2. Environmental assessment: process, practices, methods and tools
- 4.1.3. Strategic environmental assessment for decision making and integrated planning

### 4.2. Environmental Management Systems (EMS) & Modeling

- 4.2.1. Concept, components and stages of EMS
- 4.2.2. ISO 14000 series, standards and certification systems
- 4.2.3. Life cycle assessment and environmental labeling
- 4.2.4. Types and importance of environmental models

### 4.3. Remote Sensing &GIS

- 4.3.1. Concept, scope and stages in remote sensing and GIS
- 4.3.2. Remote sensing imagery: acquisition, resolution, analysis and interpretation
- 4.3.3. GIS applications in assessing environmental studies

### 4.4. Environmental Statistics

- 4.4.1. Sampling, data analysis and interpretation
- 4.4.2. Central tendency, measures of dispersion
- 4.4.3. Correlation and regression

# प्रदेश लोक सेवा आयोग सदरपश्चिम प्रदेश

# प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तरगत इन्जिनियरिङ सेवा, सर्भे समूह, नापी अधिकृत, सातौं तह वा सो सरह पदको खुला, अन्तर तह र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

4.4.4. Parametric and non-parametric tests.

### 4.5. Environmental Governance

- 4.5.1. Institutional arrangement (organ gram) and environmental governance; concerned stakeholders and networks
- 4.5.2. Governance tools and Strategies.
- 4.5.3. Adaptive management and sustainability

### Section (D) - 30 Marks

### 5. Legal Frameworks

### 5.1. Guidelines and Standards

Guidelines and standard Relating to Air (Ambient, Indoor and Stack) and Water (Tolerance Limits for Industrial Effluents to be Discharged into Public Sewers and Inland Surface Waters); Specific Industrial Effluent Standards, Nature conservation National strategic framework for sustainable development-SDG goals of Nepal.

### 5.2. Existing Legislations

Constitution of Nepal; Environmental Protection Act & Environment Protection Regulations; National EIA Guidelines, EIA Guidelines for Forestry Sector, EIA Guidelines for Industry Sector, Plant Protection Act, National Parks and Wildlife Conservation Act, Water Resources Act, Forest Act; Soil and Watershed Management Act, Solid Waste Management Act, Pesticides Act & Pesticide Regulation, Hydropower Development Policy, Climate Change Policy, Sudurpashchim Provincial forest Act & Regulation, Provincial Environment Act & Regulation, River based material (Stone, Gravel and Sand) management working procedure of Sudurpashchim Province.

### 5.3. International Treaties, Protocols & Conventions

Convention on Biological Diversity, 1992; United Nations Framework Convention on Climate Change, 1992; Paris Agreement, GHG Inventory, nationally Determined contribution and climate finance Mechanism 2015, United National Convention to Combat Desertification, 1994; Kyoto Protocol, 1997; Vienna Convention for the Protection of the Ozone Layer, 1985; Montreal Protocol on Substances that Deplete Ozone Layer, 1987; Basel Convention on the Control of Trans boundary Movements of Hazardous Waste and Their Disposal, 1989; Stockholm Convention on Persistent Organic Pollutants, 2004

### 6. Current Environmental Issues

### 6.1. Urban Environment

- 6.1.1. Urbanization and its implications on environment (sanitation, solid and hazardous waste, air pollution, water pollution, ground water depletion, food security)
- 6.1.2. Urbanization infrastructures and environment (housing, water supply and sanitation, waste management, transportation, electricity, markets and commercial areas, religious and heritage sites, open spaces and recreational areas)
- 6.1.3. Concept of urban planning and sustainable cities

# सुद्रपश्चिम प्रदेश

# प्रदेश निजामती सेवा तथा स्थानीय सरकारी सेवा अन्तरगत इन्जिनियरिङ सेवा, सर्भे समूह, नापी अधिकृत, सातौं तह वा सो सरह पदको खुला, अन्तर तह र आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

### 6.2. Land use and Water shed Management

- 6.2.1. Land use and environment (land use pattern and zoning; Guided Land Development (GLD) and land pooling)
- 6.2.2. Principles of land use and land reclamation
- 6.2.3. Factors governing land utilization and land use pattern
- 6.2.4. Scenario of watershed management in Nepal and major watershed of Sudurpashchim province.
- 6.2.5. Development and conservation challenges in watershed management
- 6.2.6. Watershed as eco systems; Upstream-downstream linkages; Measures for watershed conservation

### 6.3. Agriculture and Food Security

- 6.3.1. Faming systems and major farming practices in Sudurpashchim Province.
- 6.3.2. Modern agriculture and its impacts on environment, green revolution
- 6.3.3. Sustainable agriculture and food aid policies
- 6.3.4. Food security in Nepal

### 6.4. Disaster Risks & Vulnerability Assessment

- 6.4.1. Hazard, disaster, risk, exposure and vulnerability analysis
- 6.4.2. Disasters due to earthquake, landslide and river bank erosion, flood, GLOF, drought, epidemics, fire and industrial accidents
- 6.4.3. Disaster risk management and practices
- 6.4.4. Nepal National REDD+ Strategy 2018
- 6.4.5. Sendai Framework

#### ΩΩΩ

# द्वितीय चरण (Second Phase): सामूहिक परीक्षण (Group Test) र अन्तरवार्ता (Interview)

# सामूहिक परीक्षण (Group Test)

(१० अंक)

# सामूहिक छलफल (Group Discussion)

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ, जुन नेता विहिन सामूहिक छलफल (Leaderless Group Discussion) को रुपमा अवलम्बन गरिने छ। दिइएको प्रश्न वा Topic का विषयमा पालैपालोसंग निर्दिष्ट समय भित्र समूह बीच छलफल गर्दें प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति (Individual Presentation) गर्नु पर्नेछ।

# सामूहिक छलफलमा दिइने नमुना प्रश्न वा Topic

उदाहरणको लागि - उर्जा संकट, गरीबी निवारण, बाली बीमा, सामाजिक सुरक्षा, खाद्य सुरक्षा, प्रतिभा पलायन, स्वास्थ्य बीमा, जलवायु परिवर्तन, आरक्षण जस्ता समसामयिक विषयवस्तुहरुबाट कुनै एक Topic दिइनेछ |

अन्तरवार्ता (Interview) (२५ अंक)

मौखिक (Oral)

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