प्रथम चरण : संबंधित परीक्षा (Written Examination) पूर्णांক :- 200

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<tr>
<th>पत्र</th>
<th>विषय</th>
<th>खण्ड</th>
<th>पूर्णांक</th>
<th>उत्तर परीक्षा</th>
<th>प्रतिस्थापित संकेतक × अंक</th>
<th>समय</th>
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<tbody>
<tr>
<td>प्रथम</td>
<td>General Subject</td>
<td>Part I: General Awareness &amp; General Ability Test</td>
<td>100</td>
<td>वस्तुगत (Objective)</td>
<td>10 प्रश्न × 1 अंक</td>
<td>1 घंटा 30 मिनट</td>
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<td>Part II: General Technical Subject</td>
<td>40</td>
<td>वहैवैकल्पिक प्रश्न (MCQs)</td>
<td>10 प्रश्न × 1 अंक</td>
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द्वितीय चरण : सामान्य परीक्षा (Group Test) र अन्तर्वेत्ता (Interview) पूर्णांक :- 40

<table>
<thead>
<tr>
<th>पत्र/विषय</th>
<th>पूर्णांक</th>
<th>उत्तर परीक्षा</th>
<th>परीक्षा प्राप्ति</th>
<th>समय</th>
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<tr>
<td>सामान्य परीक्षा (Group Test)</td>
<td>10</td>
<td>सामान्य छलफल (Group Discussion)</td>
<td>30 मिनट</td>
<td></td>
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<tr>
<td>अन्तर्वेत्ता (Interview)</td>
<td>30</td>
<td>बोर्ड अन्तर्वेत्ता (Board Interview)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

प्रश्नोत्तरी:
1. संबंधित परीक्षाओं का माध्यम भाषा नेपाली या अंग्रेजी अथवा नेपाली र अंग्रेजी द्वैत हुए हुए।
2. प्रथम चरण र द्वितीय चरण में संबंधित परीक्षा छुट्टाई हुए।
3. वस्तुगत वहैवैकल्पिक (Multiple Choice) प्रश्नों को गलत उत्तर दिए मात्र गलत उत्तर वापस 20 प्रतिशत अंक कही गरिए। यदि उत्तर नौदिनिक तथा वापस अंक दिए हैं तथा अंक कही परीक्षा देते हुए।
4. वहैवैकल्पिक प्रश्न हुने परीक्षाओं के कुल प्रश्नों को क्याल्कुलेटर (Calculator) प्रयोग गर्ना पाए हुए।
5. विषयवस्तु प्रश्नों को हकमा तेहीको अंकों एउटा लामो प्रश्न र एउटेप्रश्नहरू दुई र दुई भन्दा एक प्रश्न र एक प्रश्न वर्तनि दुई र दुई भन्दा वही प्रश्न (Two or more parts of a single question) को एउटा प्रश्न वर्तनि दुई र दुई वही प्रश्न (Short notes) सीख सकिए।
6. द्वितीय प्रमाण (विषयवस्तु प्रश्न हुनका हकमा) प्रश्नहरूको छान्ड गलत छुट्टाई उत्तरपुस्तिकालाई हुनेछ। परीक्षाको प्रश्नहरूको छान्डको उत्तरको सीख छान्डको उत्तरपुस्तिकालामा लेखिए।
7. यस पाठ्यक्रममा योजना अत्यावश्यक पत्र/विषयका विषयवस्तुमा जेव्यै लेखिएको भए लिपि पाठ्यक्रममा परेका कानुन, ऐल, नियम तथा नितिहार परीक्षाको मिति भन्दा 3 महिना आगाडि (संशोधन भएका र संशोधन भएका हटाईका र याही गरी संशोधन भएका) कायम रहेका हुनु यस पाठ्यक्रममा परेको समकालीन पढ़ा।
8. प्रथम चरणको परीक्षाको छान्डको छान्ड एउटा उपोष्टेष्ठरहस्यमा मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइए।
9. यस भन्दा आगाडि लागू भएका माध्यम उल्लेखित सेवा, समूहको पाठ्यक्रम खारेज गरिएको।
10. पाठ्यक्रमलाई मिति :- २०७६/०७/२५
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

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 (II) : - General Technical Subject (50 Marks)
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 interrelationships
      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 Horizontal and vertical temperature distribution
      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 Green economy
      1.5.3 Payment for ecosystem services
      1.5.4 Ozone layer depletion and acid rain

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
      2.1.4 Problems of water resource management in Nepal
   2.2 Food Resources
      2.2.1 Major food resources and production
      2.2.2 Human nutrition and health
      2.2.4 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 Biodiversity conservation approaches
   2.4.4 Carbon sequestration

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

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 Climate variability and theories of climate change
   3.6.2 Climate models and model based projections of greenhouse effect
   3.6.3 Climate change impacts: agriculture and food security, water resources, energy, human health, biodiversity, settlement and infrastructure and livelihood
   3.6.4 Vulnerability assessment of climate change and mitigation and adaptation approaches (NAPA, LAPA)
Section C - 20 % Marks

4. ENVIRONMENTAL MANAGEMENT SYSTEMS

4.1 Environmental Assessment
   4.1.1 Environmental assessment: evolution in global and national perspectives
   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 image: acquisition, resolution, analysis and interpretation
   4.3.4 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 (organogram) 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 Standards 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

5.2 Existing Legislations
   Constitution of Nepal; Environmental Protection Act; Environment Protection Rules; 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

5.3 International Treaties, Protocols & Conventions
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, groundwater 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

6.2.5 Development and conservation challenges in watershed management

6.2.6 Watershed as ecosystems; Upstream-downstream linkages; Measures for watershed conservation

6.3 Agriculture and Food Security

6.3.1 Farming systems

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