

लोक सेवा आयोग
नेपाल इन्जिनियरिङ्ग सेवा, जियोलोजी समूह, जनरल जियोलोजी उप-समूह
राजपत्रांकित द्वितीय श्रेणीको (आन्तरिक र खुला प्रतियोगिता) लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र :- प्राविधिक विषय

A. Introduction

1. Geology of Nepal Himalaya, Sedimentary Basins, Stratigraphy, Tectonic Divisions and Structures
2. Identification of Rocks, Minerals and their Potential use
3. Geological Mapping and Different Scale for Different Purposes
4. Acid Magmatism, Granite Occurrences, their Petrography and age
5. Engineering Properties of Soil and Rocks
6. Site Investigation for Heavy Structures (Dam, Bridge, Airport, Multistorey Building/Complex)
7. Engineering and Environmental Geological Maps and their use in Urban Planning Land use Planning, Infrastructure Development Planning and New Settlement area Selection
8. Soil Erosion, Landslides and their Preventive Measures
9. Earthquakes and Causes of Frequent Earthquakes in the Himalayan Region, Seismotectonics of the Himalaya
10. Use of Remote Sensing and GIS Techniques in Geological Mapping, Hazard Assessment and Mineral Exploration
11. Common Types of Natural Hazards and their Mitigation Methods
12. Environmental Geological Assessment of Mines and Mineral Based Industries
13. Leakage and Siltation Problems in a Huge water Reservoirs and their Solutions
14. Soil Erosion, Landslides and Flooding as Common Geological Hazards in Nepal, Their Mitigation Methods
15. Surface and Groundwater Resources Development Strategy
16. Environmental Geological Problems in Major Urban Areas in Nepal

B. Mineral Resources Exploration

1. Stages of Mineral Exploration and Exploration Techniques/Methods
2. Geophysical Methods Used in Oil Gas and Groundwater Exploration
3. Importance of Geochemical and Geophysical Methods Used in Metallic Mineral Exploration
4. Petroleum and Natural Gas Exploration, Evaluation and Present Status

C. Mineral Resources Promotion & Development

1. Mineral Occurrences, Prospects, Deposits and Mines in Nepal
2. Economic Mineral Deposits and Promotion of Mineral Bases Industries in Nepal
3. Environmental Degradation due to Haphazard Mining Activities
4. Limestone/Dolomite, Magnesite, Marble, Phosphorite, Gemstone Occurrences/ Prospects, Their Importance and use

D. Project, Planning and Evaluation

1. Project Planning, Programming, Budgeting, Field Investigation, Data Collection, Analysis, Interpretation, Evaluation, Findings and Reporting
2. Formulation/Design of Mineral Resources Development Project, its Activities, Target, and Expected Results
3. General Problems in Planning, Programming, Implementation and Evaluation of a Project
4. Situation of Mineral Based Industries in Nepal their Problems and Remediation
5. Foreign Investment Situation in Nepal in Mineral Sector and Suggestion for Promotion