

द्वितीय पत्र - प्राविधिक विषय

पूर्णाङ्क १००

1 Historical Background

- 1.1 Historical background of Department of Mines and Geology, its objective, role and activities
- 1.2 Historical background of mineral exploration including petroleum, mining and mineral based industries in Nepal

2 Geology

- 2.1 Geology and status of Geological Maps of Nepal

3 Mineral Resources, Exploration and Exploitation

- 3.1 Present status of exploration of mineral resources in Nepal for metallic, nonmetallic fuel/energy mineral, precious, semiprecious and construction materials
- 3.2 Potential area for mineral exploration and development of metal, nonmetal, energy minerals, precious, semiprecious minerals and construction minerals.
- 3.3 Problems, issues, constraints, and challenges for exploration work of mineral resources in Nepal and their remedial measures
- 3.4 Present status of mineral exploitation, development and promotion of mineral based industries
- 3.5 Problems, issues, constraints, and challenges for mining and mineral based industries in Nepal and their remedial measures
- 3.6 Technology and Methodology for exploration of different minerals:
 - 3.6.1 Metallic Mineral
 - 3.6.2 Nonmetallic Mineral
 - 3.6.3 Fuel/Energy Mineral
 - 3.6.4 Precious and Semiprecious Mineral
 - 3.6.5 Construction Material

- 3.7 Evaluation and feasibility study of mineral resources and mineral based industry of the country
- 3.8 Licensing procedure for exploration and exploitation of mineral resources and construction materials

4 Mining

- 4.1 Mine Design and Planning
- 4.2 Mining Technology and Methodology of different mineral deposits
- 4.3 Mine machines and equipment
- 4.4 Mine ventilation
- 4.5 Mine haulage and transportation

5 Environment in Mining Industry

- 5.1 Consideration of environmental issues in mines and mining industry for sustainable development of the country;
 - 5.1.1 Conservation of minerals resources
 - 5.1.2 Land reclamation and rehabilitation
 - 5.1.3 Waste disposal management
 - 5.1.4 Health and safety
 - 5.1.5 Hazard in mines
 - 5.1.6 Ultimate pit slope and stability

6 Mine management

- 6.1 Identification of mining project, project planning, project formulation, project appraisal, Monitoring and Evaluation of the mining projects.
- 6.2 Mine management, leadership, decision making and contract negotiation in mining projects
- 6.3 Resources Management for mining industry
