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)
8. Soil Erosion, Landslides and their Preventive Measures
9. Earthquakes and Causes of Frequent Earthquakes in the Himalayan Region, Seismotectonics of the Himalaya
11. Common Types of Natural Hazards and their Mitigation Methods
13. Leakage and Siltation Problems in a Huge water Reservoirs and their Solutions
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 Based 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