

लोक सेवा आयोग
नेपाल ईन्जिनियरिङ्ग सेवा, केमिष्ट्री समूह, राजपत्रांकित द्वितीय श्रेणी
(आन्तरिक र खुला प्रतियोगिता) को लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र :- प्राविधिक विषय

1. Current Status of Chemical Laboratories in Nepal and Challenges for Their Modernization
2. Importance of Chemical Laboratories for the overall Development of Nepal with Special Focus on Industry, Commerce and Environmental Management.
3. Laboratory Safety and Chemical Hazards
4. Knowledge on Hazardous Chemicals and their Management
5. Methods and Significance of Chemical Analysis of
 - a) Food and Agricultural Products including Fisheries, Livestock and Dairy Products
 - b) Water
 - c) Soil
 - d) Rock
 - e) Minerals
 - f) Forest Products (Medicinal and Aromatic Plants and other non Timber Forest Products)
 - g) Fertilizers
 - h) Pesticides
 - i) Drug/Pharmaceuticals
 - j) Environmental Pollutants
6. High Precision Expensive Equipments ; Appropriate Use, Safe Handling and General Maintenance
 - a) Gas Liquid Chromatography
 - b) High performance Liquid Chromatography
 - c) Atomic Absorption Spectrophotometer
 - d) UV-Visible Spectrophotometer
 - e) Infra Red Spectrophotometer
 - f) NMR Spectrophotometer
 - g) Mass Spectrophotometer
 - h) Others
7. Sampling Techniques and Preparation of Laboratory Samples for the Chemical Analysis
8. Chemical Pollutants (Hazardous Pesticides, Chemicals and Heavy Metals) and pollution Hazards in
 - a) Soil
 - b) Air
 - c) Water
 - d) Food/Agricultural/Forest Products
9. Prospects of Using Chemical Researches in livelihood and Poverty Alleviation through Appropriate use of Resources (Dyes, Tannins, Minerals, Medicinal and Aromatic Plants, Water Resources and farm and Dairy Products) and etc.