

B.Sc. Semester - 3 (NEP-2020) Examination

OCT/NOV-2025

**CHE: Principles of Inorganic Qualitative and Gravimetric Analysis
(Skill Enhancement Course)**

Time: 1:00 Hours

Marks:25

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1 Answer any two out of three questions given. (10)
- 1) Write group reagents used for the wet test of cations. Also write at least two radicals per group.
 - 2) Discuss charcoal cavity test in detail.
 - 3) Explain principle of common ion effects involved with suitable example.
- Que.2 Answer any two out of three questions given (10)
- 1) Explain very briefly how precipitation, digestion, filtration, drying and weighing process is carried out in the gravimetric estimation of Ni as Ni(DMG)_2 .
 - 2) Discuss completeness of precipitation in gravimetric analysis.
 - 3) Explain coprecipitation and post precipitation and methods to minimize it.
- Que.3 Answer any one out of two questions given. (05)
- 1) Explain the terms: Supersaturation, Nucleation, coagulation, peptization and digestion.
 - 2) Explain flame test in detail.
