

B.Sc. Semester - 6 (NEP-2020) Examination

March/April-2026

CHE: Minor Chemistry-303 (Minor-6)

Time: 2:00 Hours

Marks: 50

Instructions:

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

-
- Que.1 Answer any two questions out of three questions. (10)
- (1) Explain Flame test in Inorganic Qualitative Analysis with chemical reactions.
 - (2) Write a note on role of Group reagents and Common ion effect in Inorganic Qualitative Analysis.
 - (3) Discuss: Charcoal test in Inorganic Qualitative Analysis with necessary chemical reactions.
- Que.2 Answer any two questions out of three questions. (10)
- (1) Discuss: Important Features of Gravimetric analysis of Ba^{+2} as BaSO_4 .
 - (2) Give conditions for Precipitation & Explain Types of Precipitates and it's characteristics.
 - (3) Explain: Effect of pH and Temperature on solubility of Precipitates in Gravimetric analysis.
- Que.3 Answer any two questions out of three questions. (10)
- (1) Explain: Manufacturing of Ammonium nitrate fertilizer by Prilling method.
 - (2) What is fertilizer? Discuss: Classification of fertilizers based on mode of operation and sources.
 - (3) Write a detailed note on manufacturing of Urea from Ammonium carbide.
- Que.4 Answer any two questions out of three questions. (10)
- (1) Write a note on manufacturing of Triple super phosphate fertilizer.
 - (2) Discuss: Comparison of advantages and disadvantages of natural and synthetic fertilizers.
 - (3) Explain: Manufacture process of Diammonium phosphate fertilizer.
- Que.5 Answer any two questions out of four questions. (10)
- (1) Discuss: Cobalt nitrate test in Inorganic Qualitative Analysis with chemical reactions.
 - (2) Discuss: Important Features of Gravimetric analysis of Ni^{+2} as Ni(DMG)_2 .
 - (3) Explain: Manufacturing of Ammonium sulphate fertilizer by Sindri process.
 - (4) Explain: Manufacturing process of Normal super phosphate fertilizer.
