

Assignment for B.Sc. Sem VI Chemistry (Major 1 + Major 2) 2025-26

Paper: Inorganic Chemistry

Assignment Submission Date: 25.03.2026

M.M. 25

S. No.	Topics	Roll No.
1	Crystal field theory, And <ul style="list-style-type: none">• Crystal field splitting in octahedral, tetrahedral and square planar complexes	Bio (2330014010006 — 4010058) Math (2330014020005 — 4020025)
2	Calculating CFSE along with pairing energy, And <ul style="list-style-type: none">• Factors affecting the crystal field parameters• Effect of CFSE on lattice energy, Ionic radii	Bio (2330014010065 — 4010129) Math (2330014020026 — 4020036)
3	Types of magnetic behaviour, And <ul style="list-style-type: none">• Methods of determining magnetic susceptibility• Spin only formula• L-S coupling• Spectroscopic ground state.	Bio (2330014010130 — 4010184) Math (2330014020037 — 4020050)
4	Correlation of μ_s and μ_{eff} values, And <ul style="list-style-type: none">• Orbital contribution to magnetic moments• Application of magnetic moment data for 3d metal complexes	Bio (2330014010186 — 4010231) Math (2330014020057 — 4020075)
5	Preparation, properties, reactions and Nature of bonding in: <ul style="list-style-type: none">• Triphosphazenes• Pseudohalogens• Pseudohalides.	Bio (2330014010232 — 4010275) Math (2330014020077 — 4020103)

6	Structure, bonding of NO and ligand behaviour of NO, And <ul style="list-style-type: none"> • Preparation of nitrosyl complexes • Effective atomic number (EAN) as applied to nitrosyls 	Bio (2330014010277 — 4010327) Math (2330014020108 — 4020119)
7	Pearson's HSAB concept, acid base strength, hardness and softness, And <ul style="list-style-type: none"> • Symbiosis, theoretical basis of hardness and softness. Applications of HSAB principle, limitations of HSAB principle	Bio (2330014010330 — 4010380) Math (2330014020120 — 4020141)

- Note:**
- 1. Students have to select assignment topics as per their Roll No.**
 - 2. This assignment is common for Major 1 & Major 2 B.Sc. Sem VI chemistry students**
 - 3. Students are instructed to use a fair register copy for writing**
 - 4. Students must bring their previous semester marksheets at the time of assignment submission**