

CHEMICAL SCIENCES

1. **Chemical periodicity**
2. **Chemical Bonding and Structure of Molecules**
3. **Acid-Base chemistry**
4. **s-Block elements**
5. **p-Block elements**
6. **Noble gases**
7. **d-block elements**
8. **Coordination chemistry**
9. **Inner transition elements.**
10. **Organometallic chemistry**
11. **Analytic chemistry**
12. **Bioinorganic chemistry**
13. **Nuclear chemistry**
14. **Quantum mechanics**
15. **Group theory**
16. **Molecular spectroscopy**
17. **Thermodynamics**
18. **Statistical thermodynamics**
19. **Electrochemistry**
20. **Chemical kinetics**
21. **Surface chemistry:**
22. **Solid state**
23. **Stereochemistry**
24. **Aromaticity**
25. **Organic reaction mechanism and reactive intermediates**
26. **Common named reactions and rearrangements**
27. **Organic transformations and reagents**

- 28. Concepts in organic synthesis**
- 29. Asymmetric synthesis**
- 30. Pericyclic reactions**
- 31. Principles and applications of photochemical reactions in organic chemistry**
- 32. Chemistry of heterocyclic compounds**
- 32. Natural products**
- 33. Structure determination**
- 34. Green chemistry, medicinal chemistry, Environmental pollution**
- 35. IUPAC nomenclature of organic compounds**