

ANURAG Engineering College
(An Autonomous Institution)

I B.Tech I Semester Supplementary Examinations, January - 2025

ENGINEERING CHEMISTRY
(COMMON TO CIVIL, EEE & MECH)

Time: 3 Hours

Max. Marks: 75 M

Section – A (Short Answer type questions)

(25 Marks)

Answer All Questions

	Course Outcome	B.T Level	Marks
1. What are the conditions for the formation of Molecular Orbital's?	CO1	L1	2M
2. Briefly explain basic concept of CFT.	CO1	L2	3M
3. What are scales? How they formed?	CO2	L1	2M
4. Write a short note on Hardness of Water and Express its Units.	CO2	L2	3M
5. What is Sacrificial Anodic Method?	CO3	L1	2M
6. Write Short Note on Hydrogen Electrode.	CO3	L2	3M
7. Write Short note on Markownikoff Rule.	CO4	L2	2M
8. Explain about Nucleophilic addition reaction with suitable example.	CO4	L2	3M
9. What is Polymer? Give Any Two Examples	CO5	L1	2M
10. Write the Structure of Buna-S And PVC, Teflon.	CO5	L2	3M

Section B (Essay Questions)

Answer all questions, each question carries equal marks.

(5 X 10M = 50M)

11. A) Write M.O.E.D. Of N ₂ & F ₂ Molecule.	CO1	L3	10M
OR			
B) Discuss about Octahedral Splitting Patterns.	CO1	L3	10M
12. A) Explain the estimation of total hardness using EDTA method.	CO2	L2	10M
OR			
B) Give An Account on Ion-Exchange Process for External Treatment of Boiler Feed Water.	CO2	L3	10M
13. A) Describe the Construction and Functioning of Calomel Electrode.	CO3	L3	10M
OR			
B) Briefly Discuss about Wet Corrosion and its mechanism.	CO3	L3	10M
14. A) Write The Mechanism of SN ₁ And SN ₂ Reactions with Examples.	CO4	L3	10M
OR			
B) Discuss the Conformational Analysis Of n-Butane.	CO4	L3	10M
15. A) Write short note on PHB Preparation and Properties. And Explain Applications of Biodegradable Polymers.	CO5	L3	10M
OR			
B) Explain to Preparation and Properties of Bakelite.	CO5	L2	10M