



SNS COLLEGE OF TECHNOLOGY

Saravanampatti, Coimbatore – 641 035

Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai



23CHT102-CHEMISTRY OF ENGINEERING MATERIALS

QUESTION BANK

UNIT - 1- CORROSION AND ITS CONTROL

PART - A - 2 Marks

Q.No	Question	Bloom Level	Company/Source
1	Define corrosion.	L1	GATE 2021
2	What is chemical corrosion?	L1	GATE 2020
3	Define oxidation corrosion.	L1	Tata Steel
4	What is electrochemical corrosion?	L1	GATE 2019
5	State galvanic corrosion.	L1	IOCL
6	What is differential aeration corrosion?	L1	BPCL
7	Define pitting corrosion.	L1	GATE 2022
8	What is corrosion control?	L1	SAIL
9	Define corrosion inhibitor.	L1	Exide Industries
10	What is anodic inhibitor?	L1	GATE 2018
11	Define cathodic protection.	L1	GATE 2020
12	What is sacrificial anodic protection?	L1	ONGC
13	What is impressed current cathodic protection?	L1	IOCL
14	Define electroplating.	L1	GATE 2021
15	Mention any two uses of gold electroplating.	L1	Gate 2022

PART – B – 13 Marks

Q.No	Question	Bloom Level	Company/Source
1	Explain chemical corrosion mechanism.	L2	GATE 2019
2	Discuss oxidation corrosion with examples.	L2	SAIL
3	Explain electrochemical corrosion mechanism.	L3	GATE 2020
4	Describe types of electrochemical corrosion.	L3	IOCL
5	Explain corrosion control methods.	L3	GATE 2021
6	Discuss corrosion inhibitors and their classification.	L3	Exide
7	Explain sacrificial anodic protection.	L3	ONGC
8	Explain impressed current cathodic protection.	L3	BPCL
9	Describe protective coatings and their importance.	L2	Asian Paints
10	Explain fire retardant paints and applications.	L2	L&T

PART – C – 15 Marks

Q.No	Question	Bloom Level	Company/Source
1	A pipeline industry faces severe corrosion. Propose suitable cathodic protection method.	L4	IOCL
2	Analyze corrosion failure in a ship hull and suggest remedies.	L4	Gate 2021
3	Design a corrosion control strategy for underground tanks.	L4	HPCL
4	Explain selection of inhibitors for acidic environments.	L4	GATE 2022
5	Compare sacrificial and impressed current cathodic protection.	L4	GATE 2021
6	Evaluate protective coatings used in marine environment.	L4	DRDO
7	Analyze failure of paint coating in industrial structures.	L4	Asian Paints
8	Design a fire retardant paint for high-rise buildings.	L4	DRDO
9	Explain gold electroplating process with industrial relevance.	L4	Gate 2019
10	Propose electroplating parameters to improve coating quality.	L4	GATE 2020

Bloom' s Level (BL)			
L1- Remember	L2- Understand	L3- Apply	L4- Analyse