



Anil Neerukonda Institute of Technology & Sciences (Autonomous)

(Permanent Affiliation by Andhra University & Approved by AICTE
Accredited by NBA (ECE, EEE, CSE, IT, Mech. Civil & Chemical) & NAAC)

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QUESTION BANK UNIT-111 CORROSION CHEMISTRY (CO3)

Q.No	Question (Common questions)	Expected marks	BL	PI
1	Define the meaning of corrosion. Specify the reason why metals undergo corrosion?	4M	3	
2	Discuss the mechanism of Dry corrosion. Why you call dry corrosion as Chemical corrosion? Give reason.	4M	3	
3	What happens to extent of oxidation corrosion of a metal when a metal oxide is formed on its surface?	6M	2	
4	Explain the principle underlined in pilling Bed worth rule. State the significance of pilling Bed-worth rule	6M	3	
5	Define wet corrosion. Why wet corrosion is called Electrochemical corrosion. Specify the reason.	4M	3	
6	Elaborate the mechanism of wet corrosion theory.	6M	3	
7	How do you apply the principle of wet corrosion to explain the rusting of Iron.	8M	4	
8	Enumerate the factors influencing the rate of corrosion of a metal.	8M	3	
9	What is a composition cell? In what kind of equipment's, the composition cell corrosion is noticed. Illustrate	6M	4	
10	Explain elaborately various situations of formation of concentration cell on metal surface with specific examples	8M	3	
11	Discuss the principle underlined in the process of electroplating to prevent corrosion of a metal. Illustrate with a specific example	6M	3	
12	How electroless plating with Nickel is performed? Explain	6M	3	
13	Write a note on Inhibition. What are anodic and cathodic inhibitors? Discuss their mechanism in protecting a metal from corrosion.	8M	4	
14	Why we call applying paints is organic coating? Discuss the functions of various components in paint with specific examples	8M	4	
15	What is the principle involved in cathodic protection techniques? Discuss Impressed voltage method and sacrificial anode method with specific examples	8M	3	

	(Some Advanced Questions)			
16	Give reasons for the following <ul style="list-style-type: none"> a. A brass bucket has only a brass handle not iron Why? b. Rusting of iron is quicker in salt water than in normal water. Why? c. Food is stored in tin coated container but in galvanized container. Why? d. Why stainless steel has high corrosion resistance? 	Each 2 marks	4	
17	Why does a steel pipe in a copper tank corrode causing destruction?	4M	3	
18	Give reasons for the following <ul style="list-style-type: none"> a. Impure metal corrodes faster than pure metal under identical conditions. b. Why corrosion of water filled steel tanks occurs below the water line? c. Small anodic area causes intense corrosion. 	6M	3	
19	Explain Hydrogen evolution type and oxygen absorption type of corrosion	8M	3	
20	Describe the mechanism of drying of the oil used as a vehicle in paint	6M	4	

Prepared by

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FED Chemistry