



**Japala Engineering College:: Japala (Autonomous)**

Department of Chemistry  
Mid-Term Examination-I, SEM-2

1/4 B.Tech EEE	Engineering Chemistry	20EE203
Time: 8:30 AM-10:00 A.M	Max. Marks: 35	12-06-2023

**Question No.1 compulsory (1X7 = 7 M) ; Answer ONE Question from each unit (2X14 = 28 M)**

<b>1. Answer all questions</b>	<b>(1X7 = 7 Marks)</b>
a. What are the units of hardness	CO1 BL2 1M
b. What is reverse osmosis	CO1 BL2 1M
c. Name three substances used for sterilization of water	CO1 BL3 1M
d. Name any two coagulants.	CO1 BL2 1M
e. State Pilling-Bed worth rule?	CO2 BL3 1M
f. Define Galvanic corrosion	CO2 BL2 1M
g. Define entropy	CO2 BL3 1M

**UNIT - I**

2 a. Explain determination of hardness of water by EDTA method	CO1 BL3 7M
2.b Write a short note on Boiler corrosion	CO1 BL2 7M

**(OR)**

3 a. Discuss any two disinfection methods	CO1 BL2 7M
3 b. Explain the process of desalination using electro dialysis method with neat label diagram.	CO1 BL4 7M

**UNIT - II**

4 a. Define wet corrosion? Explain the mechanism of wet corrosion by absorption of oxygen type with neat label diagram	CO2 BL2 7M
4b. Derive Nernst's equation for single electrode potential and write its applications.	CO2 BL1 7M

**(OR)**

5 a. Explain the mechanism of oxidation corrosion with neat label diagram	CO2 BL2 7M
5 b. Discuss about Pitting corrosion with neat label diagram.	CO2 BL3 7M