types of electrochemical cell -do- 23		Government Polytechnic, Sonepur Session: 2023-24 Lesson Plan				
Corrosion Engineering (TH-04) Week Class No. Class No. Class No. Class No. Class No. Chapter -1: Introduction Direct loss and indirect loss importance of corrosion and chemical corrosion electrochemical corrosion Corrosion rate electrochemical principle of corrosion 10 11 12 4 13 14 15 16 5 17 18 19 20 6 21 Chapter -3: Types of electrochemical cells Paraday's 2nd law -do- Faraday's 2nd law -do- Deviation from Faradays law -do- Concentration Cell Electrolytic cell Difference between various types of electrochemical cell Electrolytic cell Difference between various types of electrochemical cell Construction of EMF series -do- Application and drawbacks of EMF series -do- Application and drawbacks of EMF series -do- Comparison between EMF and Galvanic series Comparison between EMF a	Metallurgical Engineering	6 th				
Engineering (TH-04) Week Class No. 1			Semester from Date: 16. 01.	2024 to Date: 26.04.2024		
Class No.	Engineering	week class	No. of weeks: 14			
1				Lacture Topics		
2	Week	Class 140.		Lecture ropics		
Construction of EMF series Comparison between EMF and Galvanic series Comparison between EMF and Calvanic	1	1		Introduction		
1		2	to Corrosion	Cost of corrosion		
Classification of types of corrosion electrochemical corrosion and chemical corrosion and chemical corrosion 7		3				
Classification of types of corrosion electrochemical corrosion and chemical corrosion and chemical corrosion 7		4		importance of corrosion studies		
chemical corrosion -do- Corrosion rate electrochemical principle of corrosion 10 11 12 4 13 14 15 16 Chapter-3: Types of electrochemical cells 19 20 6 21 Chapter-4: Electrode 22 23 Chapter-4: Electrode 24 Potential Chapter-4: Electrode Potential Construction of EMF series -do- Application and drawbacks of EMF series Comparison between EMF and Galvanic series	2	5		Classification of types of		
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9		7		-do-		
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Comparison between EMF and Galvanic series		26		THE RESIDENCE OF THE PROPERTY		
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Tutorial class for Chr ₂ 2,5 & 1		28		Tutorial class for Ch1,2,3 &4		

8	29	Chapter-5: Different forms of corrosion	Broad Classification of forms of corrosion
	30		Atmospheric corrosion
	31		Intergranular corrosion
	32		Sensitization in SS
9	33		Knife line attack
	34		Pitting corrosion
	35		Corrosion fatigue
	36		Galvanic corrosion
10	37		-do-
	38		Stress corrosion cracking
	39		-do-
	40		Cavitation corrosion
11	41		Fretting corrosion
	42		High temperature oxidation
		1000年100日,1000年100日,1000年10日,1000年10日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,	corrosion
	43		Stray current corrosion
	44	Chapter-6: Corrosion	Methods for prevention of
		Prevention	corrosion
12	45		-do-
	46		Importance of proper selection of materials
	47		Role of electrode potential in prevention
	48		Cathodic Protection
13	49		Anodic Protection
	50		Characteristic of protective coating
	51		-do-
	52		Metallic coating
14	53		Non-metallic Coatings
	54		Advantages and methods of coatings
	5.5		Inhibitors
	55		Types of inhibitors
	56		Tutorial for Ch5 & 6
15	57		Revision Class
	58		Revision Class Revision Class
	59		Important question discussion
	60		Important question discussion

Prepared By
(G.K. Majhi, Lect. Metallurgy)

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Metallurgical Engg.

Academic-Coordinator