| LESSON PLAN-6th SEMESTER ( 2021 ) | | |
|---|---|---|
| SUBJECT:CORROSION ENGINEERING | | |
| NAME OF THE FACULTY: SOURAV ADHYA | | |
| MONTH | MODULE/UNIT | COURSE TO BE COVERED |
| April | 1 | **Introduction to Corrosion** |
| | | Define Corrosion,Explain Cost and Losses of Corrosion |
| | | Importances of Corrosion Studies |
| | | Disscuss about types of Corrosion and rate of Corrosion |
| | | Differentiate between Chemical and Electrochemical Corrosion |
| May | 2 | **Corrosion Principles** |
| | | Explain the Electrochemical Principle of Corrosion |
| | | State the Faraday's Law |
| | | Causes of Faraday's Law and its Deviation |
| | 3 | **Types of Electrochemical Cells** |
| | | Discuss about Galvanic Cell |
| | | Discuss about Concentration Cell |
| | | Discuss about Electrolytic Cell |
| | 4 | **Electrode Potential** |
| | | Describe and State the Significance of Electrode Potential |
| | | Discuss in detail about EMF and Galvanic Series |
| June | 5 | **Different Forms of Corrosion** |
| | | Various Factors affecting and Prevention of the Following Corrosion |
| | | Atmospheric and Intergranular Corrosion |
| | | Pitting Corrosion |
| | | Galvanic Corrosion |
| | | Cavitation and Fretting Corrosion |
| | | High Temperature Oxidation Corrosion |
| | | Stray Current Corrosion |
| | | Stress Corrosion / Cracking |
| | | Corrosion Fatigue |
| July | 6 | **Corrosion Prevention** |
| | | Studing the Physical Characteristics of Protective Coatting |
| | | Studing the Chemical Characteristics of Protective Coatting |
| | | Studing the Mechanical Characteristics of Proctective Coatting |
| | | Corrosion Prevention by Inhibition |
| | | Corrosion Control by Passivation |
| | | Discuss about Cathodic and Anodic Protection |

| CLASSES REQUIRED | REMARKS |
|---|---|
| **10** | |
| 3 | |
| 2 | |
| 3 | |
| 2 | |
| **8** | |
| 4 | |
| 2 | |
| 2 | |
| **6** | |
| 2 | |
| 2 | |
| 2 | |
| **6** | |
| 3 | |
| 3 | |
| **15** | |
| 1 | |
| 2 | |
| 1 | |
| 2 | |
| 2 | |
| 2 | |
| 2 | |
| 2 | |
| 1 | |
| **15** | |
| 2 | |
| 3 | |
| 3 | |
| 2 | |
| 2 | |
| 3 | |