**METALLURGY DEPARTMENT**

Name of the teacher-PARASMITA BISWAL

Semester-4th

Number of classes per week :-14

From- Dt 16/01/2024 to dt 26/04/2024

Subject Theory-1 Material Testing(NDT)

|  |  |  |  |
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| **Week** | **Class No.** | **Chapter** | **Lecture Topics** |
| 1 | 1 | Chapter-5: Creep Test | Introduction  |
| 2 | creep and its importance  |
| 2 | 3 | -do- |
| 4 | engineering creep curve |
| 3 | 5 | -do- |
| 6 | equicohesive temperature  |
| 4 | 7 | -do- |
| 8 | factors that affect creep  |
|  | 9 | -do- |
| 10 |  | Doubt clear class |
| 6 | 11 | Chapter- 6:Non – destructive Testing  | scope and elementary idea about different NDT  |
| 12 | -do- |
| 7 | 13 | X – ray radiography method |
| 14 | -do- |
| 8 | 15 | Dye penetration test |
| 16 |  Dye penetration test sequence |
| 9 | 17 | -do- |
| 18 | Magnetic particle testing |
| 10 | 19 | Magnetic particle testing methods |
| 20 | X- Ray radiography method |
| 11 | 21 | Ultrasonic method of NDT |
| 22 | -do- |
| 12 | 23 | Eddy current method of NDT |
| 24 | -do- |
| 13 | 25 |  | Doubt clear class |
| 26 | Chapter- 7: Temperature Measurement and Calibration | Analysis the basic principle of pyrometry  |
| 14 | 27 | Thermocouples |
| 28 | Revision class |