# PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH

## *LESSON PLAN*

Session-2023-2024

Discipline: Mechanical Engg. Semester: 6th

Subject: PSE

Name of the Teaching Faculty: Vikash Baroga

Subject: PSE No. of Days/per week class allotted : 4

Semester From Date :16-01-2024 To Date :26-04-2024 No. of Weeks : 15

| Week | Class Day | Theory /Practical Topics |
|---|---|---|
| 1 | 1 | Sources of Energy |
| | 2 | Classification of power station |
| | 3 | Concept of central & captive P.S. |
| | 4 | Electrical power |
| 2 | 5 | Method of Electrical power generation |
| | 6 | Steam power plant |
| | 7 | Layout of steam power plant. |
| | 8 | Steam power cycle |
| 3 | 9 | Carnot vapour power cycle |
| | 10 | Rankine cycle |
| | 11 | Efficiency, Workdone, work ratio, S.R |
| | 12 | P-V, T-S, H-S diagream. |

Signature of the Faculty

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Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

| Week | Class Day | Theory /Practical Topics |
|---|---|---|
| 4 | 13 | Simple problem on Rankine cycle |
| | 14 | List of thermal P.s with capacities |
| | 15 | Boiler Accessories APH |
| | 16 | Economiser |
| 5 | 17 | Electrostatic precipitator |
| | 18 | Super heater, Need of Boiler mountings |
| | 19 | Draught system, types |
| | 20 | steam prime mover, Advantages & disadvantages of turbine. |
| 6 | 21 | Elements of Steam turbine |
| | 22 | Stage efficiency & Gross efficiency |
| | 23 | Steam Condenser |
| | 24 | Cooling tower |

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| Week | Class Day | Theory /Practical Topics |
|---|---|---|
| 7 | 25 | Selection of site for thermal P.S |
| | 26 | Neuclear P.S |
| | 27 | Classification of Neuclear fuels |
| | 28 | Fusion & fission Reaction |
| 8 | 29 | Working of Neuclear P.S with diagram. |
| | 30 | Neuclear Reactor |
| | 31 | Working & Construction of nuclear Reactor |
| | 32 | Compared Neclear & thermal P.S |
| 9 | 33 | Explanation of disposal of neuclear wastes |
| | 34 | Selection of site for neuclear P.S |
| | 35 | List of nuclear PS |
| | 36 | Diesel electric P.S |

Signature of the Faculty