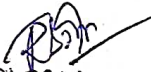


| Discipline : ELECTRICAL | Semester:- 3rd | Name of the Teaching Faculty: - MANASWINI KAR |
|----------------------------|--|--|
| Subject:- EME (TH-3) | No of Days/per Week Class Allotted :- 04 | Semester From:- 15.09.2022 To:- 22.12.2022 |
| Week | Class Day | Theory |
| 1 st | 1 st | State Unit of Heat and work |
| | 2 nd | 1st law of thermodynamics. |
| | 3 rd | State Laws of perfect gases |
| | 4 th | specific heat of gases at constant volume |
| 2 nd | 1 st | specific heat of gases at constant pressure. |
| | 2 nd | Determine relationship of specific heat of gases at constant volume and constant pressure. |
| | 3 rd | Use of steam table |
| | 4 th | Explain total heat of wet steam |
| 3 rd | 1 st | Explain total heat of dry steam |
| | 2 nd | Explain total heat of super-heated steam |
| | 3 rd | Use steam table for solution of simple problem |
| | 4 th | Introduction to Boiler |
| 4 th | 1 st | State types of Boilers |
| | 2 nd | Types of Water tube Boilers |
| | 3 rd | Describe Cochran Boiler(diagram) |
| | 4 th | Describe Cochran Boiler (detailed description) |
| 5 th | 1 st | Types of Fire tube Boilers |
| | 2 nd | Describe Babcock and Wilcox boiler(diagram) |
| | 3 rd | Describe Babcock and Wilcox boiler (detailed description) |
| | 4 th | Describe various mountings of Boiler |
| 6 th | 1 st | Describe various accessories of Boiler |
| | 2 nd | Definition of Simple steam engine |
| | 3 rd | Simple steam engine Diagram |
| | | Explain the principle of Simple steam engine |


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| 7 th | 1 st | Calculate Mean effective pressure |
| | 2 nd | Calculate IHP |
| | 3 rd | Calculate BHP |
| | 4 th | Calculate mechanical efficiency. |
| 8 th | 1 st | Solve Simple problem on IHP, BHP |
| | 2 nd | Solve Simple problem ON Mean effective pressure |
| | 3 rd | Solve Simple problem on mechanical efficiency |
| | 4 th | Introduction to Steam Turbine |
| 9 th | 1 st | State Types |
| | 2 nd | Description of Impulse Turbine |
| | 3 rd | Description of Reaction Turbine |
| | 4 th | Differentiate between impulse and reaction Turbine |
| 10 th | 1 st | Differentiate between impulse and reaction Turbine |
| | 2 nd | Introduction to condenser |
| | 3 rd | Explain the function of condenser |
| | 4 th | State their types |
| 11 th | 1 st | Explain their types |
| | 2 nd | Introduction to IC Engine |
| | 3 rd | Explain working of two stroke petrol and Diesel engines. |
| | 4 th | Explain working of 4 stroke petrol and Diesel engines. |
| 12 th | 1 st | Differentiate between them |
| | 2 nd | Define Hydrostatic |
| | 3 rd | Describe properties of fluid |
| | 4 th | Solve simple problem on the above properties of Fluid |
| 13 th | 1 st | Determine pressure at a point |
| | 2 nd | Determine pressure measuring Instruments |
| | 3 rd | Define HYDROKINETICS |
| | 4 th | Deduce equation of continuity of flow |
| 14 th | 1 st | Explain energy of flowing liquid |
| | 2 nd | State Bernoulli's theorem |

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| | 3 rd | Explain Bernoulli's theorem |
| | 4 th | Introduction to Hydraulic devices and pneumatics |
| 15 th | 1 st | Describe Intensifier |
| | 2 nd | Describe Hydraulic lift |
| | 3 rd | Describe Accumulator |
| | 4 th | Describe Hydraulic ram |


Teaching Faculty


HOD, ELECTRICAL

Academic Co-ordinator


Principal 26/9/22

Government Polytechnic, Dhenkanal

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