



UTKAL INSTITUTE OF ENGINEERING & TECHNOLOGY

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| DISCIPLINE: Electrical Engineering | SEMESTER: 3 rd Sem | NAME OF THE TEACHING FACULTY: Er .Kalakar Mohanty | | |
| SUBJECT: Elements of Mechanical Engineering | No of Days/Per week class allotted: 4 Class P/W(60) | Semester From Date:15/09/2022 To Date:22/12/2022 No. Of Weeks: 15 | | |
| WEEK | CLASS DAY | THEORY TOPICS | REMARKS | |
| 1 st | 1 st | State unit of Heat and work,1st law of thermodynamics | Date | Dean/Principal |
| | 2 nd | State Laws of perfect gases | | |
| | 3 rd | Determine relationship of specific heat of gases at constant volume and constant pressure. | | |
| | 4 th | Revision of last Class | | |
| 2 nd | 1 st | Use steam table for solution of simple problem | | |
| | 2 nd | Explain total heat of wet, dry and super heated steam | | |
| | 3 rd | State types of Boilers | | |
| | 4 th | Revision of last few Classes | | |
| 3 rd | 1 st | Describe Cochran, Babcock Wilcox boiler | | |
| | 2 nd | Describe Mountings and accessories | | |
| | 3 rd | Explain the principle of Simple steam engine | | |
| | 4 th | Draw Indicator diagram | | |
| 4 th | 1 st | Calculate mean effective pressure,IHP and BHP and mechanical efficiency | | |
| | 2 nd | Solve simple problem | | |
| | 3 rd | STEAM TURBINES:State Types | | |
| | 4 th | Differentiate between impulse and reaction Turbine | | |

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| 5 th | 1 st | Assignment | | |
| | 2 nd | Doubt Cler Class | | |
| | 3 rd | Assignment question discussion | | |
| | 4 th | Doubt clear class | | |
| 6 th | 1 st | Explain the function of condenser | | |
| | 2 nd | State their types | | |
| | 3 rd | Revision last class | | |
| | 4 th | Doubt clear class | | |
| 7 th | 1 st | Explain working of two stroke and 4 stroke petrol and Diesel engines. | | |
| | 2 nd | Revision of Last class | | |
| | 3 rd | Explain working of two stroke and 4 stroke petrol and Diesel engines. | | |
| | 4 th | Revision of Last Classes | | |
| 8 th | 1 st | Differentiate between two stroke and 4 stroke petrol and Diesel engines. | | |
| | 2 nd | Doubt Clear class | | |
| | 3 rd | Assignment | | |
| | 4 th | Doubt Clearing Class and Assignment Questions Discussion. | | |
| 9 th | 1 st | Describe properties of fluid | | |
| | 2 nd | Describe properties of fluid | | |
| | 3 rd | Revision Class About properties of fluid | | |
| | 4 th | Doubt clear class | | |
| 10 th | 1 st | Class Test | | |
| | 2 nd | Note book check | | |
| | 3 rd | Determine pressure at a point, pressure measuring Instruments | | |
| | 4 th | Determine pressure at a point, pressure measuring Instruments | | |
| | 1 st | Assignment | | |
| | 2 nd | Assignment question discussion | | |

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| 11 th | 3 rd | Deduce equation of continuity of flow | | |
| | 4 th | Deduce equation of continuity of flow | | |
| 12 th | 1 st | Doubt clear class | | |
| | 2 nd | Explain energy of flowing liquid | | |
| | 3 rd | Explain energy of flowing liquid | | |
| | 4 th | State and explain Bernoulli's theorem | | |
| 13 th | 1 st | Class Test | | |
| | 2 nd | Internal question Discussion | | |
| | 3 rd | Revision | | |
| | 4 th | HYDRAULIC DEVICES AND PNEUMATICS | | |
| 14 th | 1 st | Intensifier | | |
| | 2 nd | Hydraulic lift | | |
| | 3 rd | Hydraulic lift | | |
| | 4 th | Doubt clear class | | |
| 15 th | 1 st | Accumulator | | |
| | 2 nd | Accumulator | | |
| | 3 rd | Hydraulic ram | | |
| | 4 th | Giving Assignment For Semester Exam And Previous Year Question Discussion. | | |

Chittaranjan Parida

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Chittaranjan Parida

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PRINCIPAL