| Discipline: Electrical engineering | Semester : 3rd Semester 2020-21 | Name of the Teaching faculty: Smt. C R Meher(Lect.) | |
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| Subject :ELEMENT OF MECHANICAL ENGINEERING | No. of Days/Week Class Allotted: 60 | Semester from date:   01/09/2020 to date:  19/03/2021<br> No of weeks :18 | |
| Week | Class Day | Theory  Topics | |
| 1st | 1st | definition of thermodynamics | |
| | 2nd | state unit of heat and work, 1st law of thermodynamics | |
| | 3rd | state laws of perfect gases | |
| | 4th | boyles law charles law ,gaylusses law | |
| 2nd | 1st | Determine relationship of specific heat of gases at constant volume and constant pressure. | |
| | 2nd | properties of steam | |
| | 3rd | use steam table for solution of simple problem | |
| | 4th | explain total heat of wet, dry and super heated steam | |
| 3rd | 1st | introduction boilers: | |
| | 2nd | state types of boilers | |
| | 3rd | describe cochran, | |
| | 4th | babcock ,wilcox boiler | |
| 4th | 1st | describe mountings of boiler | |
| | 2nd | accessories of boiler | |
| | 3rd | introduction steam engines | |
| | 4th | explain the principle of simple steam engine | |
| 5th | 1st | draw indicator diagram | |
| | 2nd | calculate mean effective pressure, ihp and bhp and mechanical efficiency | |
| | 3rd | solve simple problem. | |
| | 4th | steam turbines | |
| 6th | 1st | state types of stem turbine | |
| | 2nd | differentiate between impulse and reaction turbine | |
| | 3rd | condenser introduction | |
| | 4th | explain the function of condenser | |
| 7th | 1st | state their types of condenser | |
| | 2nd | IC. engine | |
| | 3rd | explain working of two stroke petrol engine | |
| | 4th | explain working  4 stroke petrol engine | |
| 8th | 1st | explain working of two stroke diesel engine | |
| | 2nd | explain working  4 stroke diesel engine | |
| | 3rd | differentiate between ic engine and ec engine | |
| | 4th | differentiate between them diesel engine and petrol engine | |

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| 9th | 1st | differentiate between them diesel engine and petrol engine |
| | 2nd | hydrostatics |
| | 3rd | property of fluid |
| | 4th | mass density, specific volume, |
| 10th | 1st | relative density, surface tension |
| | 2nd | viscosity definition unit, |
| | 3rd | numerical on hydrostatic |
| | 4th | definition of pressure and types |
| 11th | 1st | determine pressure at a point |
| | 2nd | different types of pressure measuring instrument |
| | 3rd | different types of pressure measuring instrument |
| | 4th | manometer ,u tube manometer |
| 12th | 1st | numerical on pressure measuring instrument |
| | 2nd | hydrokinetics |
| | 3rd | types of fluid flow |
| | 4th | define continuity equation |
| 13th | 1st | derived a continuity equation |
| | 2nd | problem solving on continuity equation |
| | 3rd | explain energy of flowing liquid |
| | 4th | types of energy flow in fluid |
| 14th | 1st | state and explain Bernoulli's theorem |
| | 2nd | solving numerical on Bernoulli's theorem |
| | 3rd | hydraulic devices and pneumatics |
| | 4th | hydraulic devices and pneumatics |
| 15th | 1st | intensifier |
| | 2nd | hydraulic lift |
| | 3rd | accumulator |
| | 4th | hydraulic ram |
| 16th | 1st | revision  of chapter 1 and 2 |
| | 2nd | revision  of chapter  3 and 4 |
| | 3rd | revision  of chapter 5 and 6 |
| | 4th | revision  of chapter 7 and 8 |
| 17th | 1st | revision  of chapter 9 and 10 |
| | 2nd | discussion of  question and answer  of chapter 1 |
| | 3rd | discussion of  question and answer  of chapter 2 |
| | 4th | discussion of  question and answer  of chapter 3 |
| 18th | 1st | discussion of  question and answer  of chapter 4 |
| | 2nd | discussion of  question and answer  of chapter 5 and 6 |
| | 3rd | discussion of  question and answer  of chapter 7 and 8 |
| | 4th | discussion of  question and answer  of chapter 9 and 10 |