Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

****

**End Semester Examination – Nov/Dec – 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **17ME3030** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ENERGY CONSERVATION AND MANGEMENT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the history of world conventional and non conventional energy consumption patterns with a help of bar or pie chart? | CO2 | 10 |
| b. | Discuss the importance of energy conservation in an industry? | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | List the various energy programmes in India and explain it? | C02 | 10 |
| b. | What is predictive and preventive maintenance? Explain | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Discuss the importance of energy auditing in a foundry industry? | CO3 | 10 |
|  | b. | Explain the energy audit method in a textile industry? | CO3 | 10 |
| (OR) | | | | |
| 4. | a. | Discuss the importance of energy auditing in a plastic manufacturing industry? | CO3 | 10 |
|  | b. | Explain the energy audit method in a chemical powder making industry? | CO3 | 10 |
|  |  |  |  |  |
| 5. | a. | Discuss the energy conservation opportunities in a water tube boiler? | CO4 | 10 |
|  | b. | Discuss the energy conservation opportunities in buildings? | CO4 | 10 |
| (OR) | | | | |
| 6. | a. | Discuss the energy conservation opportunities in a heat exchanger? | CO4 | 10 |
|  | b. | Explain the energy conservation opportunities in domestic appliances? | CO4 | 10 |
|  |  |  |  |  |
| 7. | a. | Discuss the energy conservation tips in refrigeration systems? | CO5 | 10 |
|  | b. | Define energy conservation? Explain the energy conservation tips in electrical systems? | CO5 | 10 |
| (OR) | | | | |
| 8. | a. | Discuss the energy conservation tips in air conditioning systems? | CO5 | 10 |
|  | b. | Explain the energy conservation tips in cooling towers? | CO5 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the energy management principles? Discuss the need for organization and goal setting? | CO6 | 10 |
|  | b. | Discuss briefly about life cycle costing in financial management? List the factors affecting economics? | CO6 | 10 |

ALL THE BEST