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

G:\logo and QP Template\logo 3 Feb 2018 final.tif

**End Semester Examination – Nov/Dec – 2018**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **16ME1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MECHANICAL MACHINES AND SYSTEMS** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the working of a four stroke petrol engine with neat sketch. | CO1 | 14 |
| b. | Write the functions of carburetor in IC engines. | CO1 | 6 |
| (OR) | | | | |
| 2. | a. | Discuss in detail the working of vapour absorption refrigeration system with a neat diagram. | CO2 | 14 |
| b. | Write short notes on thermoelectric cooling. | CO1 | 6 |
|  |  |  |  |  |
| 3. | a. | Explain the working principle of a split air conditioning with a neat sketch. | CO2 | 14 |
| b. | Write short notes on reciprocating pump with neat diagram. | CO2 | 6 |
| (OR) | | | | |
| 4. | a. | Explain the working principle of pneumatic system. | CO2 | 10 |
| b. | Enumerate the industrial uses of compressors. | CO2 | 10 |
|  |  |  |  |  |
| 5. | a. | Explain in detail about the centrifugal pump with neat sketch. List out the applications. | CO2 | 14 |
| b. | Classify the various types of turbines. | CO2 | 6 |
| (OR) | | | | |
| 6. | a. | Mention the mechanism in a vacuum cleaning system. | CO2 | 10 |
| b. | Draw and explain the working principle of ocean power plant. | CO1 | 10 |
|  |  |  |  |  |
| 7. | a. | What are the different patterns used in casting process and explain the moulding process with neat sketch. | CO3 | 14 |
| b. | Describe about the Milling Machine parts with neat sketch . | CO3 | 6 |
| (OR) | | | | |
| 8. | a. | Discuss about any two metal joining processes with neat sketches. | CO3 | 10 |
| b. | Draw a neat sketch and explain the arc welding technique. | CO3 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Write short notes on fork lifter used in industries. | CO3 | 10 |
| b. | Classify and explain about the different types of cranes. | CO3 | 10 |