**ANURAG GROUP OF INSTITUTIONS**

(Formerly CVSR COLLEGE OF ENGINEERING)

Venkatapur (V), Ghatkesar (M), R. R. Dist.

**(Autonomous)**

**DEPARTMENT OF MECHANICAL ENGINEERING**

Name of the Course: **THERMODYNAMICS**

Name of the course coordinator: **Dr. P. VISHWANATH KUMAR**

**Course Outcomes:**

After completion of this course the students will be able to:

1. Understand and analyze processes such as isothermal, isobaric, isentropic, cyclic Processes
2. Apply equilibrium criteria to systems and thermodynamic properties via partial derivatives, Maxwell’s relations
3. Use equations of state, correlations and tables for non ideal fluids
4. Understand the Perfect Gas laws and their application in the analysis of mechanical and engineering problems
5. Calculate the Efficiencies of different Power Cycles and can be able to represent them on P-V & T-S diagrams.

**Articulation matrix of CO’s with PO’s and PSO’s**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Program Outcome’s** | | | | | | | | | | | | **PSO’s** | | |
| **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO 10** | **PO 11** | **PO12** | **PSO1** | **PSO2** | **PSO3** |
| **CO1** | **3** | **2** | **-** | **-** | **2** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **1** | **-** |
| **CO2** | **3** | **3** | **-** | **-** | **3** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **2** | **-** |
| **CO3** | **3** | **3** | **-** | **-** | **3** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **2** | **-** |
| **CO4** | **3** | **3** | **-** | **-** | **3** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **2** | **-** |
| **CO5** | **3** | **3** | **-** | **-** | **3** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **2** | **-** |
| **AVG** | **3** | **3** | **-** | **-** | **3** | **-** | **-** | **-** | **2** | **2** | **-** | **2** | **2** | **2** | **-** |

***Note*: 1 - Slight**

**2 - Moderate**

**3 - Substantial**

**Signature of the Course Coordinator**