

**Shree Swami Vivekanand Shikshan Sanstha Kolhapur,
DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE COLLEGE,
ICHALKARANJI**

Course Outcomes

Thermal Physics & Statistical Mechanics-I (Paper-V)

B.Sc. II (PHYSICS)

.....

Thermodynamics is a course that explores the concepts of heat and how it can be converted to power, and covers all aspects of energy and energy transfer including power production, refrigeration and property relation of substances. This course has a history of being labeled as one of tough courses. Therefore, it is a challenge for any lecturer who teaches thermodynamics to convince and make students understand the basics concepts of thermodynamics especially the concepts of entropy and Second Law of Thermodynamics which seems to student as abstract things.

Course Outcomes:-

- 1) Ability to understand the basic concepts of thermodynamic such as temperature, pressure, system, properties, process, state, cycles and equilibrium.
- 2) Ability to conduct experiments regarding the measurement and calibration of temperatures and pressures in groups.
- 3) Ability to identify the properties of substances on property diagrams and obtain the data from property tables.
- 4) Ability to define energy transfer through mass, heat and work for closed and control volume systems.
- 5) Ability to apply the first Law of Thermodynamics on closed and control volume systems.
- 6) Ability to apply Second Law of Thermodynamics and entropy concepts in analysing the thermal efficiencies of heat engines such as Carnot and Rankine cycles and the coefficients of performance for refrigerators.