

## Assignment: 1 INTRODUCTION, BASIC CONCEPTS

1. Explain briefly the following terms (i) Thermodynamic system (ii) Surroundings (iii) Boundary (iv) Universe (v) Process (vi) State (vii) Cycle (viii) Control Volume (ix) Thermodynamic equilibrium.

2. Differentiate between the following:

I. Statistical and classical thermodynamics

- II. Open system and control volume
- III. Intensive properties and extensive properties

IV. Microscopic approach and macroscopic approach

V. system and control volume

3. Define a thermodynamic system. Differentiate between open system, closed system and an isolated system.

4. Explain the following terms: Point Function, Homogenous system, First law of thermodynamics, Quasi-static process, pure substance.

5. Explain path function and point function.