

M.Sc. DEGREE EXAMINATION, ODD SEMESTER 2020
II Year and III Semester
Statistical Mechanics

Max.marks :25

Answer any **FIVE** questions ($5 \times 5 = 25$) Marks

1. Explain phase transition and Gibbs phase rule.
2. Describe entropy using second law of thermodynamics.
3. Obtain the relation between statistical and thermo dynamical quantities.
4. Compare MB, BE and FD statistics.
5. Derive Planck's black body radiation formula using the concept of Bose Einstein statistics.
6. Explain Canonical ensemble and its probability density.
7. Derive the expression for partition function from Maxwell Boltzmann distribution.