LESSON PLAN. B.Sc II (IV th Sem.)

STATISTICAL PHYSICS (Paper – I)

- 17 Jan. — 23 Jan.
  - Unit I – Probability
  - Some Probability Considerations.
- 24 Jan — 30 Jan.
  - Combinations possessing maximum Probability
  - Combinations possessing minimum Probability
- 31 Jan. — 06 Feb.
  - Distribution of molecules in two boxes
  - Phase Space.
- 07 Feb — 13 Feb.
  - Microstates And Macrostates
  - Statistical fluctuations
- 14 Feb. — 20 Feb.
  - Constraints
  - Accessible And Inaccessible States.
  - Thermodynamical Probability.
- 21 Feb. — 27 Feb.
  - Unit – II – Introduction (Statistical Physics – II)
  - Postulates of Statistical Physics
- 28 Feb — 06 March.
  - Division of Phase Space into cells
  - Occupation Index . Stirling's Approximation
- 07 March — 13 March
  - Condition of Equilibrium b/w two systems in thermal Contact
  - β - parameter.

- 14 march — 20 March
  - Entropy And Probability
  - Boltzman's Distribution Law
- 21 march — 27 march
  - Evaluation of A And B
  - Bose - Einstein statistics
- 28 march — 03 April
  - Application to Planck's Radiation law
  - Bose - Einstein Gas.
- 04 April — 10 April
  - Unit - III - Introduction (Statistical PHYSICS - III)
  - Fermi - Dirac Statistics
- 11 April — 17 April
  - M.B. Law as limiting Case of B.E. Degeneracy.
  - Bose - Einstein Condensation
- 18 April — 24 April
  - Fermi - Dirac Gas
  - Electron gas in metals
- 25 April — 01 May
  - Zero point Energy
  - Specific Heat of metals And its solution.
- 01 may — Onwards.
  - Revisions.