

CURRICULAM PLAN-- ODD SEMESTER 2025-26**Heat and Thermodynamics****BSC. (H) Physics 3rd semester****Prof. SEEMA GUPTA**

TOPICS	No. OF LECTURES	MONTH WISE SCHEDULE	Tutorial/Assignment/presentation
Zeroth law, First law of thermodynamics and its applications , Second law of thermodynamics, carnot cycle, carnot theorem,	12	August	Numericals based on first law and Second law, Assignments
Thermodynamic scale of temperature, absolute zero temperature, Clausius clapeyron latent heat equation entropy, principal of increase in entropy,thermodynamic potentials, adiabatic lapse rate, carnot enequility, Third law of thermodynamics	12	September	Numericals and problems on clausius clapeyron equation Numericals based on Entropy, Assignments
Maxwell relations, adiabatic demagnetization, First order and second order phase transition. Liquification of gases, Andrew experiment, Vanderwaals equation of state	10	October	Numericals and problems on Maxwell's equation, Assignment
Joul's free expansion, Joul Thompson throttling experiment, Maxwell Boltzman law, Mean free path, Experimental verification of Maxwell law, Transport phenomenon, Vscosity, Conductivity, Diffusion, Brownian motion, Einstein theory, application	11	November	Class Test, Numericals on mean free path, Numericals on transport mechanism

CURRICULAM PLAN-- ODD SEMESTER 2025-26

Heat and Thermodynamics

BSC. (H) Physics 3rd semester

Prof. SEEMA GUPTA
