

LESSON PLAN SESSION 2024-2025 (PHYSICS)

Computer Programming, Thermodynamics (Sem. 1ST)

S.No	WEEK	TOPIC	REMARK
1	22.07.2024- 27.07.2024	Unit-I Binary Representation, Algorithm development, Flow charts and their interpretation	
2	29.07.2024- 03.08.2024	Revision/ Class Test	
3	05.08.2024- 10.08.2024	Unit-II Thermodynamics-I : Second law of thermodynamics, Carnot theorem	
4	12.07.2024- 17.08.2024	Absolute scale of temperature, Absolute Zero	
5	19.08.2024- 24.08.2024	Entropy, show that $dQ/T=O$, T-S diagram	
6	26.08.2024- 31.08.2024	Joule's free expansion, Joule Thomson (Porous plug) experiment.	
7	02.09.2024- 07.09.2024	Joule - Thomson effect	
8	09.09.2024- 14.09.2024	Liquefaction of gases.	
9	16.09.2024- 21.09.2024	Air pollution due to internal combustion Engine	
10	23.09.2024- 28.09.2024	Revision/ Class Test	
11	30.09.2024- 05.10.2024	Unit-III Thermodynamics-II : Derivation of Clausius - Claperyron latent heat equation	
12	07.10.2024- 12.10.2024	Phase diagram and triple point of a substance	
13	14.10.2024- 19.10.2024	Development of Maxwell thermo dynamical relations	
14	21.10.2024- 26.10.2024	Application of Maxwell relations in the derivation of relations between entropy, specific heats and thermodynamic variables.	

16	27.10.2024- 03.11.2024	DIWALI BREAK	
17	04.11.2024- 09.11.2024	Thermodynamic functions : Internal energy (U), Helmholtz function (F), Enthalpy (H), Gibbs function (G)	
18	11.11.2024- 16.11.2024	Relations between Thermodynamic functions	
19	18.11.2024- 23.11.2024	REVISION/ CLASS TEST	
20	25.11.2024 onwards	EXAMINATION	
21	22.12.2024- 31.12.2024	WINTER VACATION	

LESSON PLAN SESSION 2024-2025 SUBJECT-Solid State Physics Sem.5th			
S.No	WEEK	TOPIC	REMARK
1	22.07.2024-27.07.2024	Unit-I Crystalline and glassy forms, liquid crystals.	
2	29.07.2024-03.08.2024	Crystal structure, periodicity, lattice and basis,	
3	05.08.2024-10.08.2024	Crystal translational vectors and axes. Unit cell and primitive cell, Winger Seitz primitive Cell,	
4	12.07.2024-17.08.2024	symmetry operations for a two dimensional crystal	
5	19.08.2024-24.08.2024	Bravais lattices in two & Three dimension	
6	26.08.2024-31.08.2024	Revision/Class Test	
7	02.09.2024-07.09.2024	Unit-II Crystal planes and Miller indices-ray diffraction, Bragg's Law and experimental x-ray diffraction methods, K-space.	
8	09.09.2024-14.09.2024	Interplaner spacing	
9	16.09.2024-21.09.2024	Crystal structures of Zinc sulphide, Sodium Chloride, Crystal structures of diamond	
10	23.09.2024-28.09.2024	Revision/Class Test	
11	30.09.2024-05.10.2024	Unit-III Reciprocal lattice and its physical significance, reciprocal lattice vectors,	
12	07.10.2024-12.10.2024	Reciprocal lattice to a simple cubic lattice,	
13	14.10.2024-19.10.2024	reciprocal lattice to a b.c.c and f.c.c.lattice	
14	21.10.2024-26.10.2024	. Specific heat : Specific heat of solids	
17	27.10.2024-03.11.2024	Diwali Break	
	04.11.2024-09.11.2024	Einstein's theory of specific heat,	
18	11.11.2024-16.11.2024	Debye model of specific heat of solids	
19	18.11.2024-23.11.2024	Revision/Class Test	
20	25.11.2024 onwards	Examinations	
21	22.12.2024-31.12.2024	Winter Vacation	

