

Lesson Plan

Name of the Assistant/ Associate Professor... Jasvinder
 Class and Section... B.Sc. 3rd year (6th Sem.)
 Subject... Physics (Nuclear)

Week	Date	Topics
J A N U A R Y	1 7 Jan - 11 Jan	Nuclear mass and binding energy, systematic nuclear binding energy, nuclear size,
	13 Jan - 18 Jan	Spin, statistic magnetic dipole moment, determination of mass by Bain - Bridge
	20 Jan - 25 Jan	Bain - Bridge and Jordan mass and determination of size and nuclei.
	27 Jan - 30	TOPIC - PRESENTATION.
	3 Feb - 8 Feb	Interaction of heavy charged particles.
F E B R U A R Y	11 Feb - 15 Feb	Alpha disintegration and its theory Energy loss of heavy charged particle. Energetics
	17 Feb - 22 Feb	of alphadecay, Range and straggling of alpha particles, Geiger Nuttal law.
		TOPIC - PRESENT.
	24 Feb - 28 Feb	CLASS - TEST
	3 March - 8 March	Types of beta decay and energetic of beta decay, Energy loss of beta particles, Range of electrons, absorption of beta - particles. Absorption of Gamma rays and its Application. Nature of Gamma rays, Photoelectric effect.
M A R C H		CLASS - TEST.
	4 17 Mar. - 22	Nuclear reactions, Elastic scattering, Inelastic scattering, Nuclear disintegration, Photonuclear reaction, Radiative capture, Direct, reactions
	25 March - 29	Nuclear reactors General aspects of
	1 April - 5 April	Reactor design, Nuclear fission and fusion reactions. Linear accelerators,
	7 April - 12 April	Tandem accelerators, Cyclotron, Betatron.
M A Y	5 1 May to	Doubt - Class
	- - -	Syllabus - Revision
	- 5 May	Class - Test.

Bay

Lesson Plan

Name of the Assistant/ Associate Professor... Jasvinder

Class and Section: ... B.Sc. 2nd year (4th Sem.)

Subject: ... Physics (Statistical)

Week	Date	Topics
J A N U A R Y	1	7 Jan - 11 Jan
		System, Sample space and probability
		Combination, Possessing maximum and minimum
		13 Jan - 18 Jan
		Probability, Distribution of molecules in boxes
F E B R U A R Y		90 Jan - 25
		Phase space, microstate and macrostate
		Constraints, Thermodynamic Probability,
		Accessible and Inaccessible state.
		27 Jan - 30
M A R C H	2	Topic Presentation
		3 Feb - 8 Feb
		Postulates of Statistical Physics; Division
		of phase space into cells.
		11 Feb - 15 Feb
A P R I L		Beta-parameter, entropy and Probability
		Boltzmann distribution law. Evaluation
		17 Feb - 22
		of A and B. Types of statistics.
		Unit - Test
M A R C H		24 Feb - 28 Feb
		Numerical Problems.
	3	3 March - 8 March
		Bose - Einstein statistics, Applications of
		Bose - Einstein statistics to Planck's law
A P R I L		Bose - Einstein gas and its derivation
		ASSIGNMENT
		Topic - Presentation
		Doubt - class
		17 March - 22
M A Y		Fermi - Dirac statistics and its derivation.
	4	25 Mar - 29
		Maxwell Boltzmann distribution law.
		Bose - Einstein condensation in detail.
		class - Test
M A Y		1 April - 5 April
		Fermi - Dirac Gas and its derivation.
		7 April - 12 April
		Electron - gas in metal, zero point
		energy and its significance.
M A Y		14 Apr - 19
		Specific heat of metals and its solution
	5	1 May to
		Doubt class - 2
		Class - Test
M A Y		Syllabus - Revision.

Tram