

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

Date	Lecture No	Teacher's Name	Paper	Chapter	Topic
16/07/2020	1	Dr S. K. Thakur	I	Introduction	List of books & Newtonian Mechanics
16/07/2020	1	Maneeta Singh	III	Statistical basis of thermodynamics	Ensemble & Ergodic Surface
17/07/2020	1	Dr S. K. Thakur	II	Introduction	List of books & Need of QM
18/07/2020	1	Dr S. K. Thakur	IV	Introduction	List of books & concept of spectra
20/07/2020		Dr S. K. Thakur		Class Teaching	
21/07/2020	2	Dr S. K. Thakur	I	Classical mechanics	Conservation theorem
22/07/2020	3	Dr S. K. Thakur	I	Classical mechanic	Constraints & Generalized coordinates
22/07/2020	2	Maneeta Singh	III	Statistical basis of Thermodynamics	Phase space μ and Γ space
23/07/2020	2	Dr S. K. Thakur	II	Matter & radiation Photoelectric Effect	Photoelectric effect
23/07/2020	2	Maneeta Singh	III	Statistical basis of Thermodynamics	Ensemble average & density of state
24/07/2020	2	Dr S. K. Thakur	II	Matter & radiation Photoelectric Effect	Theory of photoelectric effect – explanation
27/07/2020	2	Dr S. K. Thakur	IV	Atomic spectra	Bohr's Model & Its flour
28/07/2020		Dr S. K. Thakur		Class Teaching	
29/07/2020	4	Dr S. K. Thakur	I	System Of Particles	d-Alembert Principle
30/07/2020	5	Dr S. K. Thakur	I	System of Particles	Lagrange's Equations
31/07/2020	3	Dr S. K. Thakur	II	Matter and radiation	Compton effect
04/08/2020	3	Manneta Singh	III	Statistical basis of Thermodynamics	Liouville's Theorem
04/08/2020	3	Dr. S K. Thakur	II	Matter & Radiation	De-Broglie Hypothesis
05/08/2020	3	Dr. S K. Thakur	IV	Atomic spectra	Summerfield model and fine structure of H_α line
05/08/2020	4	Maneeta Singh	III	Statistical Mechanics	Liouville's Theorem(2)
06/08/2020		Dr S. K. Thakur		Class-Teaching	
07/08/2020	6	Dr S. K. Thakur	I	System of Particles	Generalized Momenta , cyclic coordinates
08/08/2020	7	Dr S. K. Thakur	I	System of Particles	Principal Of Least action

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

10/08/2020	4	Dr S.K. Thakur	II	Matter & Radiation	Davinson-Germer experiment
11/08/2020	5	Dr S. K. Thakur	II	Matter & Radiation	wave packet
13/08/2020	6	Dr S. K. Thakur	II	Matter & Radiation	Uncertainty principle
13/08/2020	5	Maneeta Singh	III	Thermodynamics equilibrium	Statistical equilibrium probability and entropy
14/08/2020	4	Dr. S K Thakur	IV	Atomic Spectra	Vector atom model
17/08/2020		Dr. S K. Thakur		Class-Teaching	
18/08/2020	8	Dr S .K. Thakur	I	System of particles	Lagrangian of free particles
19/08/2020	6	Maneeta Singh	III	Thermodynamic Equilibrium	Boltzmann Entropy Relation
20/08/2020	7	Manneta Singh	III	Thermodynamic Equilibrium	MB Distribution
20/08/2020	7	Dr S. K. Thakur	II	Matter and Radiation	Complementary principle
21/08/2020	8	Dr S. K. Thakur	II	Matter and Radiation	Bohr magneton
22/08/2020	5	Dr S. K. Thakur	IV	Atomic Spectra	Paulie's exclusion principle and electronic configuration of atom
24/08/2020		Dr S. K. Thakur		Class-Teaching	
25/08/2020	10	Dr S. K. Thakur	I	Two body problem	Reduction to one-body problem,
26/8/2020	11	Dr S. K. Thakur	I	Two body problem	Center of mass
26/8/2020	8	Maneeta Singh	III	Thermodynamic Equilibrium	Second Law of Thermodynamic
27/8/2020	9	Dr S. K. Thakur	II	Matter & Radiation	electron spin, Stern-Gerlach experiment
27/8/2020	9	Maneeta Singh	III	Thermodynamic Equilibrium	MB Distribution of speed in ideal Gas
28/8/2020	10	Dr S. K. Thakur	II	Schrodinger equation	Time independent and time dependent formulations
01/09/2020	6	Dr S. K. Thakur	IV	Atomic Spectra of one valence electron system	Optical spectra of Alkali atoms
02/09/2020		Dr S. K. Thakur		Monthly Evaluation	
02/09/2020	10	Maneeta Singh	III	Quantum Statistics	MB Distribution
03/09/2020	12	Dr S. K. Thakur	I	Two Body Problem	Kepler's Problem
03/09/2020	11	Maneeta Singh	III	Quantum Statistics	MB Distribution

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

04/09/2020	13	Dr S. K. Thakur	I	Canonical Formulation	Hamilton's equations
05/09/2020	11	Dr S. K. Thakur	II	Schrodinger equation	Postulatory approach to wave mechanics
07/09/2020	12	Dr S. K. Thakur	II	Schrodinger equation	physical interpretation of wave function
08/09/2020	07	Dr S. K. Thakur	IV	Atomic Spectra of one valence electron system	electron spin and fine structure
09/09/2020		Dr S. K. Thakur		Class-Teaching	
09/09/2020	12	Maneeta Singh	III	Quantum Statistics	Plank's Law
10/09/2020	13	Maneeta Singh	III	Quantum Statistics	Plank's Law
10/09/2020	14	Dr S. K. Thakur	I	Canonical Formulation	Poisson's bracket
11/09/2020	15	Dr S. K. Thakur	I	Canonical Formulation	Angular momentum Poisson's brackets
12/09/2020	13	Dr S. K. Thakur	II	Schrödinger equation	Conditions to be satisfied by the Schrödinger equation as an operator equation
14/09/2020	14	Dr S. K. Thakur	II	Schrödinger equation	observable and measurements
15/09/2020	8	Dr S. K. Thakur	IV	Atomic Spectra of one valence electron system	spin orbit interaction
18/09/2020		Dr S. K. Thakur		Class-Teaching	
18/09/2020	1	A.V.	III	Laser & Maser	Einstein coefficient
19/09/2020	16	Dr S. K. Thakur	I	Canonical Formulation	Hamilton Principal function
21/09/2020	17	Dr S. K. Thakur	I	Canonical Formulation	Hamilton-Jacobi equation
22/09/2020	15	Dr S. K. Thakur	II	Schrödinger equation	eigen values and eigen functions
23/09/2020	16	Dr S. K. Thakur	II	Schrödinger equation	Classical limit and Correspondence principle
23/09/2020	2	A.V.	III	Laser & Maser	Einstein coefficient and population inversion
24/09/2020	9	Dr S. K. Thakur	IV	Atomic Spectra of one valence electron system	Zeeman Effect
24/09/2020	14	Maneeta singh	III	Quantum Statistics	R-D Equation
25/09/2020		Dr S. K. Thakur		Monthly evaluation	
26/09/2020	18	Dr S. K. Thakur	I	Canonical Formulation	Harmonic Oscillator Problem
28/09/2020	19	Dr S. K. Thakur	I	Canonical Formulation	Harmonic Oscillator

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

					Problem
29/09/2020	17	Dr S. K. Thakur	II	Schrödinger equation	Normalization and Orthogonality of wave function
30/09/2020	18	Dr S. K. Thakur	II	Schrödinger equation	degeneracy and parity of wave function
30/09/2020	3	A. V.	III	Maser & Laser	Three Level laser & Ruby Laser
01/10/2020	10	Dr S. K. Thakur	IV	Atomic Spectra of one valence electron system	Paschen-Back effects
01/10/2020	04	A.V.	III	Maser & Laser	Ruby Laser
03/10/2020		Dr S. K. Thakur		Class teaching	
05/10/2020	20	Dr S. K. Thakur	I	Motion of rigid body	Angular Momentum
06/10/2020	21	Dr S. K. Thakur	I	Motion of rigid body	Inertia Tensor
07/10/2020	19	Dr S. K. Thakur	II	Schrödinger equation	Probability current density and its interpretation
09/10/2020	20	Dr S. K. Thakur	II	Schrödinger equation	expectation value of an observable
10/10/2020	11	Dr S. K. Thakur	IV	Atomic spectra of two valence electrons system	Spectra of helium and alkali earth elements
12/10/2020		Dr S. K. Thakur		Class teaching	
13/10/2020	22	Dr S. K. Thakur	I	Motion of rigid body	Torque free motion of a rigid body,
14/10/2020	23	Dr S. K. Thakur	I	Motion of rigid body	Symmetrical top
14/10/2020	5	A.V.	III	Laser & Maser	He-Ne laser
15/10/2020	6	A.V.	III	Laser & Maser	He-Ne Maser
15/10/2020	21	Dr S. K. Thakur	II	Schrodinger Equation	Ehrenfest's theorem
16/10/2020	22	Dr S. K. Thakur	II	Schrodinger Equation	Ehrenfest's theorem
17/10/2020	12	Dr S. K. Thakur	IV	Atomic spectra of two valence electrons system	different types of coupling schemes and interaction energies
19/10/2020		Dr S. K. Thakur		Monthly Evaluation	
20/10/2020	24	Dr S. K. Thakur	I	Motion of rigid body	Precession
21/10/2020	25	Dr S. K. Thakur	I	Mathematical Physics	Orthogonal transformations
22/10/2020	23	Dr S. K. Thakur	II	Operators	linear operators
22/10/2020	07	A.V.	III	Nuclear Instruments	Cyclotron
23/10/2020	24	Dr S. K. Thakur	II	Operators	product of two operators

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

29/10/2020	13	Dr S. K. Thakur	IV	Atomic spectra of two valence electrons system	different types of coupling schemes and interaction energies
29/10/2020	08	A.V.	III	Nuclear Instruments	Synchrotron
31/10/2020		Dr S. K. Thakur		Class Teaching	
02/11/2020	26	Dr S. K. Thakur	I	Mathematical Physics	transformation matrix
03/11/2020	27	Dr S. K. Thakur	I	Mathematical Physics	proper and improper rotations
04/11/2020	25	Dr S. K. Thakur	II	Operators	commuting and non commuting operator
04/11/2020	8	A.V.	III	Nuclear Instruments	Betatron
05/11/2020	26	Dr S. K. Thakur	II	Operators	simultaneous eigen functions
05/11/2020	9	A.V.	III	Nuclear Instruments	Geiger-Muller counter
06/11/2020	14	Dr S. K. Thakur	IV	Atomic spectra of two valence electrons system	Zeeman effect
07/11/2020		Dr S. K. Thakur		Class teaching	
09/11/2020	28	Dr S. K. Thakur	I	Mathematical Physics	Euler angles
10/11/2020	29	Dr S. K. Thakur	I	Mathematical Physics	Curvilinear coordinates: tangent basis vectors
17/11/2020	27	Dr S. K. Thakur	II	Operators	Hermitian operators and their properties
18/11/2020	28	Dr S. K. Thakur	II	Simple one dimensional problems	Particle in a box
18/11/2020	10	A. V.	III	Elementary Particles	Classification
19/11/2020	15	Dr S. K. Thakur	IV	Atomic spectra of two valence electrons system	Intensity of spectral lines
19/11/2020	11	A. V.	III	Elementary Particles	Elementary idea of electromagnet
21/11/2020		Dr S. K. Thakur		Class-Teaching	
23/11/2020	30	Dr S. K. Thakur	I	Mathematical Physics	scale factors
24/11/2020	31	Dr S. K. Thakur	I	Mathematical Physics	spherical, polar and cylindrical coordinate systems
26/11/2020	29	Dr S. K. Thakur	II	Simple one dimensional problems	concept of potential well
26/11/2020	12	A.V.	III	Elementary particles	Quark model
27/11/2020	30	Dr S. K. Thakur	II	Simple one dimensional	Wave function and energies

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

				problems	for ground and excited states
28/11/2020		Dr S. K. Thakur		Evaluation	
01/12/2020	16	Dr S. K. Thakur	IV	Molecular spectra	Diatomic molecules and its spectra
02/12/2020	32	Dr S. K. Thakur	I	Mathematical Physics	gradient of a scalar, Divergence and curl of a vector
03/12/2020	33	Dr S. K. Thakur	I	Mathematical Physics	Laplace equation in spherical, polar and cylindrical coordinate systems and its solution
07/12/2020	31	Dr S. K. Thakur	II	Simple one dimensional problems	Step potential, penetration through rectangular barrier,
08/12/2020	32	Dr S. K. Thakur	II	Simple one dimensional problems	transmission coefficients, quantum mechanical tunneling.
09/12/2020	17	Dr S. K. Thakur	IV	Molecular spectra	Quantum mechanical interpretation of near and far infra-red spectra of diatomic molecules
11/12/2020		Dr S. K. Thakur		Class-Teaching	
12/12/2020	34	Dr S. K. Thakur	I	Special Function	Legendre Equation
14/12/2020	35	Dr S. K. Thakur	I	Special Function	Legendre Equation
15/12/2020	33	Dr S. K. Thakur	II	One dimensional harmonic oscillator	One dimensional harmonic oscillator solution
16/12/2020	34	Dr S. K. Thakur	II	One dimensional harmonic oscillator	One dimensional harmonic oscillator solution
17/12/2020	18	Dr S. K. Thakur	IV	Molecular spectra	Rotation Spectra
18/12/2020		Dr S. K. Thakur		Class-Teaching	
21/12/2020	36	Dr S. K. Thakur	I	Special Function	Hermite Equation
22/12/2020	37	Dr S. K. Thakur	I	Special Function	Hermite Equation
23/12/2020	17	A. V.	III	Nuclear & Nuclear Model	Bohr-wheeler Theory
23/12/2020	35	Dr S. K. Thakur	II	One dimensional harmonic oscillator	One dimensional harmonic oscillator eigen function

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

24/12/2020	18	A. V.	III	Nuclear & Nuclear Model	Semi-empirical mass formula
24/12/2020	36	Dr S. K. Thakur	II	Hydrogen atom	Schrödinger equation and its solution
26/12/2020	21	Dr S. K. Thakur	IV	Molecular spectra	P,Q, & R branch
28/12/2020	38	Dr S. K. Thakur	I	Special Function	Hermite Equation
29/12/2020	39	Dr S. K. Thakur	I	Special Function	Laguerre differential equations
30/12/2020	19	A.V.	III	Nuclear Model	Shell Model & Magic Number
30/12/2020	37	Dr S. K. Thakur	II	Hydrogen atom	angular momentum
31/12/2020	20	A.V.	III	Magnetism	Dia & paramagnetism
31/12/2020	38	Dr S. K. Thakur	II	Hydrogen atom	angular momentum
01/01/2021	22	Dr S. K. Thakur	IV	Molecular spectra	Classification of molecular electronic status of a diatomic molecules
02/02/2020	23	Dr S. K. Thakur	IV	Molecular spectra	symmetry properties of electronic eigen functions
04/02/2020		Dr S. K. Thakur		Class-Teaching	
06/01/2020	40	Dr S. K. Thakur	II	Hydrogen atom	Angular Momentum
06/01/2021	20	A.V.	III	Magnetism	Curie's Law
07/01/2020	39	Dr S. K. Thakur	II	Hydrogen atom	Commutation Relation of angular momentum operator
07/01/2020	21	A. V.	III	Magnetism	Curie's Law
08/01/2020	24	Dr S. K. Thakur	IV	Molecular spectra	coupling of rotation and electronic motion
09/01/2021	25	Dr S. K. Thakur	III	Molecular spectra	Electronic band systems
11/01/2021	40	Dr S. K. Thakur	I	Special Function	generating functions
12/01/2021	40	Dr S. K. Thakur	II	Hydrogen atom	Commutation Relation of angular momentum operator
13/01/2021	22	A. V.	III	Magnetism	Ferromagnetism
13/01/2021	40	Dr S. K. Thakur	II	Hydrogen atom	L_2 and L_z and their degeneracy

Maharana Pratap PG College Jungal Dhushan Gorakhpur

Bsc-III

Physics

16/01/2021		Dr S. K. Thakur		Class-Teaching	
18/01/2021	41	Dr S. K. Thakur	I	Special Function	generating functions
19/01/2021	42	Dr S. K. Thakur	I	Special Function	generating functions
20/01/2021	41	Dr S. K. Thakur	II	Hydrogen atom	Rigid rotator
20/01/2021	23	A. V.	III	Magnetism	Concept of Domain Formation
21/01/2021	42	Dr S. K. Thakur	II	Hydrogen atom	Rigid rotator
21/01/2021	24	A. V.	III	Magnetism	Hysteresis
22/01/2021	25	Dr S. K. Thakur	IV	Molecular spectra	sequences and progressions
23/01/2021	26	Dr S. K. Thakur	IV	Molecular spectra	Franck-Codon principle
25/01/2021	43	Dr S. K. Thakur	I	Special Function	Rodrigue's formula and orthogonality properties
27/01/2021	43	Dr S. K. Thakur	II	Hydrogen atom	Rigid rotator
27/01/2021	26	A.V.	III	Revision	Revision
28/01/2021	27	Dr S. K. Thakur	IV	Molecular spectra	Raman Spectra
28/01/2021	25	Maneeta/ A.V.	--	Revision	Revision
29/01/2021	28	Dr S. K. Thakur	IV	Molecular spectra	Florescence
30/01/2021	29	Dr S. K. Thakur	IV	Molecular spectra	Revision