

महाराणा प्रताप पी.जी. कालेज, जंगल धूसड़, गोरखपुर

कक्षा : बी.एस.सी तृतीय वर्ष		पाठ्यक्रम योजना : सत्र-2021-22			विषय : भौतिकी
दिनांक	व्याख्यान सं.	प्राध्यापक का नाम	प्रश्नपत्र	अध्याय	शीर्षक
16-07-2021	1	Dr S.K.Thakur	I	Introduction	List of books
17-07-2021	1	Dr S.K.Thakur	II	Introduction	List of books
19-07-2021	1	Dr S.K.Thakur	IV	Introduction	List of books
21-07-2021	1	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Ensemble, Ergodic Surface
20-07-2021		Dr S.K.Thakur		CLASS TEACHING	
22-07-2021	2	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Phase space μ and Γ -space
22-07-2021	2	Dr S.K.Thakur	I	Classical mechanics	Conservation theorem
23-07-2021	3	Dr S.K.Thakur	I	System of particle	Constraints and generalized coordinates
24-07-2021	2	Dr S.K.Thakur	II	Schrodinger equation	Time-dependent equation
26-07-2021	2	Dr S.K.Thakur	II	Schrodinger equation	Time-depedent equation
28-07-2021	2	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Ensemble Average, Density of states
27-07-2021	2	Dr S.K.Thakur	IV	Atomic spectra of two systems	Bhors Model
28-07-2021		Dr S.K.Thakur		CLASS TEACHING	
29-07-2021	4	Dr S.K.Thakur	I	System of particle	D-alembert principle
30-07-2021	5	Dr S.K.Thakur	I	System of particle	Langrange's equation
31-07-2021	3	Dr S.K.Thakur	II	Schrodinger equation	Postulate of Q.M. superposition principle
29-07-2021	3	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Liouville's theorem
02-08-2021	3	Dr S.K.Thakur	II	Schrodinger equation	Physical Interpretation of wave function
03-08-2021	3	Dr S.K.Thakur	IV	Atomic spectra of two systems	Draw Back of Bhor's Model
04-08-2021		Dr S.K.Thakur		CLASS TEACHING	
05-08-2021	6	Dr S.K.Thakur	I	System of particle	Generalised Momenta
06-08-2021	7	Dr S.K.Thakur	I	System of particle	Principle of least action
07-08-2021	4	Dr. S. K. Thakur	II	Schrodinger equation	Schrodinger equation
04-08-2021	4	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Liouville's theorem : 2nd part
09-08-2021	5	Dr S.K.Thakur	II	Schrodinger equation	Schrodinger equation
10-08-2021	6	Dr S.K.Thakur	II	Schrodinger equation	Expectation Value
05-08-2021	5	Dr S.K.Thakur	III	Thermodynamic equilibrium	Statistical equilibrium, Probability & entropy
11-08-2021	4	Dr S.K.Thakur	IV	Atomic spectra of two systems	Sommer fields Model
12-08-2021		Dr S.K.Thakur		CLASS TEACHING	
14-08-2021	8	Dr S.K.Thakur	I	System of particle	Langrangian for a free particle
16-08-2021	9	Dr S.K.Thakur	I	System of particle	Remaining portion & discussion
11-08-2021	6	Dr S.K.Thakur	III	Thermodynamic equilibrium	Boltzman Entropy Relation
17-08-2021	7	Dr S.K.Thakur	II	Schrodinger equation	Ehrenfest's theorem
18-08-2021	8	Dr S.K.Thakur	II	Schrodinger equation	Ehrenfest's theorem

20-08-2021	5	Dr S.K.Thakur	IV	Two valance system	Paschen back effect
21-08-2021		Dr S.K.Thakur		CLASS TEACHING	
18-08-2021	7	Dr S.K.Thakur	III	Thermodynamic equilibrium	M.B. distribution
23-08-2021	10	Dr S.K.Thakur	I	Two body problem	Reduction to one body problem
24-08-2021	11	Dr S.K.Thakur	I	Two body problem	Centre of Mass, kepler's Law
25-08-2021	8	Dr S.K.Thakur	III	Thermodynamic equilibrium	2nd Law of thermodynamics
25-08-2021	9	Dr S.K.Thakur	II	Schrodinger equation	Degeneracy & parity
26-08-2021	9	Dr S.K.Thakur	III	Thermodynamic equilibrium	M.B. distribution of speed in an ideal gas
26-08-2021	10	Dr S.K.Thakur	II	Operator	Linear operator, production of two operator
27-08-2021	6	Dr S.K.Thakur	IV	Two valance system	Draw Back of Sommer Field Model
27-08-2021		Dr S.K.Thakur		MONTHLY EVALUATION	
31-08-2021	12	Dr S.K.Thakur	I	Two body problem	Kepler's problem
08-09-2021	10	Dr S.K.Thakur	III	Quantum statistics	M. B. distribution
09-09-2021	11	Dr S.K.Thakur		Quantum statistics	M. B. distribution
01-09-2021	13	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
02-09-2021	11	Dr S.K.Thakur	II	Operator	Simultaneous eign function
03-09-2021	12	Dr S.K.Thakur	II	Operator	Simultaneous egin function
04-09-2021	7	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Orbital Angular Momentum
06-09-2021		Dr S.K.Thakur		CLASS TEACHING	
15-09-2021	12	Dr S.K.Thakur	III	Quantum statistics	Planck's Law
16-09-2021	13	Dr S.K.Thakur	III	Quantum statistics	Planck's Law
07-09-2021	14	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
08-09-2021	15	Dr S.K.Thakur	I	Canonical formulation	Canonical transformation
09-09-2021	13	Dr S.K.Thakur	II	Operator	Angular momentum operator
10-09-2021	14	Dr S.K.Thakur	II	Simple one-D problem	Particle in a box
11-09-2021	8	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Spin Angular Momentum and Space Quantization
13-09-2021		Abhishek Verma		CLASS TEACHING	
22-09-2021	1	Abhishek Verma	III	Laser & Maser	Eienstein coefficient,
14-09-2021	16	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
23-09-2021	2	Abhishek Verma	III	Laser & Maser	Eienstein coefficient Population inversion
15-09-2021	17	Dr S.K.Thakur	I	Canonical formulation	Poisson's bracket , angular momentum
16-09-2021	15	Dr S.K.Thakur	II	Simple one-D problem	Step potential
18-09-2021	16	Dr S.K.Thakur	II	Simple one-D problem	Rectangular barrier
20-09-2021	9	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Vector Atom Model
29-09-2021				MONTHLY EVALUATION	
30-09-2021	3	Abhishek Verma	III	Laser & Maser	Three level laser, Ruby Laser
21-09-2021	18	Dr S.K.Thakur	I	Canonical formulation	Harmonic oscillator problem
22-09-2021	19	Dr S.K.Thakur	I	Canonical formulation	Harmonic oscillator problem
23-09-2021	17	Dr S.K.Thakur	II	Simple one-D problem	Rectangular barrier

25-09-2021	18	Dr S.K.Thakur	II	Simple one-D problem	Finite Potential well
27-09-2021	10	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	State of Atom and their Representation
29-09-2021		Dr S.K.Thakur		CLASS TEACHING	
30-09-2021	20	Dr S.K.Thakur	I	Motion of rigid bodies	Angular momentum
01-10-2021	21	Dr S.K.Thakur	I	Motion of rigid bodies	Torque free motion of a rigid body
06-10-2021	4	Abhishek Verma	III	Laser & Maser	Ruby Laser
04-10-2021	19	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Linear Harmonic Oscillator
07-10-2021		Abhishek Verma	III	Laser & Maser	He-Ne Laser, Maser
05-10-2021	20	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Linear Harmonic Oscillator
07-10-2021	5	Dr S.K.Thakur	III	Linear & maser He-He Meser	Linear & maser He-He Meser
08-10-2021	11	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Spin orbital Interaction
09-10-2021				CLASS TEACHING	
13-10-2021	10	Abhishek Verma	III	Nuclear instruments	Cyclotron
11-10-2021	22	Dr S.K.Thakur	I	Motion of rigid bodies	Symmetrical top precession
18-10-2021	23	Dr S.K.Thakur	I	Curvi linear coordinates	Tangent basis vectors, scale factor
20-10-2021	21	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Ground & excited states, zero point energy
21-10-2021	22	Dr S.K.Thakur	II	Matter and radiation	Photoelectric effect
22-10-2021	12	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	L-S Coupling
23-10-2021		Dr S.K.Thakur		MONTHLY EVALUATION	
25-10-2021	24	Dr S.K.Thakur	I	Curvilinear coordinates	Spherical coordinate system
26-10-2021	25	Dr S.K.Thakur	I	Curvilinear coordinates	Polar & Cylindrical Coordinate System
20-10-2021	6	Abhishek Verma	III	Nuclear instruments	Synchrotron
21-10-2021	7	Abhishek Verma	III	Nuclear instruments	Betatron
27-10-2021	23	Dr S.K.Thakur	II	Matter and radiation	Photoelectric effect
28-10-2021	24	Dr S.K.Thakur	II	Matter and radiation	Compton Effect
29-10-2021	13	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	J.J Coupling
30-10-2021		Dr S.K.Thakur		CLASS TEACHING	
08-11-2021	26	Dr S.K.Thakur	I	Curvilinear coordinates	Gradient of Scale, Curl divergent
27-10-2021	8	Abhishek Verma	III	Nuclear instruments	G.. M. Counter
28-10-2021	9	Abhishek Verma	III	Nuclear instruments	G.. M. Counter
09-10-2021	27	Dr S.K.Thakur	I	Curvilinear coordinate	Laplace equation in spherical polar & cylindrical
11-11-2021	25	Dr S.K.Thakur	II	Matter and radiation	De- Broglie's Hypothesis
12-11-2021	26	Dr S.K.Thakur	II	Matter and radiation	Davison-germer Experiment
13-11-2021	14	Dr S.K.Thakur	IV	Atomic Model	Alkali Spectra
16-11-2021		Dr S.K.Thakur		CLASS TEACHING	
17-11-2021	28	Dr S.K.Thakur	I	Special functions	Legendra generationony Function

18-11-2021	29	Dr S.K.Thakur	I	Special functions	Legendra differential equation
20-11-2021	27	Dr S.K.Thakur	II	Matter & Radiation	Uncertainty & Complementary Principle
03-11-2021	10	Abhishek Verma	III	Elementary Particle	Classification
04-11-2021	11	Abhishek Verma	III	Elementary Particle	Elementry ideas of Electro magnate
22-11-2021	28	Dr S.K.Thakur	II	Matter & Radiation	Bohr Magnetron, Angular Momentum
23-11-2021	15	Dr S.K.Thakur	IV	Atomic Model	Diand D2 Lines
25-11-2021		Dr S.K.Thakur		CLASS TEACHING	
26-11-2021	30	Dr S.K.Thakur	I	Special functions	Recurrence relations
11-12-2021	12	Abhishek Verma	III	Elementary Particle	Quark Model
27-11-2021	31	Dr S.K.Thakur	I	Special functions	Rodrigue's formula & orthogonality
17-11-2021	13	Abhishek Verma	III	Elementary Particle	Quark Model
29-11-2021	29	Dr S.K.Thakur		MONTHLY EVALUATION	
30-11-2021	30	Dr S.K.Thakur	II	H-atom	H-atom, Value of L2 & L2
01-12-2021	16	Dr S.K.Thakur	IV	Atomic Model	Atom inMagnetic Field
02-12-2021		Dr S.K.Thakur		CLASS TEACHING	
03-12-2021	32	Dr S.K.Thakur	I	Special functions	Legendre Polynomial & Generating function of Laguerre
18-12-2021	14	Abhishek Verma	III	Nuclear and nuclear Model	Rutherford Scattering
07-12-2021	33	Dr S.K.Thakur	I	Special functions	Recurrence relation for Laguerre
08-12-2021	15	Abhishek Verma	III	Nuclear and nuclear Model	Liquid drop Model
08-12-2021	31	Dr S.K.Thakur	II	H-atom	Remaining portion
09-12-2021	32	Dr S.K.Thakur	II	QUESTION ANSWER	
11-12-2021	17	Dr S.K.Thakur	IV	Atomic Model	Zeeman Effect
09-12-2021	16	Abhishek Verma	III	Nuclear and nuclear Model	Static Properties of Nucleas
13-12-2021		Dr S.K.Thakur		CLASS TEACHING	
14-12-2021	34	Dr S.K.Thakur	I	Special functions	orthogonality of laguerre
15-12-2021	35	Dr S.K.Thakur	I	Special functions	Rodrigues formula for laguerre
16-12-2021	33	Dr S.K.Thakur	II	QUESTION ANSWER	
17-12-2021	34	Dr S.K.Thakur	II	QUESTION ANSWER	
15-12-2021	17	Abhishek Verma	III	Nuclear and nuclear Model	Bohr- Wheeler Theory
16-12-2021	18	Abhishek Verma	III	Nuclear and nuclear Model	Semi-empirical Mass formula
18-12-2021	18	Dr S.K.Thakur	IV	Atomic Model	Analamous and Normal Zeemn Effect
20-12-2021				CLASS TEACHING	
21-12-2021	36	Dr S.K.Thakur	I	Special functions	Laguerre's Associated Polynomial
22-12-2021	37	Dr S.K.Thakur	I	Special functions	Hermite differential equation $H_n(x)$

22-12-2021	19	Abhishek Verma	III	Nuclear and nuclear Model	Beethe's Theory and Nuclear Fusion
23-12-2021	19	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Stark Effect
23-12-2021	19	Abhishek Verma	III	Magnetism	Diamagnetism, Para magnetism
24-12-2021	20	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Molecular Spectra
27-12-2021	21	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Dumb Bell Model of Diatomic Molecule
28-12-2021	18	Abhishek Verma	III	Nuclear and nuclear Model	Shell Model and Magic Number
29-12-2021		Dr S.K.Thakur		MONTHLY EVALUATION	
29-12-2021	20	Abhishek Verma	III	Magnetism	Curie's Law
30-12-2021	36	Dr S.K.Thakur	I	Special functions	Rearrence relation for $H_n(x)$ Orthogonality for $H_n(x)$
30-12-2021		Abhishek Verma	III	Magnetism	Curie's Law
31-12-2021	37	Dr S.K.Thakur	I	Special functions	Remaining Portion of Special function
01-01-2022	22	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Rotational Spectra
03-01-2022	23	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Vibational Spectra
04-01-2022	24	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Rotational- Vibrational Spectra
05-01-2022				CLASS TEACHING	
06-01-2022	38	Dr S.K.Thakur	I	Proper & improper rotation	Proper & improper rotation
05-01-2022	21	Abhishek Verma	III	Magnetism	Curie's Law
06-01-2022	22	Abhishek Verma	III	Magnetism	FerroMagnetism, domain
07-01-2022	39	Dr S.K.Thakur	I	Euler's angle	Euler's angles, Notation of goldstein
10-01-2022	25	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Franck-condon principle
11-01-2022	26	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Sequences & Progression
12-01-2022	27	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Fluorescence
12-01-2022	23	Abhishek Verma	III	Magnetism	Hysteresis Loop
13-01-2022	28	Dr S.K.Thakur	IV	Fluorescence & raman spectra	Raman Spectra
13-01-2022	24	Abhishek Verma	III	Magnetism	Revision
17-01-2022				CLASS TEACHING	
18-01-2022	40	Dr S.K.Thakur	I	Orthogonal Transformation	Transformation of Matrix
19-01-2022	41	Dr S.K.Thakur	I	Hydrogen Atom	Radial Solution
20-01-2022	29	Dr S.K.Thakur	IV	Molecular Spectra	Fluorescence
20-01-2022	30	Dr S.K.Thakur	IV	Molecular Spectra	I R- Raman Spectra Exclusion Rule
21-01-2022	31	Dr S.K.Thakur	I	Rigid Body Dynamics	EULER Equation of Motion
22-01-2022		Dr S.K.Thakur		CLASS TEACHING	

24-01-2022	32	Dr S.K.Thakur	II	Anguler Momentum	Commutation Operator Algebra
27-01-2022	33	Dr S.K.Thakur	IV	Fluresence & raman spectra	Revision
28-01-2022				<i>MONTHLY EVALUATION</i>	
29-01-2022	43	Dr S.K.Thakur	I	Orthogonal Transformation	Revision

