

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

कक्षा : बी.एस.सी तृतीय वर्ष		पाठ्यक्रम योजना : सत्र-2022-23			विषय : भौतिकी
दिनांक	व्याख्यान सं.	प्राध्यापक का नाम	प्रश्नपत्र		शीर्षक
08-07-2022	1	Dr S.K.Thakur	I	Introduction	List of books
09-07-2022	1	Dr S.K.Thakur	II	Introduction	List of books
11-07-2022	1	Dr S.K.Thakur	IV	Introduction	List of books
12-07-2022	1	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Ensemble, Ergodic Surface
13-07-2022		Dr S.K.Thakur		CLASS TEACHING	
14-07-2022	2	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Phase space μ and Γ -space
15-07-2022	2	Dr S.K.Thakur	I	Classical mechanics	Conservation theorem
16-07-2022	3	Dr S.K.Thakur	I	System of particle	Constraints and generalized coordinates
18-07-2022	2	Dr S.K.Thakur	II	Schrodinger equation	Time-dependent equation
19-07-2022	2	Dr S.K.Thakur	II	Schrodinger equation	Time-depedent equation
20-07-2022	2	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Ensemble Average, Density of states
21-07-2022	2	Dr S.K.Thakur	IV	Atomic spectra of two systems	Bhors Model
22-07-2022		Dr S.K.Thakur		CLASS TEACHING	
23-07-2022	4	Dr S.K.Thakur	I	System of particle	D-alembert principle
25-07-2022	5	Dr S.K.Thakur	I	System of particle	Langrange's equation
26-07-2022	3	Dr S.K.Thakur	II	Schrodinger equation	Postulate of Q.M. superposition principle
27-07-2022	3	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Liouville's theorem
28-07-2022	3	Dr S.K.Thakur	II	Schrodinger equation	Physical Interpretation of wave function
29-07-2022	3	Dr S.K.Thakur	IV	Atomic spectra of two systems	Draw Back of Bhor's Model
30-07-2022		Dr S.K.Thakur		CLASS TEACHING	
01-08-2022	6	Dr S.K.Thakur	I	System of particle	Generalised Momenta
03-08-2022	7	Dr S.K.Thakur	I	System of particle	Principle of least action
04-08-2022	4	Dr. S. K. Thakur	II	Schrodinger equation	Schrodinger equation
05-08-2022	4	Dr S.K.Thakur	III	Statistical basis of Thermodynamics	Liouville's theorem : 2nd part
06-08-2022	5	Dr S.K.Thakur	II	Schrodinger equation	Schrodinger equation
08-08-2022	6	Dr S.K.Thakur	II	Schrodinger equation	Expectation Value
10-08-2022	5	Dr S.K.Thakur	III	Thermodynamic equilibrium	Statistical equilibrium, Probability & entropy
11-08-2022	4	Dr S.K.Thakur	IV	Atomic spectra of two systems	Sommer fields Model
13-08-2022		Dr S.K.Thakur		CLASS TEACHING	
16-08-2022	8	Dr S.K.Thakur	I	System of particle	Langrangian for a free particle
17-08-2022	9	Dr S.K.Thakur	I	System of particle	Remaining portion & discussion
19-08-2022	6	Dr S.K.Thakur	III	Thermodynamic equilibrium	Boltzman Entropy Relation
20-08-2022	7	Dr S.K.Thakur	II	Schrodinger equation	Ehrenfest's theorem
22-08-2022	8	Dr S.K.Thakur	II	Schrodinger equation	Ehrenfest's theorem
23-08-2022	5	Dr S.K.Thakur	IV	Two valance system	Paschen back effect
24-08-2022		Dr S.K.Thakur		CLASS TEACHING	
25-08-2022	7	Dr S.K.Thakur	III	Thermodynamic equilibrium	M.B. distribution
26-08-2022	10	Dr S.K.Thakur	I	Two body problem	Reduction to one body problem
27-08-2022		Dr S.K.Thakur		MONTHLY EVALUATION	Centre of Mass, kepler's Law

29-08-2022	8	Dr S.K.Thakur	III	Thermodynamic equilibrium	2nd Law of thermodynamics
30-08-2022	9	Dr S.K.Thakur	II	Schrodinger equation	Degeneracy & parity
31-08-2022	9	Dr S.K.Thakur	III	Thermodynamic equilibrium	M.B. distribution of speed in an ideal gas
01-09-2022	10	Dr S.K.Thakur	II	Operator	Linear operator, production of two operator
02-09-2022	6	Dr S.K.Thakur	IV	Two valence system	Draw Back of Sommer Field Model
03-09-2022	7	Dr S.K.Thakur	IV	Two valence Elect.	Draw Back of Sommer Field Model 2
05-09-2022	12	Dr S.K.Thakur	I	Two body problem	Kepler's problem
06-09-2022	10	Dr S.K.Thakur	III	Quantum statistics	M. B. distribution
07-09-2022	11	Dr S.K.Thakur		Quantum statistics	M. B. distribution
10-09-2022	13	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
12-09-2022	11	Dr S.K.Thakur	II	Operator	Simultaneous eigen function
13-09-2022	12	Dr S.K.Thakur	II	Operator	Simultaneous eigen function
15-09-2022	7	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Orbital Angular Momentum
16-09-2022		Dr S.K.Thakur		CLASS TEACHING	
19-09-2022	12	Dr S.K.Thakur	III	Quantum statistics	Planck's Law
20-09-2022	13	Dr S.K.Thakur	III	Quantum statistics	Planck's Law
21-09-2022	14	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
22-09-2022	15	Dr S.K.Thakur	I	Canonical formulation	Canonical transformation
23-09-2022	13	Dr S.K.Thakur	II	Operator	Angular momentum operator
24-09-2022	14	Dr S.K.Thakur	II	Simple one-D problem	Particle in a box
26-09-2022	8	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Spin Angular Momentum and Space Quantization
27-09-2022		Dr S.K.Thakur		MONTHLY EVALUATION	
28-09-2022	1	Abhishek Verma	III	Laser & Maser	Einstein coefficient,
29-09-2022	16	Dr S.K.Thakur	I	Canonical formulation	Hamilton's equation
29-09-2022	2	Abhishek Verma	III	Laser & Maser	Einstein coefficient Population inversion
30-09-2022	17	Dr S.K.Thakur	I	Canonical formulation	Poisson's bracket , angular momentum
01-10-2022	15	Dr S.K.Thakur	II	Simple one-D problem	Step potential
07-10-2022	16	Dr S.K.Thakur	II	Simple one-D problem	Rectangular barrier
08-10-2022	9	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Vector Atom Model
10-10-2022				CLASS TEACHING	
12-10-2022	3	Abhishek Verma	III	Laser & Maser	Three level laser, Ruby Laser
11-10-2022	18	Dr S.K.Thakur	I	Canonical formulation	Harmonic oscillator problem
12-10-2022	19	Dr S.K.Thakur	I	Canonical formulation	Harmonic oscillator problem
13-10-2022	17	Abhishek Verma	III	Laser & Maser	Einstein Coeff 2
14-10-2022	18	Dr S.K.Thakur	II	Simple one-D problem	Finite Potential well
15-10-2022	10	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	State of Atom and their Representation
17-10-2022		Dr S.K.Thakur		CLASS TEACHING	
18-10-2022	20	Dr S.K.Thakur	I	Motion of rigid bodies	Angular momentum
19-10-2022	21	Dr S.K.Thakur	I	Motion of rigid bodies	Torque free motion of a rigid body
19-10-2022	4	Abhishek Verma	III	Laser & Maser	Ruby Laser
20-10-2022	19	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Linear Harmonic Oscillator
20-10-2022		Abhishek Verma	III	Laser & Maser	He-Ne Laser, Maser
28-10-2022	20	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Linear Harmonic Oscillator

29-10-2022	5	Dr S.K.Thakur	III	Linear & Measer He-He	Linear & measer He-He Meser
01-11-2022	11	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	Spin orbital Interaction
02-11-2022				CLASS TEACHING	
02-11-2022	10	Abhishek Verma	III	Nuclear instruments	Cyclotron
03-11-2022	22	Dr S.K.Thakur	I	Motion of rigid bodies	Symmetrical top precession
03-11-2022	23	Abhishek Verma	III	Nuclear instruments	Synchrontron
05-11-2022	21	Dr S.K.Thakur	II	One D-Harmonic Oscillator	Ground & excited states, zero point energy
07-11-2022	22	Dr S.K.Thakur	II	Matter and radiation	Photoelectric effect
09-11-2022	12	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	L-S Coupling
10-11-2022		Dr S.K.Thakur		CLASS TEACHING	
11-11-2022	24	Dr S.K.Thakur	I	Curvilinear coordinates	Spherical coordinate system
12-11-2022	25	Dr S.K.Thakur	I	Curvilinear coordinates	Polar & Cylindrical Coordinate System
09-11-2022	6	Abhishek Verma	III	Nuclear instruments	Synchrotron
10-11-2022	7	Abhishek Verma	III	Nuclear instruments	Betatron
14-11-2022	23	Dr S.K.Thakur	II	Matter and radiation	Photoelectric effect
15-11-2022	24	Dr S.K.Thakur	II	Matter and radiation	Compton Effect
16-11-2022	13	Dr S.K.Thakur	IV	Atomic spectra of one Valence system	J.J Coupling
17-11-2022		Dr S.K.Thakur		CLASS TEACHING	
18-11-2022	26	Dr S.K.Thakur	I	Curvilinear coordinates	Gradient of Scale, Curl divergent
16-11-2022	8	Abhishek Verma	III	Nuclear instruments	G. M. Counter
17-11-2022	9	Abhishek Verma	III	Nuclear instruments	G. M. Counter
19-11-2022	27	Dr S.K.Thakur	I	Curvilinear coordinate	Laplace equation in spherical polar & cylindrical
21-11-2022	25	Dr S.K.Thakur	II	Matter and radiation	De- Broglie's Hypothesis
22-11-2022	26	Dr S.K.Thakur	II	Matter and radiation	Davison-germer Experiment
23-11-2022	14	Dr S.K.Thakur	IV	Atomic Model	Alkali Spectra
25-11-2022		Dr S.K.Thakur		MONTHLY EVALUATION	
26-11-2022	28	Dr S.K.Thakur	I	Special functions	Legendra generationy Function
28-11-2022	29	Dr S.K.Thakur	I	Special functions	Legendra differential equation
29-11-2022	27	Dr S.K.Thakur	II	Matter & Radiation	Uncertainty & Complementary Principle
23-11-2022	10	Abhishek Verma	III	Elementary Particle	Classification
30-11-2022	11	Abhishek Verma	III	Elementary Particle	Elementry ideas of Electro magnate
30-11-2022	28	Dr S.K.Thakur	II	Matter & Radiation	Bohr Magnetron, Angular Momentum
01-12-2022	15	Dr S.K.Thakur	IV	Atomic Model	Diand D2 Lines
02-12-2022		Dr S.K.Thakur		CLASS TEACHING	
03-12-2022	30	Dr S.K.Thakur	I	Special functions	Recurrence relations
01-12-2022	12	Abhishek Verma	III	Elementary Particle	Quark Model
02-12-2022	31	Dr S.K.Thakur	I	Special functions	Rodrigue's formula & orthogonality
02-12-2022	13	Abhishek Verma	III	Elementary Particle	Quark Model
03-12-2022	30	Dr S.K.Thakur	II	H-atom	H-atom, Value of L2 & L2
07-12-2022	16	Dr S.K.Thakur	IV	Atomic Model	Atom in Magnetic Field
08-12-2022	32	Dr S.K.Thakur	I	Special functions	Legendre Polynomial & Generating function of Laguerre

07-12-2022	14	Abhishek Verma	III	Nuclear and nuclear Model	Rutherford Scattering
12-12-2022	33	Dr S.K.Thakur	I	Special functions	Recurrence relation for Laguerre
08-12-2022	15	Abhishek Verma	III	Nuclear and nuclear Model	Liquid drop Model
13-12-2022	31	Dr S.K.Thakur	II	H-atom	Schrodinger
14-12-2022	32	Dr S.K.Thakur		CLASS TEACHING	
15-12-2022	17	Dr S.K.Thakur	IV	Atomic Model	Zeeman Effect
02-01-2023	34	Dr S.K.Thakur	I	Special functions	Orthogonality of laguerre
03-01-2023	35	Dr S.K.Thakur	I	Special functions	Rodrigues formula for laguerre
04-01-2023	33	Dr S.K.Thakur	II	H-atom	Continued
05-01-2023	34	Dr S.K.Thakur	II	H-atom	Continued
04-01-2023	17	Abhishek Verma	III	Nuclear and nuclear Model	Bohr- Wheeler Theory
05-01-2023	18	Abhishek Verma	III	Nuclear and nuclear Model	Semi-empirical Mass formula
06-01-2023	18	Dr S.K.Thakur	IV	Atomic Model	Analamous and Normal Zeemn Effect
07-01-2023				MONTHLY EVALUATION	
09-01-2023	36	Dr S.K.Thakur	I	Special functions	Laguerre's Associated Polynomial
10-01-2023	37	Dr S.K.Thakur	I	Special functions	Hermite differential equation $H_n(x)$
11-01-2023	19	Abhishek Verma	III	Nuclear and nuclear Model	Beethe's Theory and Nuclear Fusion
11-01-2023	19	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Stark Effect
12-01-2023	19	Abhishek Verma	III	Magnetism	Diamagnetism, Para magnetism
12-01-2023	20	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Molecular Spectra
13-01-2023	21	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Dumb Bell Model of Diatomic Molecule
18-01-2023	18	Abhishek Verma	III	Nuclear and nuclear Model	Shell Model and Magic Number
16-01-2023		Dr S.K.Thakur			
19-01-2023	20	Abhishek Verma	III	Magnetism	Curie's Law
17-01-2023	36	Dr S.K.Thakur	I	Special functions	Rearrence relation for $H_n(x)$ Orthogonality for $H_n(x)$
19-01-2023	22	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Rotational Spectra
20-01-2023	23	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Viberational Spectra
21-01-2023	24	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Rotational- Vibrational Spectra
23-01-2023				CLASS TEACHING	
23-01-2023	38	Dr S.K.Thakur	I	Proper & improper rotation	Proper & improper rotation
25-01-2023	21	Abhishek Verma	III	Magnetism	Curie's Law
03-02-2023	22	Abhishek Verma	III	Magnetism	Ferro Magnetism, domain
30-01-2023	39	Dr S.K.Thakur	I	Eurler's angle	Euler's angles, Notation of goldstein
25-01-2023	25	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Franck-condon principle
27-01-2023	26	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Sequences & Progression
28-01-2023	27	Dr S.K.Thakur	IV	M.S. of diatomic molecules	Fluorescence
04-02-2023	23	Abhishek Verma	III	Magnetism	Hysterisis Loop
31-01-2023	28	Dr S.K.Thakur	IV	Fluresence & raman spectra	Raman Spectra
08-02-2023	24	Abhishek Verma	III	Magnetism	Revision
01-02-2023	40	Dr S.K.Thakur	I	Orthogonal Transformation	Transformation of Matrix
02-02-2023	41	Dr S.K.Thakur	I	Hydrogen Atom	Radial Solution
03-02-2023	29	Dr S.K.Thakur	IV	Molecular Spectra	Flourscence
04-02-2023	30	Dr S.K.Thakur	IV	Molecular Spectra	I R- Raman Spectra Exclusion Rule
06-02-2023	31	Dr S.K.Thakur	I	Ridid Body Dynamics	EULER Equation of Motion
07-02-2023		Dr S.K.Thakur		CLASS TEACHING	
08-02-2023	32	Dr S.K.Thakur	II	Anguler Momentum	Commutation Operator Algebra

09-02-2023	33	Dr S.K.Thakur	IV	Fluresence & raman spectra	Revision
10-02-2023	32	Dr S.K.Thakur	I	Revision	Question Answer
11-02-2023	33	Dr S.K.Thakur	II	Revision	Question Answer
13-02-2023	25	Abhishek Verma	III	Revision	Question Answer
14-02-2023	34	Dr S.K.Thakur	IV	Revision	Question Answer
15-02-2023		Dr S.K.Thakur		Revision	Question Answer