

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

कक्षा : बी.एस-सी. भाग-तीन					विषय : भौतिकी
दिनांक	व्याख्यान	प्राध्यापक का नाम	प्रश्नपत्र	अध्याय	शीर्षक
16.07.2013	1	Arvind Kumar	IV	Introduction	List of book
17.07.2013	1	Arvind Kumar	I	Introduction	List of book
18.07.2013	2	Arvind Kumar	I	Classical Mechanics	Conservation theorem
19.07.2013	1	Maneeta Singh	II	Introduction	List of Book
19.07.2013	2	Maneeta Singh	II	Schroedinger equation	Time independent equation
20.07.2013	1	Maneeta Singh	III	Introduction	List of book
20.07.2013	1	Maneeta Singh	III	Statistical basis of thermodynamics	Phase space, Mu & Gamma space
22.07.2013		Arvind Kumar		Class Teaching	
23.07.2013	2	Arvind Kumar	IV	Atomic-spectra of two systems	Coupling schemes
24.07.2013	3	Arvind Kumar	I	System of particle	Constraints & Generalised co-ordinates
25.07.2013	4	Arvind Kumar	I	System of particle	D'Alembert's principle
26.07.2013	3	Maneeta Singh	II	Schroedinger equation	Time dependent equation
26.07.2013	4	Maneeta Singh	II	Schroedinger equation	Postulate of quantum mechanics super position principle
27.07.2013	3	Maneeta Singh	III	Statistical bases of thermodynamics	Ensemble
27.07.2013	4	Maneeta Singh	III	Statistical bases of thermodynamics	Ergodic surface
29.07.2013		Arvind Kumar		Class Teaching	
30.07.2013	3	Arvind Kumar	IV	Atomic spectra of two system	Spin orbit interaction energy
31.07.2013	5	Arvind Kumar	I	Mechanics of systems of particles	Lagrange's equation
01.08.2013	6	Arvind Kumar	I	Mechanics of systems of particles	Generalised momenta
03.08.2013	5	Maneeta Singh	II	Schroedinger equation	Physical interpretation of wave function
03.08.2013	6	Maneeta Singh	II	Schroedinger equation	Normalization, orthogonality
05.08.2013	5	Maneeta Singh	III	Statistical basis of thermodynamics	Ensemble Average, Density of state
06.08.2013		Maneeta Singh		Class Teaching	
07.08.2013	4	Arvind Kumar	IV	Atomic spectra of two system	Lande's interval rule
08.08.2013	7	Arvind Kumar	I	Mechanics of sytem of particles	Principle of least action & cyclic co-ordinates
10.08.2013	8	Arvind Kumar	I	Mechanics of sytem of particles	Lagrangian for a f ree particles
10.08.2013	7	Maneeta Singh	II	Schroedinger equation	Expectation value
12.08.2013	8	Maneeta Singh	II	Schroedinger equation	Probability current density
13.08.2013	6	Maneeta Singh	III	Statistical basis of thermodynamics	Liouville's theorem

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14.08.2013		Arvind Kumar		Class Teaching	
16.08.2013	5	Arvind Kumar	IV	Atomic spectra of two particle system	Zeeman effect
16.08.2013	9	Arvind Kumar	I	Mechanics system of particle	Remaining partion & discussion
17.08.2013	10	Arvind Kumar	I	Two body problem	Reduction to one body problem
17.08.2013	9	Maneeta Singh	II	Schroedinger equation	Ehrenfest's theorem
19.08.2013	10	Maneeta Singh	II	Schroedinger equation	Degeneracy & parity
20.08.2013	7	Maneeta Singh	III	Statistical basis of thermodynamics	II part of Liouville's theorem
22.08.2013	8	Maneeta Singh	III	Statistical basis of thermodynamics	Statistical equilibrium
23.08.2013		Arvind Kumar		Class Teaching	
23.08.2013	6	Arvind Kumar	IV	Two valence & system	Paschen back of effect
24.08.2013	7	Arvind Kumar	IV	Two valence & systems	Spectra of alkali earth elements
24.08.2013	11	Arvind Kumar	I	Two body problem	Centre of mass
26.08.2013	12	Arvind Kumar	I	Two body problem	Kepler's law
27.08.2013	11	Maneeta Singh	II	Operator	Linear operation, product of two operator
29.08.2013	12	Maneeta Singh	II	Operator	Simultaneous eigen functions
30.08.2013	9	Maneeta Singh	III	Thermodynamic equilibrium	Probability and entropy
30.08.2013	10	Maneeta Singh	III	Thermodynamic equilibrium	Boltzmann entropy relation
31.08.2013		Maneeta/Arvind		Evaluation	
31.08.2013	8	Arvind Kumar	IV	Atomic spectra of one valence system	Atomic spectra of alkali metals
02.09.2013	13	Arvind Kumar	I	Two body problem	Kepler's problem
03.09.2013	14	Arvind Kumar	I	Cannonical formuation	Hamilton's equation
04.09.2013	13	Maneeta Singh	II	Operator	Commutators, hermitian operator
05.09.2013	14	Maneeta Singh	II	Operator	Properties of hermitian operator
06.09.2013	11	Maneeta Singh	III	Thermodynamic equilibrium	Statistical interpretation of 2nd law of thermodynamics
06.09.2013	12	Maneeta Singh	III	Thermodynamic equilibrium	Maxwell boltzmann distribution
07.09.2013		Arvind Kumar		Class Teaching	
07.09.2013	9	Arvind Kumar	IV	Atomic spectra of one valence system	Zeeman effect

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09.09.2013	15	Arvind Kumar	I	Canonical formulation	Canonical transformation
10.09.2013	16	Arvind Kumar	I	Canonical formulation	Paisson's brackets, angular momentum
11.09.2013	15	Maneeta Singh	II	Operator	Angular Momentum operator
12.09.2013	16	Maneeta Singh	II	Simple one-D-Problem	Particle in a box
13.09.2013	13	Maneeta Singh	III	Thermodynamic equilibrium	M-B distrition of speed in an ideal gas
13.09.2013	14	Maneeta Singh	III	Thermodynamic equilibrium	Different cases of M-B Distribution
14.09.2013		Arvind Kumar		Class Teaching	
14.09.2013	10	Arvind Kumar	IV	Atomic spectra of one valence e ⁻ system	Paschan back effect
16.09.2013	11	Arvind Kumar	IV	Atomic spectra of one valence e ⁻ system	Spin orbit interaction
17.09.2013	17	Arvind Kumar	I	Canonical formulation	Hamilton principle function & Hamilton Jacobi equation
20.09.2013	18	Arvind Kumar	I	Canonical formulation	Harmonic oscillator problem
20.09.2013	17	Maneeta Singh	II	Simple one-D-Problem	Step potential
21.09.2013	18	Maneeta Singh	II	Simple one-D-Problem	Rectangular barrier
21.09.2013	15	Maneeta Singh	III	Quantum statistics	M.B. Distribution
23.09.2013	16	Maneeta Singh	III	Quantum statistics	Fermi-Dirac Distribution
24.09.2013		Maneeta/Arvind		Evaluation	
25.09.2013	12	Arvind Kumar	IV	Atomic spectra of one valence system	
26.09.2013	19	Arvind Kumar	I	Cononical formulation	Seperation of variables & central force problem
27.09.2013	20	Arvind Kumar	I	Motion of rigid bodies	Angular momentum, inertia tensor
27.09.2013	19	Maneeta Singh	II	Simple one-D-Problem	Penetration through rectangular barrier
28.09.2013	20	Maneeta Singh	II	Simple one-D-Problem	Transmission coefficient
28.09.2013	17	Maneeta Singh	III	Quantum statistics	Bose-Einstein distribution
30.09.2013	18	Maneeta Singh	III	Quantum statistics	Difference between three distibution
01.10.2013		Arvind Kumar		Class Teaching	
03.10.2013	13	Arvind Kumar	IV	Atomic spectra of one valence electron system	Stark's effect

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07.10.2013	21	Arvind Kumar	I	Motion of rigid bodies	Torque free motion of a rigid bodies
08.10.2013	22	Arvind Kumar	I	Motion of rigid bodies	Symmetrical top, precession
09.10.2013	21	Maneeta Singh	II	Simple one-d-problem	Quantum mechanical tunneling
10.10.2013	19	Maneeta Singh	III	Quantum statistics	Planck's law
11.10.2013		Maneeta Singh		Class Teaching	
11.10.2013	14	Arvind Kumar	IV	Atomic spectra of one valence electron system	Electron spin & fine structure
17.10.2013	23	Arvind Kumar	I	Curvi linear coordinates	Tangent basis vectors, scale factor
19.10.2013	24	Arvind Kumar	I	Curvi linear coordinates	Spherical coordinate system
19.10.2013	22	Maneeta Singh	II	Simple one-d-problem	Particle in a finite potential well
21.10.2013	23	Maneeta Singh	II	One-D-harmonic oscillator	Linear harmonic oscillator
22.10.2013	20	Maneeta Singh	III	Quantum statistics	Cell size
23.10.2013	21	Maneeta Singh	III	Quantum statistics	Shaha theory
24.10.2013		Maneeta/Arvind		Evaluation	
25.10.2013	15	Arvind Kumar	IV	Atomic model	Sommer field model
25.10.2013	25	Arvind Kumar	I	Curvilinear coordinates	Polar and cylindrical coordinate system
26.10.2013	26	Arvind Kumar	I	Curvilinear coordinates	Gradient of scalaor, curl & divergence of vector
26.10.2013	24	Maneeta Singh	II	One-D-harmonic oscillator	Ground & excited states, zero point energy
28.10.2013	25	Maneeta Singh	II	Matter & radiation	Photoelectric effect
29.10.2013	22	Maneeta Singh	III	Quantum statistics	R-D equation
30.10.2013	23	Maneeta Singh	III	LASER & MOSER	Stimulated & spontaneous emission
06.11.2013		Arvind Kumar		Class Teaching	
07.11.2013	16	Arvind Kumar	IV	Atomic model	Vector atom model
08.11.2013	27	Arvind Kumar	I	Curvilinear coordinates	Laplace equation in spherical, polar & cylindrical coordinate systems
09.11.2013	26	Maneeta Singh	II	Matter & radiation	Compton effect
09.11.2013	27	Maneeta Singh	II	Matter & radiation	De broglie's hypothesis
11.11.2013	24	Maneeta Singh	III	Laser and maser	Einstein's coefficients
12.11.2013	25	Maneeta Singh	III	Laser and maser	Population inversion
15.11.2013		Arvind Kumar		Class Teaching	

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15.11.2013	17	Arvind Kumar	IV	Atomic model	Paulie's exclusion principle
16.11.2013	29	Arvind Kumar	I	Special functions	Legendre generating function
16.11.2013	30	Arvind Kumar	I	Special functions	Legendre differential equation
18.11.2013	28	Maneeta Singh	II	Matter & radiation	Davison Germer experiment
19.11.2013	29	Maneeta Singh	II	Matter & radiation	Uncertainty principle and complementary principle
20.11.2013	26	Maneeta Singh	III	Laser and maser	Cavity, basic concept of laser
21.11.2013	27	Maneeta Singh	III	Laser and maser	Three level laser
22.11.2013		Arvind Kumar		Class Teaching	
22.11.2013	18	Arvind Kumar	IV	Atomic model	Fine structure of H α line
23.11.2013	19	Arvind Kumar	IV	Atomic model	Electronic configuration of atom
23.11.2013	31	Arvind Kumar	I	Special function	Recurrence relations
25.11.2013	32	Arvind Kumar	I	Special functions	Rodrigue's formula and orthogonality
26.11.2013	30	Maneeta Singh	II	Matter & radiation	Stern-Gerlach experiment
27.11.2013	28	Maneeta Singh	III	Laser and maser	Ruby Laser
28.11.2013	29	Maneeta Singh	III	Laser and maser	Helium-Neon laser
29.11.2013		Maneeta/Arvind		Evaluation	
29.11.2013	20	Arvind Kumar	IV		
30.11.2013					
30.11.2013					
02.12.2013					
03.12.2013					
06.12.2013					
06.12.2013					
07.12.2013					
07.12.2013					
09.12.2013				Class Teaching	
11.12.2013	22	Arvind Kumar	IV	Molecular spectra & diatomic molecules	Rotation - Vibration spectra

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12.12.2013	23	Arvind Kumar	IV	Molecular spectra & diatomic molecules	Electronic spectra
13.12.2013	36	Arvind Kumar	I	Special functions	Recurrence relation for Laguerre's
13.12.2013	37	Arvind Kumar	I	Special functions	Orthogonality formula for Laguerre's
14.12.2013	32	Maneeta Singh	II	Matter & radiation	Electron spin, angular momentum
14.12.2013	33	Maneeta Singh	III	Nuclear instrument	Synchrotron
16.12.2013	34	Maneeta Singh	III	Nuclear instrument	Betatron
17.12.2013		Maneeta Singh		Class Teaching	
18.12.2013	24	Arvind Kumar	IV	Molecular spectra of diatomic molecule	P, Q & R Branches
19.12.2013	25	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Coupling of Rotation
20.12.2013	38	Arvind Kumar	I	Special functions	Rodrigue's formula for Laguerre's
20.12.2013	39	Arvind Kumar	I	Special functions	Laguerre's associated polynomial
21.12.2013	33	Maneeta Singh	II	Matter & Radiation	Magnetic momentum
21.12.2013	35	Maneeta Singh	III	Nuclear instrument	Geiger-muller counter
23.12.2013	36	Maneeta Singh	III	Elementary particle	Classification
24.12.2013		Maneeta/Arvind		Evulation	
26.12.2013	26	Arvind Kumar	IV	Molecular spectro of diatomic molecule	Electronic band system
27.12.2013	27	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Symmetry properties of electronic Eigen function
27.12.2013	40	Arvind Kumar	I	Special functions	Hermite differential equation $H_n(x)$
28.12.2013	41	Arvind Kumar	I	Special functions	Generating function for $H_n(x)$
28.12.2013	34	Maneeta Singh	II	Hydrngen atom	Rigid Rotator
30.12.2013	37	Maneeta Singh	III	Elementary particle	Elementry ideas of strong eletromagnetic
31.12.2013	38	Maneeta Singh	III	Elementary particle	Weak and gravitational Interation
01.01.2014		Maneeta Singh		Class Teaching	
02.01.2014	28	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Sequences

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04.01.2014	29	Arvind Kumar	IV	Molecular spectro of diatomic molecule	Progression
04.01.2014	42	Arvind Kumar	I	Special function	Recurrence relation for $H_n(x)$
06.01.2014	35	Maneeta Singh	II	Hydrogen atoms	Eigen value of Rigid rotator
07.01.2014	39	Maneeta Singh	III	Elementary particle	Quark model
08.01.2014	40	Maneeta Singh	III	Nucleus & nuclear model	Rutherford-Particle scattering
09.01.2014		Maneeta Singh		Class Teaching	
10.01.2014	30	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Franck-Condon principle
10.01.2014	31	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Remaining portion
11.01.2014	43	Arvind Kumar	I	Special functions	Orthogonality for $H_n(x)$
11.01.2014	44	Arvind Kumar	I	Special functions	Remaining parts of special functions
13.01.2014	36	Maneeta Singh	II	Hydrogen atom	Hydrogen atom
15.01.2014	41	Maneeta Singh	III	Nucleur & nuclear model	Liquid drop model
16.01.2014	42	Maneeta Singh	III	Nuclear & nuclear model	Static properties of nuclear
17.01.2014		Maneeta Singh		Class Teaching	
17.01.2014	32	Arvind Kumar	IV	Molecular spectra of diatomic molecule	Remaining portion & discussion
18.01.2014	33	Arvind Kumar	IV	Fluorescence & roman spectra	Fluorescence
18.01.2014	45	Arvind Kumar	I	Proper & improper rotation	Proper rotations
20.01.2014	46	Arvind Kumar	I	Proper & improper rotation	Improper rotation
21.01.2014	37	Maneeta Singh	II	Hydrogen atom	Value of L^2 & L_z
22.01.2014	43	Maneeta Singh	III	Nucleus & nuclear model	Semiempirical mass formula
23.01.2014	44	Maneeta Singh	III	Nucleus & nuclear model	Bohr-wheeler theory
24.01.2014		Maneeta Singh		Class Teaching	
24.01.2014	34	Arvind Kumar	IV	Fluorescence & ram spectra	Raman spectra
25.01.2014	35	Arvind Kumar	IV	Fluorescence & ram specetra	Kinds of Raman spectra
25.01.2014	47	Arvind Kumar	I	Euler's angles	Euler's angles
27.01.2014	48	Arvind Kumar	I	Euler's angles	Notation of goldstein

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28.01.2014	38	Maneeta Singh	II	Hydrogen atom	Remaning portion & discussion
29.01.2014	45	Maneeta Singh	III	Nucleus & nuclear model	Bethe's theory, nuclear fusion
30.01.2014	46	Maneeta Singh	III	Nucleus & nuclear model	Shell model, magic number
31.01.2014		Maneeta/Arvind		Evaluation	
31.01.2014	47	Maneeta Singh	III	Mangetism	Diamagnetism
01.02.2014	48	Maneeta Singh	III	Magnetism	Paramagnetism
01.02.2014	49	Arvind Kumar	I	Orthogonal transformation	Transformation matrix
03.02.2014	50	Arvind Kumar	I	Orthogonal transformation	Numericals & questions
04.02.2014	49	Maneeta Singh	III	Magnetism	Curie's law
05.02.2014	50	Maneeta Singh	III	Magnetism	Ferromagnetism
06.02.2014	51	Maneeta Singh	III	Magnetism	Domain hysteresis loops
07.02.2014		Arvind Kumar		Class Teaching	
07.02.2014	51	Arvind Kumar	I	Revision	Revision
08.02.2014	52	Arvind Kumar	I	Revision	Revision
08.02.2014	39	Maneeta Singh	II	Revision	Revision
10.02.2014	40	Maneeta Singh	II	Revision	Revision
11.02.2014	52	Maneeta Singh	III	Revision	Revision
12.02.2014	53	Maneeta Singh	III	Revision	Revision
13.02.2014	36	Arvind Kumar	IV	Revision	Revision
14.02.2014		Arvind Kumar		Class Teaching	
14.02.2014	37	Arvind Kumar	IV	Revision	Revision