

Lesson Plan

Name of the Assistant/ Associate Professor... Neelam Gupta

Class and Section: BSc II Sec-I (1-6) BSc I Sec-I (3 day)
(1-3)

Subject: Physics

Week	Date	Topics	
1	1-Jan-18	1.1. Historical introduction of spectra	1.1. elasticity
	2-Jan-18	- do -	1.2 "
	3-Jan-18	1.2 Review of Quantum theory	1.3 Hooke's law
	4-Jan-18	- do -	1.4, 1.5 stress, strain
	5-Jan-18	- do - Bohr's Sommerfeld theory	
	6-Jan-18	- do -	
	7-Jan-18	Sunday	
2	8-Jan-18	1.3 Space quantization	1.6, 1.7, 1.8, 1.9 elastic eff.
	9-Jan-18	- do -	1.10 stress
	10-Jan-18	1.4 Magnetic moment of atom	1.11 Bulk Modulus γ , K
	11-Jan-18	Problems of chapter	
	12-Jan-18	2.1 Gross structure of spectra	
	13-Jan-18	- do -	
	14-Jan-18	Sunday	
3	15-Jan-18	2.2. Penetrating & non-penetrating orbits	1.12. Modulus of Rigidity
	16-Jan-18	- do -	1.13 Relation elastic constant
	17-Jan-18	2.3 Problems	1.14 "
	18-Jan-18	3.1. Vector Atom Model Introduction	1.15 Torsion / couple
	19-Jan-18	3.1. " " or discussion	1.15 - do -
	20-Jan-18	3.1. - do -	
	21-Jan-18	Sunday	
4	22-Jan-18	Vasant Panchami	
	23-Jan-18	3.2. Fine structure of Alkali spectra	1.15 Torsion / couple
	24-Jan-18	Sir Chhotu Ram Jayanti	1.16 Bending of Beams
	25-Jan-18	3.3 doublet fine structure	1.17 "
	26-Jan-18	Republic Day	1.18 Cantilever
	27-Jan-18	3.3.1. Spin-orbit interaction of electron	
	28-Jan-18	Sunday	
	5	29-Jan-18	3.3.1 - do -
30-Jan-18		3.4. - do -	1.20, 1.21 "
31-Jan-18		3.5. Problems	1.22 Deformation

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Class and Section:..... BSC (I) Sec II (1-6)

Subject:..... Physics BSC I Sec II (3 day)
(1-3) Paper I

Week	Date	Topics	
1	1-Feb-18	Test of chapter 1 & 2	1.23 Difference of beam
	2-Feb-18	Test — 3	1.24, 1.25 Residence
	3-Feb-18	4.1. L.S-coupling or Russell-Saunders coupling Problems	
	4-Feb-18	Sunday	
2	5-Feb-18	-do-	Test
	6-Feb-18	-do-	2.1. kinetic theory of gas
	7-Feb-18	-do-	2.2. -do-
	8-Feb-18	4.2. Pauli Principle.	2.3. Expression of Pressure
	9-Feb-18	4.3. Spin-orbit interaction	
	10-Feb-18	Maharshi Dayanand Saraswati Jayanti	
	11-Feb-18	Sunday	
3	12-Feb-18	-do-	2.4. Kinetic of Temp.
	13-Feb-18	Maha Shivratri	2.6. Phase space.
	14-Feb-18	-do-	2.7, 2.8, 2.9. Postulates
	15-Feb-18	4.4. JJ coupling scheme.	
	16-Feb-18	4.4. -do-	
	17-Feb-18	5.1. Zeeman effect.	
	18-Feb-18	Sunday	
4	19-Feb-18	-do-	2.10 M.B. Distribution law
	20-Feb-18	-do-	2.11. M.B. speed law
	21-Feb-18	5.2. Paschen-Back effect.	2.12. Discussion.
	22-Feb-18	5.3. Stark effect	
	23-Feb-18	6.1. do Molecular spectra	
	24-Feb-18	6.2. electronic states	
	25-Feb-18	Sunday	
	5	26-Feb-18	6.3. Rotation spectra
27-Feb-18		6.4. vibrational spectra	2.14. Mean speed
28-Feb-18		Holiday	2.17. Stern Method, 2.18. Degree of freedom

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Name of the Assistant/ Associate Professor..... Neelam Gupta

Class and Section:..... B.Sc. IT Sec. II (1-G)..... B.Sc. IT Lec I (1-3)

Subject:..... Physics Paper I & II..... Paper I

Week	Date	Topics
1	1-Mar-18	Guru Ravidas Birthday
	2-Mar-18	Holi
	3-Mar-18	Holiday
	4-Mar-18	Sunday
2	5-Mar-18	6.5. Vibrating rotator model 2.19. ^{2.20} Specific heat of gases
	6-Mar-18	6.6. Raman effect 2.22. ^{2.23, 2.24} Mean free path
	7-Mar-18	6.7. electronic spectra 2.26. ^{2.27} transport phenomenon
	8-Mar-18	6.7. Test of chapters
	9-Mar-18	7.1. Introduction of laser
	10-Mar-18	7.2. Properties of laser
	11-Mar-18	Sunday
3	12-Mar-18	-do-
	13-Mar-18	8.2. Einstein coefficients, ^{8.3} Moment of transition 2.27 Thermal
	14-Mar-18	8.4. Life time & Amplification 2.28. ^{Conduction in gases} Diffusion of gases
	15-Mar-18	8.6 Kinetics 8.7 line shape fn. 2.9, 4
	16-Mar-18	9.1 Resonance cavity
	17-Mar-18	9.2 Threshold condition laser pump
	18-Mar-18	Sunday 10.1 Ruby laser
4	19-Mar-18	10.1 Ruby laser 2.31 Brownian motion
	20-Mar-18	10.2 HeNe laser 2.33 Real gas behaviour
	21-Mar-18	10.2. " 2.4. ^{2.5} Van der waal eq. ^{2.6}
	22-Mar-18	10.3. Semiconductor laser
	23-Mar-18	Shaheedi Diwas of Bhagat Singh, Rajguru & Sukhdev
	24-Mar-18	11.1. Non-linear optics ^{11.3, 11.4, 11.5} Holography, laser applications
	25-Mar-18	Sunday/ Ram Navami 1.1. ^{1.2, 1.3, 1.4, 1.5} Nuclear structure
5	26-Mar-18	1.6. Nuclear Stability ^{2.5} Test.
	27-Mar-18	1.7. ^{1.8} Size of Nucleus 2.1 & 2. Theory of relativity ^{3.1, 3.2}
	28-Mar-18	1.8 Nuclear Mass 3.4. ^{3.5} General frames
	29-Mar-18	Mahavir Jayanti do, 1.9 Spectrograph ^{1.10} Problems 3.5
	30-Mar-18	2.1 Interaction of Nuclear particles
	31-Mar-18	2.2 Interaction of charged particles with matter

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Name of the Assistant/ Associate Professor..... Neelam Gupta

Class and Section:..... BSC (IT) Sec II (F-C)..... BSC IT Sec II (F-3)

Subject:..... Physics Paper I..... Paper I

Week	Date	Topics
1	1-Apr-18	Sunday 2.3 Alpha disintegration
	2-Apr-18	2.4 Range and straggling particles
	3-Apr-18	2.5 energetics of α -decay
	4-Apr-18	2.6 β -
	5-Apr-18	2.7 Interaction of light charged particles
	6-Apr-18	2.8 origin of continuous β spectrum
	7-Apr-18	2.9 Beta decay
	8-Apr-18	Sunday 2.11. energetics of γ -decay
2	9-Apr-18	2.12 difference b/w positron, electron
	10-Apr-18	2.13. emission, energy loss
	11-Apr-18	2.14 ^{2.15, 2.16} range of electrons
	12-Apr-18	2.17 Nature of γ rays
	13-Apr-18	2.18 energetic of γ ray
	14-Apr-18	Dr Ambedkar Jayanti / Vaisakhi 2.19. range of γ ray
	15-Apr-18	Sunday 2.19 photo electric effect
3	16-Apr-18	2.19.2 Compton effect, pair production
	17-Apr-18	2.20 electron-positron annihilation
	18-Apr-18	Parashurama Jayanti 2.21. Absorption of γ rays
	19-Apr-18	2.22. Types of γ -ray interactions
	20-Apr-18	2.23 Applications
	21-Apr-18	3.1. Nuclear reactions
	22-Apr-18	Sunday 3.5 Nuclear Fission
4	23-Apr-18	3.16, 3.11, 3.12, 3.13, 3.14, 3.15 Nuclear reactors
	24-Apr-18	3.17, 3.18, 3.19 fusion
	25-Apr-18	3.20, 3.21, 3.22, 'Y Accelerators
	26-Apr-18	4.1, 2.4, 4.2, 3. Accelerators
	27-Apr-18	Accelerators
	28-Apr-18	de-

3.5. Galilean transformation
3.6, 3.7, 3.8

3.8 search for ether
3.9 Michelson Morley's

3.10 special theory of Relativity

3.11. Lorentz transformation

3.12 Relativity of space

3.13 Relativity of Mass

3.14. m vs v time

3.15 Train paradox

3.16.

3.17 energy manequ

3.18 Experimental Eviden

3.19 Test