

B. SC. PHYSICS (GENERAL COURSE) – JILLI SAMANTA

<u>YEAR</u>	<u>PAPER</u>	<u>TOPIC</u>	<u>TOTAL NO. OF CLASSES</u>	<u>DATE</u>	<u>TEACHING STRATEGY</u>	<u>REFERENCE BOOKS</u>	
PART-I	I	1.Kinetic Theory of Gases a.Ideal gas, kinetic model b.Real Gas c.Liquefaction of gases d.Transport phenomena	8	Aug 8,11,13,18,20,22,25,27	Lectures + Math Solving	1.Snatak Padarthabidya (Vol. 1) – M. D. Khan (Calcutta Book House). 2.Snatak Padartha Bijnan [A Handbook of Degree Physics] (Vol. 1) – C. R. Dasgupta (Book Syndicate).	
			7	29,Sep1,3,5,8,10,12			
			5	15,19,22,24,26,			
		6	Oct1,3,6,N ov 3,5,7				
		8	Nov10,12,17,19,21,24,26,28				
		10	Dec1,3,5,8,10,12,15,17,19,22,				
		5	Jan 2,5,7,9,12				
PART-II	II	1.Electrostatics a. Coulomb's law in free space b. Gauss's law and its applications c.Dielectrics	5	Aug 8,11,13,18,20	Lectures + Math Solving	Snatak Padarthabidya (Vol. 2) – M. D. Khan (Calcutta Book House).	
			7	Aug 22,25,27,29,Sep1,3,5,8,10,12			
3	Sep 8,10,12						
		2	7	Sep 15,19,22,24,26,1,3			
		3. Magnetostatics a.Lorentz force and definition of B b.Biot-Savart law & applications c.Magnetization (M)&Curie's law	2	Nov 3,5			
			7	Nov 7,10,12,17,19,21,24			
			5	Nov 26,28 Dec 1,3,5			

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PART-II	II	4. Electromagnetic induction and Maxwell's Equations	5	Dec 8,10, 12,15,17	Lectures + Math Solving	Snatak Padarthabidya (Vol. 2) – M. D. Khan (Calcutta Book House)
		5. Transients in DC	5	Dec 19,22,24 Jan'17 2,5,		
		6. Alternating current	5	Jan 7,9,12,16, 19		

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PART -III	IV (A)	1.Mechanics and Thermodynamics a.Production and Measurement of High Vacuum b.Heat Engines	5 3		Lectures + Math Solving	Snatak Padarthabidya (Vol. 3) – M. D. Khan (Calcutta Book House).
		2.Sound and Acoustics a.Ultrasonics and its application b. Microphones and speakers	3 5			
		3.Electricity a.Conversion b.Electric Generator c.Electrical wiring	3 7 5			