

Name : Mrs. Santosh Kurra
 Class and Section : B.Sc. IIIrd year , VIth sem. Section – A
 Subject : Solid state and nano physics (I)

Week	Date	Topic
1 UNIT - I	1-Jan-19	Crystalline and glassy forms , liquid crystals
	2-Jan-19	Crystalline structure , periodicity , lattice , basis , translation vector
	3-Jan-19	
	4-Jan-19	
	5-Jan-19	
	6-Jan-19	Sunday
	2	7-Jan-19
8-Jan-19		Symmetry operations for a 2-dim. Crystals (2-d)
9-Jan-19		Bravais lattices in two and three dimensions
10-Jan-19		
11-Jan-19		
12-Jan-19		
13-Jan-19		Sunday
3	14-Jan-19	Crystal planes and miller indices , Interplanar spacing
	15-Jan-19	Crystal structure of ZnS , Nace
	16-Jan-19	Crystal structure of Diamond
	17-Jan-19	
	18-Jan-19	
	19-Jan-19	
	20-Jan-19	Sunday
4 UNIT – II	21-Jan-19	Numerical problems and doubts
	22-Jan-19	Text of unit I
	23-Jan-19	X-ray Diffraction and Bugg's law
	24-Jan-19	
	25-Jan-19	Sir Chhotu Ram Jayanti
	26-Jan-19	Republic Day
	27-Jan-19	Sunday
5	28-Jan-19	Experimental X-ray diffraction methods
	29-Jan-19	-----Do-----
	30-Jan-19	Reciprocal space and K-space
	31-Jan-19	

Week	Date	Topic
1	1-Feb-19	
	2-Feb-19	
	3-Feb-19	Sunday
2	4-Feb-19	Physical significance of K-space and reciprocal lattice
	5-Feb-19	Reciprocal lattice vectors , Reciprocal lattice to simple arebic
	6-Feb-19	Reciprocal lattice to b.c.c. and f.c.c.
	7-Feb-19	
	8-Feb-19	
	9-Feb-19	
	10-Feb-19	VasantPanchami / Sunday
3	11-Feb-19	Numerical problems and doubts
	12-Feb-19	Assignment of unit II
	13-Feb-19	Test of unit (Revision & oral test)
	14-Feb-19	
	15-Feb-19	
	16-Feb-19	
	17-Feb-19	Sunday
4 UNIT – III	18-Feb-19	Historical introduction and survey of superconductivity
	19-Feb-19	Guru Ravi Dass Birthday
	20-Feb-19	Superconducting systems, High Tc superconductor
	21-Feb-19	
	22-Feb-19	
	23-Feb-19	
	24-Feb-19	Sunday
5	25-Feb-19	Isotopic effect , critical magnetic field
	26-Feb-19	Meissner effect and London theory
	27-Feb-19	London equation and pippard's equation
	28-Feb-19	

Week	Date	Topic
1	1-Mar-19	MahaShivratri
	2-Mar-19	
	3-Mar-19	Sunday
2	4-Mar-19	Classification of superconductors (Type I and type II)
	5-Mar-19	BCS Theory of superconductivity , Flux quantization
	6-Mar-19	Josephson effect (AC and DC)
	7-Mar-19	
	8-Mar-19	
	9-Mar-19	
	10-Mar-19	Sunday
3	11-Mar-19	Practical applications and limitations of superconductivity
	12-Mar-19	Power applications of superconductors
	13-Mar-19	Doubts and numericals
	14-Mar-19	
	15-Mar-19	
	16-Mar-19	
	17-Mar-19	Sunday
4	18-Mar-19	University Holidays
	19-Mar-19	University Holidays
	20-Mar-19	University Holidays
	21-Mar-19	University Holidays
	22-Mar-19	University Holidays
	23-Mar-19	University Holidays
	24-Mar-19	Sunday
5 UNIT – IV	25-Mar-19	Test of unit III
	26-Mar-19	Definition and nano length scale
	27-Mar-19	Importance of Nano technology , Molecular assembler concept
	28-Mar-19	
	29-Mar-19	
	30-Mar-19	
	31-Mar-19	Sunday

Week	Date	Topic
1	1-Apr-19	Benefits and challenges in Molecular manufacturing
	2-Apr-19	Understanding advanced capabilities
	3-Apr-19	Vision and objective of Nano tech.
	4-Apr-19	
	5-Apr-19	
	6-Apr-19	
	7-Apr-19	Sunday
2	8-Apr-19	Nanotech in Medicine , biotech materials
	9-Apr-19	Surface study of Nano materials , SEM , TEM , AFM
	10-Apr-19	Nano materials 1d , 2d , 3d
	11-Apr-19	
	12-Apr-19	
	13-Apr-19	
	14-Apr-19	Vaisakhi / AmbedkarJyanti / Sunday
3	15-Apr-19	Doubts and other problems
	16-Apr-19	Assignment of unit IV
	17-Apr-19	MahavirJayanti
	18-Apr-19	
	19-Apr-19	
	20-Apr-19	
	21-Apr-19	Sunday
4	22-Apr-19	Revision of unit I
	23-Apr-19	Revision of unit II
	24-Apr-19	Revision of unit III
	25-Apr-19	
	26-Apr-19	
	27-Apr-19	
	28-Apr-19	Sunday
5	29-Apr-19	Revision of unit IV
	30-Apr-19	

