

LESSON PLAN

BSC-6th Sem (NM,M,C.SC) 2017-2018

Subject : Chemistry (Paper-I,III)

Name : Dr.Geeta Sharma

S. No.	Days/ Dates	Topic
January		
Week 1		
1	Day 1 01/01/2018	Organic Synthesis via Enolates Acidity of α -hydrogens, alkylation of diethyl malonate and ethyl acetoacetate.
2	Day 2 02/01/2018	continued
3	Day 3 03/01/2018	Synthesis of ethyl acetoacetate: the Claisen condensation. Keto-enol tautomerism of ethyl acetoacetate
Week 2		
4	Day 1 08/01/2018	Heterocyclic Compounds Introduction: Molecular orbital picture and aromatic characteristics of pyrrole, furan, thiophene and pyridine
5	Day 2 09/01/2018	Methods of synthesis and chemical reactions with particular emphasis on the mechanism of electrophilic substitution
6	Day 3 10/01/2018	Continued above
Week 3		
7	Day 1 15/01/2018	Mechanism of nucleophilic substitution reactions in pyridine derivatives. Comparison of basicity of pyridine, piperidine and pyrrole.
8	Day 2 16/01/2018	Continued above
9	Day 3 17/01/2018	Introduction to condensed five and six- membered heterocycles. Preparation and reactions of indole, quinoline and isoquinoline with special reference to Fisher indole synthesis, Skraup synthesis and Bischler-Napieralski synthesis
Week 4		
10	Day 1 22/01/2018	Vasant Panchami
11	Day 2 23/01/2018	Mechanism of electrophilic substitution reactions of, quinoline and isoquinoline.
12	Day 3 24/01/2018	Sir Chotu Ram Jayanti
Week 5		

13	Day 1 29/01/2018	.Difficulties of above chapter.Questions Discussions.
14	Day 2 30/01/2018	Class Test
15	Day 3 31/01/2018	Guru Ravidas Jayanti
February		
Week 1		
16	Day 1 05/02/2018	Amino Acids, Peptides& Proteins Classification, of amino acids. Acid-base behavior.
17	Day 2 06/02/2018	isoelectric point and electrophoresis. Preparation of α -amino acids
18	Day 3 07/02/2018	. Structure and nomenclature of peptides and proteins. Classification of proteins.
Week 2		
19	Day 1 12/02/2018	Classification of proteins. Peptide structure determination, end group analysis, selective hydrolysis of peptides. Classical peptide synthesis
20	Day 2 13/02/2018	Maha Shivratri
21	Day 3 14/02/2018	solid– phase peptide synthesis.
Week 3		
22	Day 1 19/02/2018	Structures of peptides and proteins: Primary & Secondary structure.
23	Day 2 20/02/2018	.Difficulties of above chapter.Questions Discussions
24	Day 3 21/02/2018	Conditional Test
Week 4		
25	Day 1 26/02/2018	Synthetic Polymers Addition or chain-growth polymerization
26	Day 2 27/02/2018	Free radical vinyl polymerization, ionic vinyl polymerization,
27	Day 3 28/02/2018	Holiday
March		
Week 1		
28	Day 1 05/03/2018	Ziegler-Natta polymerization and vinyl polymers.
29	Day 2 06/03/2018	Condensation or step growth polymerization. Polyesters, polyamides, phenol formaldehyde resins

24	Day 3 07/03/2018	Natural and synthetic rubbers. Difficulties of above chapter. Questions Discussions
Week 2		
22	Day 1 12/03/2018	Assignment discussion
23	Day 2 13/03/2018	Class Test
24	Day 3 14/03/2018	Acids and Bases Arrhenius, Bronsted-lowry, Lux-flood, solvent system and Lewis concept of acids and bases,
Week 3		
22	Day 1 19/03/2018	continued
23	Day 2 20/03/2018	, relative strength of acids and bases, levelling solvents
24	Day 3 21/03/2018	hard and soft acids and bases(HSAB), Applications of HSAB principle.
Week 4		
22	Day 1 26/03/2018	Organometallic chemistry Definition, classification and nomenclature of organometallic compounds, preparation, properties and bonding of alkyls of Li, Al, Hg and Sn, concept of hapticity of organic ligand,
23	Day 2 27/03/2018	Continued above.
24	Day 3 28/03/2018	Continued above.
April		
Week 1		
22	Day 1 02/04/2018	Structure and bonding in metal-ethylenic complexes, Structure of Ferrocene, classification in metal carbonyls
23	Day 2 03/04/2018	preparation, properties and bonding in mononuclear carbonyls.
24	Day 3 04/04/2018	Doubt Class
Week 2		
22	Day 1 09/04/2018	Difficulties of above chapter
23	Day 2 10/04/2018	Class test
24	Day 3 11/04/2018	revision

25

last week

queries and revision

Subject : Zoology

B.Sc. 6th Sem. (Zoology)

PAPER Ist- Aquaculture and Pest Management-I

S. No.	January/Week 1	Topic
		SECTION-A AQUACULTURE-I
1	Day 1	Introduction to world and Indian fisheries
2	Day 2	Inland capture fisheries of India
3	Day 3	Test
	Week 2	
4	Day 1	Fresh Water fishes of India: River system
5	Day 2	reservoir, pond, lake fisheries
6	Day 3	Cold water fisheries, capture and culture fisheries.
	Week 3	
7	Day 1	Fishing crafts, Fishing Gears(Hooks and Lines)
8	Day 2	Fishing Gears (Nets)
9	Day 3	Test
	Week 4	
10	Day 1	Brackish Water Culture: Fin fishes, Crustaceans
11	Day 2	Molluscs, Pearl Fisheries.
12	Day 3	Test
	SECTION- B :	PEST MANAGEMENT- I
	February/ Week 1	
13	Day 1	Introduction To Parasitology
14	Day 2	Sugercane: (a) Sugercane leaf-hopper (Pyrilla perpusilla) With their systematic position, habits and nature of damage cause. Life cycle and control of Pyrilla perpusilla only.
15	Day 3	Test
	Week 2	
16	Day 1	Sugercane Whitefly (Aleurolobus barodensis) Sugercane top borer (Sciropophaganivella)
17	Day 2	Test

18	Day 3	Sugercane root borer (<i>Emmaloceradepresella</i>) Gurdaspur borer (<i>Bissetiasteniellus</i>)
	Week 3	
19	Day 1	Revision
20	Day 2	Test
21	Day 3	Cotton: (a) Pink bollworm (<i>Pestinophoragossypfolla</i>) (b) Red cotton bug (<i>DysdercusCingulatus</i>)
	Week 4	
22	Day 1	Test
23	Day 2	(c) Cotton grey weevil (<i>Myllocerusundecimpustulatus</i>)
24	Day 3	(d) Cotton Jassid (<i>Amrascadevastans</i>) With their systematic position, habits and nature of damage caused. Life cycle and control of <i>Pectinophoregossypiella</i>
	March/Week 1	
25	Day 1	Revision
26	Day 2	Test
27	Day 3	Wheat: Wheat stem borer (<i>Sesamiainferens</i>) with its systematics position, habits, nature of damage caused. Life cycle and control.
	Week 2	
28	Day 1	Paddy: (a) Gundhi bug (<i>Leptocorisaacuta</i>)
29	Day 2	(b) Rice grasshopper (<i>Hieroglyphusbanian</i>)
30	Day 3	(c) Rice stem borer (<i>Scirpophagaintertullus</i>)
	Week 3	
31	Day 1	(d) Rice Hispa(<i>Diceladispaarmigera</i>) With their systematic position, habits and nature of damage caused. Life cycle and control of <i>Loptocorisaacuta</i> .
32	Day 2	Revision
33	Day 3	Test
	Week 4	
34	Day 1	Vegetables: (a) <i>Raphidopalpafaveicollis</i> – The Red pumpkin beetle.
35	Day 2	(b) <i>Dacuscucurbitas</i> – The pumpkin fruit fly
36	Day 3	(c) <i>Tetranychustecarius</i> – The vegetable mite.
	April/ Week 1	

37	Day 1	Revision
38	Day 2	Test
39	Day 3	(d) Epilachna – The Hadda beetle Their systematics position, habits and nature of damage caused. Life cycle and control of Aulacophora faveicollis.
	Week 2	
40	Day 1	Test
42	Day 2	Revision all syllabus
42	Day 3	Test

Subject : Zoology paper-II

S.No.	January/Week 1	Topic
1	Day 4	Seed production: Natural seed resources – its assessment, collection
2	Day 5	Hatchery production
3	Day 6	Artificial fertilization
	Week 2	
4	Day 4	Test
5	Day 5	Fish Feed: Introduction, Food and Feeding habit of some culturable fresh water fishes
6	Day 6	Natural, Artificial food and feed composition (Calorie and Chemical ingredients).
	Week 3	
7	Day 4	Test
8	Day 5	Field Culture: Ponds-running water
9	Day 6	Arrangement of various type of fish ponds.
	Week 4	
10	Day 4	Test
11	Day 5	Cage culture; poly culture
12	Day 6	Management of fishery
	February/Week 1	
13	Day 4	Test
14	Day 5	Economics of fishery
15	Day 6	Marketing of fishes and their product
	Week 2	
16	Day 4	Test
17	Day 5	Latest advancements in aquaculture technology : Cryopreservation
18	Day 6	Monosex culture, Sex reversal, Hybridization.

	Week 3	
19	Day 4	Test
20	Day 5	Transgenic fish
21	Day 6	Test
	Week 4	
22	Day 4	Insect pest of stored grains: (a) Pulse beetle (<i>Callosobruchus maculatus</i>)
23	Day 5	(b) Rice weevil (<i>Sitophilus oryzae</i>)
24	Day 6	(c) Wheat weevil (<i>Trogoderma granarium</i>)
	March/ Week 1	
25	Day 4	Test
26	Day 5	(d) Rust Red Flour beetles (<i>Tribolium castaneum</i>)
27	Day 6	(e) Lesser grain borer (<i>Rhizopertha dominica</i>)
	Week 2	
28	Day 4	Test
29	Day 5	(f) Grain & Flour moth (<i>Sitotroga cerealella</i>)
30	Day 6	Revision of Insect Pest
	Week 3	
31	Day 4	Insect control: Biological control, its history, requirement
	Day 5	Biological control: precautions and feasibility of biological agents for control.
	Day 6	Chemical control: History, Categories of pesticides., Insecticides
	Week 4	
	Day 4	Test
	Day 5	Inorganic and Organic Insecticide
	Day 6	Insect repellants and attractants
	April / Week 1	
	Day 4	Test
	Day 5	Integrated pest management, Methods of control of Insect pest
	Day 6	Cultural and physical methods of control
	Week 2	
	Day 4	Biological and legal control
	Day 5	Chemical control and use of hormones
	Day 6	Test

Subject : MATHS

Name : Ms.Anupma Garg

BA/BSC Sem-6 Paper-1(Session 2017-18)

January 2018 Real and Complex Analysis

Week 1

Day 1	01.01.2018	Jacobians
Day 2	02.01.2018	Jacobians
Day 3	03.01.2018	Jacobians
Day 4	04.01.2018	Jacobians
Day 5	05.01.2018	Holiday
Day 6	06.01.2018	Doubts

Week 2

Day 1	08.01.2018	Test
Day 2	09.01.2018	Beta functions
Day 3	10.01.2018	Beta functions
Day 4	11.01.2018	Beta functions
Day 5	12.01.2018	Doubts
Day 6	13.01.2018	Gama functions

Week 3

Day 1	15.01.2018	Gama functions
Day 2	16.01.2018	Gama functions
Day 3	17.01.2018	Doubts
Day 4	18.01.2018	Double integrals
Day 5	19.01.2018	Double integrals
Day 6	20.01.2018	Double integrals

Week 4

Day 1	22.01.2018	Holiday
Day 2	23.01.2018	Doubts
Day 3	24.01.2018	Triple integrals
Day 4	25.01.2018	Triple integrals
Day 5	26.01.2018	Holiday

Day 6	27.01.2018	Doubts
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Week 5

Day 1	29.01.2018	Dirichlets integrals
Day 2	30.01.2018	Dirichlets integrals
Day 3	31.01.2018	Holiday

February 2018

Week 1

Day 1	01.02.2018	Doubts
Day 2	02.02.2018	Doubts
Day 3	03.02.2018	Conditional Test

Week 2

Day 1	05.02.2018	change of order of integration in double integrals
Day 2	06.02.2018	change of order of integration in double integrals
Day 3	07.02.2018	Doubts
Day 4	08.02.2018	Doubts
Day 5	09.02.2018	Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Co-efficients
Day 6	10.02.2018	Holiday

Week 3

Day 1	12.02.2018	Holiday
Day 2	13.02.2018	Holiday
Day 3	14.02.2018	Dirichlet's conditions
Day 4	15.02.2018	Parseval's identity for Fourier series
Day 5	16.02.2018	Parseval's identity for Fourier series
Day 6	17.02.2018	Fourier series for even and odd functions

Week 4

Day 1	19.02.2018	Fourier series for even and odd functions
Day 2	20.02.2018	Fourier series for even and odd functions
Day 3	21.02.2018	Doubts
Day 4	22.02.2018	Doubts
Day 5	23.02.2018	Half range series
Day 6	24.02.2018	Half range series

Week 5

Day 1	26.02.2018	Change of Intervals
Day 2	27.02.2018	Change of Intervals
Day 3	28.02.2018	Holidays (28 to 04.03.2018)

March 2018

Week 1

Day 1	05.03.2018	Doubts
Day 2	06.03.2018	Doubts
Day 3	07.03.2018	Test
Day 4	08.03.2018	Extended Complex Plane
Day 5	09.03.2018	Stereographic projection of complex numbers
Day 6	10.03.2018	Stereographic projection of complex numbers

Week 2

Day 1	12.03.2018	Stereographic projection of complex numbers
Day 2	13.03.2018	continuity and differentiability of complex functions
Day 3	14.03.2018	continuity and differentiability of complex functions
Day 4	15.03.2018	continuity and differentiability of complex functions
Day 5	16.03.2018	Analytic functions
Day 6	17.03.2018	Analytic functions

Week 3

Day 1	19.03.2018	Analytic functions
Day 2	20.03.2018	Cauchy-Riemann equations
Day 3	21.03.2018	Cauchy-Riemann equations
Day 4	22.03.2018	Cauchy-Riemann equations
Day 5	23.03.2018	Holiday (ShahidiDiwas)
Day 6	24.03.2018	Doubts

Week 4

Day 1	26.03.2018	Harmonic functions.
Day 2	27.03.2018	Harmonic functions.
Day 3	28.03.2018	Harmonic functions.
Day 4	29.03.2018	Holiday (MahaveerJayanti)
Day 5	30.03.2018	Test
Day 6	31.03.2018	Test

April 2018

Week 1

Day 1	02.04.2018	Mappings by elementary functions: Translation, rotation
Day 2	03.04.2018	Mappings by elementary functions: Translation, rotation
Day 3	04.04.2018	Magnification and Inversion
Day 4	05.04.2018	Conformal Mappings
Day 5	06.04.2018	Linear Translation
Day 6	07.04.2018	linear Translation

Week 2

Day 1	09.04.2018	linear Translation
Day 2	10.04.2018	Mobius transformations
Day 3	11.04.2018	Mobius transformations
Day 4	12.04.2018	Fixed points, Cross ratio
Day 5	13.04.2018	Inverse Points and critical mappings.
Day 6	14.04.2018	Holiday (Baisakhi)

Subject : Math paper-III

Name: Ms.Rimpi Kohli

Ba/Bsc Sem-6 Paper-3(Session 2017-18)

January 2018 Dynamics

Week 1

Day 1	01.01.2018	Velocity along radial and transverse directions
Day 2	02.01.2018	Velocity along radial and transverse directions
Day 3	03.01.2018	Acceleration along radial and transverse directions
Day 4	04.01.2018	Acceleration along radial and transverse directions
Day 5	05.01.2018	Holiday
Day 6	06.01.2018	Acceleration along radial and transverse directions

Week 2

Day 1	08.01.2018	Velocity along tangential and normal directions
Day 2	09.01.2018	Velocity along tangential and normal directions
Day 3	10.01.2018	acceleration along tangential and normal directions
Day 4	11.01.2018	acceleration along tangential and normal directions
Day 5	12.01.2018	Doubts of previous topics
Day 6	13.01.2018	Relative velocity and acceleration

Week 3

Day 1	15.01.2018	Relative velocity and acceleration
Day 2	16.01.2018	Relative velocity and acceleration
Day 3	17.01.2018	Simple harmonic motion
Day 4	18.01.2018	Simple harmonic motion
Day 5	19.01.2018	Simple harmonic motion
Day 6	20.01.2018	Simple harmonic motion

Week 4

Day 1	22.01.2018	Holiday
Day 2	23.01.2018	conditionall test-1
Day 3	24.01.2018	Doubt session of harmonic motion
Day 4	25.01.2018	Doubt session of harmonic motion
Day 5	26.01.2018	Holiday
Day 6	27.01.2018	Elastic strings

Week 5

Day 1	29.01.2018	Elastic strings
Day 2	30.01.2018	Elastic strings
Day 3	31.01.2018	Holiday

February 2018

Week 1

Day 1	01.02.2018	Newton's laws of motion
Day 2	02.02.2018	Newton's laws of motion
Day 3	03.02.2018	Motion on smooth and rough plane curves

Week 2

Day 1	05.02.2018	Motion on smooth and rough plane curves
Day 2	06.02.2018	Definitions of Conservative forces and Impulsive forces
Day 3	07.02.2018	Definitions of Conservative forces and Impulsive forces
Day 4	08.02.2018	Definitions of Conservative forces and Impulsive forces
Day 5	09.02.2018	Definitions of Conservative forces and Impulsive forces
Day 6	10.02.2018	Holiday

Week 3

Day 1	12.02.2018	Holiday
Day 2	13.02.2018	Holiday
Day 3	14.02.2018	Work and its equation
Day 4	15.02.2018	Work and its equation
Day 5	16.02.2018	Work and its equation
Day 6	17.02.2018	Work and its equation

Week 4

Day 1	19.02.2018	Conditional Test-2
Day 2	20.02.2018	Power
Day 3	21.02.2018	Power
Day 4	22.02.2018	Energy and conservation of Energy
Day 5	23.02.2018	Energy and conservation of Energy
Day 6	24.02.2018	Revision of topics

Week 5

Day 1	26.02.2018	Revision of topics
Day 2	27.02.2018	Revision of topics
Day 3	28.02.2018	Holidays (28 to 04.03.2018)

March 2018

Week 1

Day 1	05.03.2018	Motion on smooth and rough plane curves
Day 2	06.03.2018	Motion on smooth and rough plane curves
Day 3	07.03.2018	Motion on smooth and rough plane curves
Day 4	08.03.2018	Motion on smooth and rough plane curves
Day 5	09.03.2018	Doubt session of above topics
Day 6	10.03.2018	Doubt session of above topics

Week 2

Day 1	12.03.2018	Projectile motion of a particle in a plane
Day 2	13.03.2018	Projectile motion of a particle in a plane
Day 3	14.03.2018	Projectile motion of a particle in a plane
Day 4	15.03.2018	Projectile motion of a particle in a plane
Day 5	16.03.2018	Range and time of flight on an inclined plane
Day 6	17.03.2018	Range and time of flight on an inclined plane

Week 3

Day 1	19.03.2018	Doubt session of projectile
Day 2	20.03.2018	Doubt session of projectile
Day 3	21.03.2018	Doubt session of projectile
Day 4	22.03.2018	Central Orbits
Day 5	23.03.2018	Holiday (ShahidiDiwas)
Day 6	24.03.2018	Central Orbits

Week 4

Day 1	26.03.2018	Central Orbits
Day 2	27.03.2018	Central Orbits
Day 3	28.03.2018	Kepler laws of motion
Day 4	29.03.2018	Holiday (MahaveerJayanti)
Day 5	30.03.2018	Kepler laws of motion
Day 6	31.03.2018	Kepler laws of motion

April 2018

Week 1

Day 1	02.04.2018	Motion of a particle in three dimensions
Day 2	03.04.2018	Motion of a particle in three dimensions
Day 3	04.04.2018	Motion of a

		particle in three dimensions
Day 4	05.04.2018	Revision of Central Orbits
Day 5	06.04.2018	Revision of Central Orbits
Day 6	07.04.2018	Revision of Central Orbits

Week 2

Day 1	09.04.2018	Revision of Kepler laws
Day 2	10.04.2018	Revision of Kepler laws
Day 3	11.04.2018	Revision of Kepler laws
Day 4	12.04.2018	classTest
Day 5	13.04.2018	classTest
Day 6	14.04.2018	Holiday (Baisakhi)

Ba/bsc sem-6 paper-2(Session 2017-18)

Name : Ms.Rimpi Kohli

January 2018 Linear Algebra

Week 1

Day 1	01.01.2018	Vector spaces
Day 2	02.01.2018	Vector spaces
Day 3	03.01.2018	Vector spaces
Day 4	04.01.2018	subspaces
Day 5	05.01.2018	Holiday
Day 6	06.01.2018	subspaces

Week 2

Day 1	08.01.2018	Sum and Direct sum of subspaces
Day 2	09.01.2018	Sum and Direct sum of subspaces
Day 3	10.01.2018	Linear span
Day 4	11.01.2018	Linear span
Day 5	12.01.2018	Linearly Independent and dependent subsets of a vector space
Day 6	13.01.2018	Linearly Independent and dependent subsets of a vector space

Week 3

Day 1	15.01.2018	Finitely generated vector space
Day 2	16.01.2018	Finitely generated vector space
Day 3	17.01.2018	Existence theorem for basis of a finitely generated vector space
Day 4	18.01.2018	Existence theorem for basis of a finitely generated vector space
Day 5	19.01.2018	Existence theorem for basis of a finitely generated vector space
Day 6	20.01.2018	Revision and Doubts

Week 4

Day 1	22.01.2018	Holiday
Day 2	23.01.2018	Finite dimensional vector spaces
Day 3	24.01.2018	Finite dimensional vector spaces
Day 4	25.01.2018	Invariance of the number of elements of bases sets

Day 5	26.01.2018	Holiday
Day 6	27.01.2018	Invariance of the number of elements of bases sets

Week 5

Day 1	29.01.2018	Dimensions
Day 2	30.01.2018	Quotient space and its dimension.
Day 3	31.01.2018	Holiday

February 2018

Week 1

Day 1	01.02.2018	Homomorphism and isomorphism of vector spaces
Day 2	02.02.2018	Homomorphism and isomorphism of vector spaces
Day 3	03.02.2018	Homomorphism and isomorphism of vector spaces

Week 2

Day 1	05.02.2018	Linear transformations and linear forms on vector spaces
Day 2	06.02.2018	Linear transformations and linear forms on vector spaces
Day 3	07.02.2018	Vector space of all the linear transformations
Day 4	08.02.2018	Vector space of all the linear transformations
Day 5	09.02.2018	Conditional test-1
Day 6	10.02.2018	HOLIDAY

Week 3

Day 1	12.02.2018	HOLIDAY
Day 2	13.02.2018	HOLIDAY
Day 3	14.02.2018	Dual Spaces
Day 4	15.02.2018	Dual Spaces
Day 5	16.02.2018	Bidual spaces
Day 6	17.02.2018	Bidual spaces

Week 4

Day 1	19.02.2018	annihilator of subspaces of finite dimensional vector spaces
Day 2	20.02.2018	annihilator of subspaces of finite dimensional vector spaces
Day 3	21.02.2018	Null Space
Day 4	22.02.2018	Null Space

Day 5	23.02.2018	Range space of a linear transformation
Day 6	24.02.2018	Range space of a linear transformation

Week 5

Day 1	26.02.2018	Rank and Nullity Theorem
Day 2	27.02.2018	Rank and Nullity Theorem
Day 3	28.02.2018	Holidays (28 to 04.03.2018)

March 2018

Week 1

Day 1	05.03.2018	Algebra of Linear Transformation
Day 2	06.03.2018	Algebra of Linear Transformation
Day 3	07.03.2018	Minimal Polynomial of a linear transformation
Day 4	08.03.2018	Minimal Polynomial of a linear transformation
Day 5	09.03.2018	Singular and non-singular linear transformations
Day 6	10.03.2018	Singular and non-singular linear transformations

Week 2

Day 1	12.03.2018	Matrix of a linear Transformation
Day 2	13.03.2018	Matrix of a linear Transformation
Day 3	14.03.2018	Change of basis
Day 4	15.03.2018	Change of basis
Day 5	16.03.2018	Eigen values and Eigen vectors of linear transformations
Day 6	17.03.2018	

Week 3

Day 1	19.03.2018	Revision and Doubts of section-2,3
Day 2	20.03.2018	Revision and Doubts of section-2,3
Day 3	21.03.2018	Inner product spaces
Day 4	22.03.2018	Inner product spaces,
Day 5	23.03.2018	Holiday (ShahidiDiwas)
Day 6	24.03.2018	conditional

Week 4

Day 1	26.03.2018	Cauchy-Schwarz inequality
Day 2	27.03.2018	Cauchy-Schwarz inequality
Day 3	28.03.2018	Orthogonal vectors
Day 4	29.03.2018	Holiday (MahaveerJayanti)

Day 5	30.03.2018	Orthogonal complements
Day 6	31.03.2018	Orthogonal sets and Basis

April 2018

Week 1

Day 1	02.04.2018	Bessel's inequality for finite dimensional vector spaces
Day 2	03.04.2018	Bessel's inequality for finite dimensional vector spaces
Day 3	04.04.2018	Bessel's inequality for finite dimensional vector spaces
Day 4	05.04.2018	Gram-Schmidt, Orthogonalization process
Day 5	06.04.2018	Gram-Schmidt, Orthogonalization process
Day 6	07.04.2018	Doubt session

Week 2

Day 1	09.04.2018	Adjoint of a linear transformation and its properties
Day 2	10.04.2018	Adjoint of a linear transformation and its properties
Day 3	11.04.2018	Unitary linear transformations
Day 4	12.04.2018	Revision of complete syllabus
Day 5	13.04.2018	Class Test
Day 6	14.04.2018	Holiday (Baisakhi)

Subject : Paper – Physics XII: Atomic and Molecular Spectroscopy**Name: Ms.Monika Khurana**

S. No.	Days/ Dates	Topic
January		
Week 1		
1	Day 1 01/01/2018	Unit – I: Historical background of atomic spectroscopy Introduction of early observations, emission and absorption spectra, atomic spectra, wave number,
2	Day 2 02/01/2018	spectrum of Hydrogen atom in Balmer series, Bohr atomic model(Bohr’ s postulates) ,spectra of Hydrogen atom
3	Day 3 03/01/2018	explanation of spectral series in Hydrogen atom, un-quantized states and continuous spectra, spectral series in absorption spectra
Week 2		
4	Day 1 08/01/2018	Effect of nuclear motion on line spectra (correction of finite nuclear mass), variation in Rydberg constant due to finite mass, short comings of Bohr’ s theory,
5	Day 2 09/01/2018	Wilson sommerfeld quantization rule, de-Broglie interpretation of Bohr quantization law, Bohr’ s corresponding principle
6	Day 3 10/01/2018	Sommerfeld’ s extension of Bohr’ s model,
Week 3		
7	Day 1 15/01/2018	Sommerfeld relativistic correction, Short comings of Bohr-Sommerfeld theory,
8	Day 2 16/01/2018	Vector atom model; space quantization, electron spin,
9	Day 3 17/01/2018	coupling of orbital and spin angular momentum, spectroscopic terms and their notation, quantum numbers associated with vector atom model, transition probability and selection rules.
Week 4		
10	Day 1 22/01/2018	Vasant Panchami
11	Day 2 23/01/2018	Numericals and Difficulties
12	Day 3 24/01/2018	Sir Chotu Ram Jayanti
Week 5		
13	Day 1 29/01/2018	Test of Unit I

14	Day 2 30/01/2018	Unit –II: Vector Atom Model (single valance electron): Orbital magnetic dipole moment (Bohr megnaton), behavior of magnetic dipole in external magnetic field;
15	Day 3 31/01/2018	Guru Ravidas Jayanti
February		
Week 1		
16	Day 1 05/02/2018	Larmors' precession and theorem. Penetrating and Non-penetrating orbits,
17	Day 2 06/02/2018	Penetrating orbits on the classical model; Quantum defect,
18	Day 3 07/02/2018	spin orbit interaction energy of the single valance electron, spin orbit interaction for penetrating and non-penetrating orbits.
Week 2		
19	Day 1 12/02/2018	quantum mechanical relativity correction, Hydrogen fine spectra, Main features of Alkali Spectra and their theoretical interpretation, term series and limits,
20	Day 2 13/02/2018	Maha Shivratri
21	Day 3 14/02/2018	Rydeburg-Ritze combination principle, Absorption spectra of Alkali atoms. observed doublet fine structure in the spectra of alkali metals and its Interpretation,
Week 3		
22	Day 1 19/02/2018	Intensity rules for doublets, comparison of Alkali spectra and Hydrogen spectrum .
23	Day 2 20/02/2018	Assignment
24	Day 3 21/02/2018	Conditional Test
Week 4		
25	Day 1 26/02/2018	UNIT-III: Vector Atom model (two valance electrons) Essential features of spectra of Alkaline-earth elements, Vector model for two valance electron atom: application of spectra.
26	Day 2 27/02/2018	Coupling Schemes;LS or Russell - Saunders Coupling Scheme and JJ coupling scheme,
27	Day 3 28/02/2018	Holiday
March		
Week 1		
28	Day 1 05/03/2018	Interaction energy in L-S coupling (sp, pd configuration), Lande interval rule,
29	Day 2 06/03/2018	Pauli principal and periodic classification of the elements. Interaction energy in JJ Coupling (sp, pd configuration),

30	Day 3 07/03/2018	Equivalent and non-equivalent electrons, Two valance electron system-spectral terms of non-equivalent and equivalent electrons, comparison of spectral terms in L-S And J-J coupling.
Week 2		
31	Day 1 12/03/2018	Hyperfine structure of spectral lines and its origin; isotope effect, nuclear spin.
32	Day 2 13/03/2018	Difficulties and Conceptual Problems
33	Day 3 14/03/2018	Numericals
Week 3		
34	Day 1 19/03/2018	Conditional test
35	Day 2 20/03/2018	Unit –IV: Atom in External Field Zeeman Effect (normal and Anomalous), Experimental set-up for studying Zeeman effect, Explanation of normal Zeeman effect(classical and quantum mechanical)
36	Day 3 21/03/2018	Explanation of anomalous Zeeman effect(Lande g-factor), Zeeman pattern of D1 and D2 lines of Na atom,
Week 4		
37	Day 1 26/03/2018	Paschen-Back effect of a single valance electron system.
38	Day 2 27/03/2018	Weak field Stark effect of Hydrogen atom.
39	Day 3 28/03/2018	Difficulties
April		
Week 1		
40	Day 1 02/04/2018	Molecular Physics General Considerations, Electronic States of Diatomic Molecules, Rotational Spectra (Far IR and Microwave Region),
41	Day 2 03/04/2018	Vibrational Spectra (IR Region), Rotator Model of Diatomic Molecule,
42	Day 3 04/04/2018	Raman Effect, Electronic Spectra ,
Week 2		
43	Day 1 09/04/2018	Numericals and Conceptual Problems
44	Day 2 10/04/2018	Test of Unit IV
45	Day 3 11/04/2018	Revision of questions of univ. sample paper

Subject : Physics Paper – XI : Solid State and Nano Physics

Name: Ms.Veenu Goel

No.	Days/ Dates	Topic
January		
Week 1		
1	Day 1 04/01/2018	Crystal Structure I Crystalline and glassy forms, liquid crystals, crystal structure, periodicity
2	Day 2 05/01/2018	lattice and basis, crystal translational vectors and axes. Unit cell and Primitive Cell
3	Day 3 06/01/2018	Winger Seitz ,primitive Cell, symmetry operations for a two dimensional crystal
Week 2		
4	Day 1 11/01/2018	Bravais lattices in two and three dimensions. Crystal planes and Miller indices, Inter planer spacing,
5	Day 2 12/01/2018	Crystal structures of Zinc Sulphide, Sodium Chloride and Diamond.
6	Day 3 13/01/2018	Numerical And conceptual Problem
Week 3		
7	Day 1 18/01/2018	Test of unit 1
8	Day 2 19/01/2018	Crystal Structure II X-ray diffraction, Bragg's Law and experimental X-ray diffraction methods
9	Day 3 20/01/2018	K-space and reciprocal lattice and its physical significance,
Week 4		
10	Day 1 25/01/2018	reciprocal lattice vectors, reciprocal lattice to a simple cubic lattice, b.c.c. and f.c.c.
11	Day 2 26/01/2018	Holiday
12	Day 3 27/01/2018	Historical introduction,BCS
February		
Week 1		
13	Day 1 01/02/2018	Survey of superconductivity, Super conducting systems,

14	Day 2 02/02/2018	High Tc Super conductors, Isotopic Effect, Critical Magnetic Field,
15	Day 3 03/02/2018	Meissner Effect, London Theory and Pippards' equation
Week 2		
16	Day 1 08/02/2018	Classification of Superconductors (type I and Type II)
17	Day 2 09/02/2018	Theory of Superconductivity, Flux quantization,
18	Day 3 10/02/2018	Holiday
Week 3		
19	Day 1 15/02/2018	Conditional Test
20	Day 2 16/02/2018	Assignment
21	Day 3 17/02/2018	Josephson Effect (AC and DC)
Week 4		
22	Day 1 22/02/2018	Practical Applications of superconductivity and their limitations
23	Day 2 23/02/2018	conceptual Problem
24	Day 3 24/02/2018	power application of superconductors.
March		
Week 1		
25	Day 1 01/03/2018	Holiday
26	Day 2 02/03/2018	Holiday
27	Day 3 03/03/2018	Holiday
Week 2		
28	Day 1 08/03/2018	Introduction to Nano Physics Definition, Length scale, Importance of Nano-scale and technology,
29	Day 2 09/03/2018	History of Nano technology,
30	Day 3 10/03/2018	Benefits and challenges in molecular manufacturing.
Week 3		
31	Day 1 15/03/2018	Class Test

32	Day 2 16/03/2018	Molecular assembler concept,
33	Day 3 17/03/2018	Understanding advanced capabilities.
Week 4		
34	Day 1 22/03/2018	Numerical Problem
35	Day 2 23/03/2018	Holiday
36	Day 3 24/03/2018	Electronics, Nano-biotechnology, Materials, Medicine.
Week 5		
37	Day 1 29/03/2018	Holiday
38	Day 2 30/03/2018	Vision and objective of Nano-technology,
39	Day 3 31/03/2018	Nanotechnology in different field, Automobile,
April		
Week 1		
40	Day 1 02/04/2018	conceptual Problem
41	Day 2 03/04/2018	Conditional Test
42	Day 3 04/04/2018	Electronics Nano-biotechnology, Materials Medicine.
Week 2		
43	Day 1 09/04/2018	Revision of university Question Paper
44	Day 2 10/04/2018	Revision of university Question Paper
45	Day 3 11/04/2018	Revision of university Question Paper

Subject : C.Sc Paper-I: Relational Data Base Management System

Name : Ms Sonia Sharma

January 2018

Week 1 (1-3) days

1-3 Days	Relational Model Concepts Codd's Rules for Relational Model Hierarchical Data Model– Introduction Features Components Example
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Week 2

1-3 Days	Network Data Model– Introduction, Features, Components, Example Differences between Hierarchical Data Model and Network Data Model Class Test (Hierarchical Model) Comparison of Relational Data Model with Hierarchical Data Model and Network Data Model Group Discussion(Role of Networking to connect People)
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Week 3

1-3 Days	Relational Algebra:-SelectionProjection Set OperationJoin and Division Cross Word (Relational Alzebra& Networking) Tuple Relational Calculus
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Week 4

4-6 days	Domain Relational Calculus Functional Dependencies and Normalization -- Purpose, Test (Set Operations and Join and Division)
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Week 5 :

1-3 Days	Data RedundancyUpdate Anomalies& Discussion about Assignments-I (Real Life Examples of Normalization and Data Dependency)
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February 2018

Week 1

1-3 Days	Partial/Fully Functional Dependencies Transitive Functional Dependencies, Characteristics of Functional Dependencies,
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Week 2

1-3 Days	Student Presentation on Functional Dependencies Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF).
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Week 3

1-3 Days	SQL: Data Definition and data types ,Create Table, Insert Data, Viewing Data, Filtering Table Data, Discussion about Assignment-II (Queries Based on Sql Commands) Test –(Normal Forms)
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Week 4

1-3 Days	Sorting data, Creating Table from a Table, Destroy table, Update, View, Delete, Join,
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Week 5

1-3 Days	Concatenating data from Table Specifying Constraints in SQL
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March 2018

Week 1

1-3 Days	Primary Key, Foreign Key, Unique Key, Quiz on Sql Commands
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Week 2

1-3 Days	Check Constraint, Using Functions
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Week 3

1-3 Days	PL/SQL-Introduction, Advantages of PL/SQL Conditional Test-I (unit-I & Unit-II)
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Week 4

1-3 Days	the Generic PL/SQL Block: PL/SQL Execution Environment; Assignment: PL SQL Benefits in Database
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April 2018 Week 1

1-3 Days	PL/SQL Character Set and Data Types, Declaration and Assignment of Variables) Control Structure in PL/SQL:Iterative ControlConditional Control
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Week 2

1-3 Days	Conditional Control Conditional Test-II (All syllabus Covered under Unit-III & IV
Week 3 & 1-3 Days Days	Revision and queries of students, Discuss last year qns papers

Subject : C.Sc Paper-II: Computer Networks

Name : Ms Meenu Nagpal

S. No.	Days/ Dates	Topic
January		
Week 1		
1	Day 1 04/01/2018	Introduction to Computer Communication
2	Day 2 05/01/2018	& Networking Topologies, Uses of Computer networks, ,
3	Day 3 06/01/2018	Network Devices, Nodes, Hosts,
Week 2		
4	Day 1 11/01/2018	Network Software: Design Issues & Protocols
5	Day 2 12/01/2018	, Connection Oriented & Connection less Services,
6	Day 3 13/01/2018	Network Applications & Protocols
Week 3		
7	Day 1 18/01/2018	,Networking Models,
8	Day 2 19/01/2018	Network Architecture,
9	Day 3 20/01/2018	OSI Reference Model
Week 4		
10	Day 1 25/01/2018	Analog & Digital Communications Concepts,
11	Day 2 26/01/2018	Holiday (Republic Day)
12	Day 3 27/01/2018	Group Discussion : Networking in real Life

February		
Week 1		
13	Day 1 01/02/2018	Guided Transmission Media,.
14	Day 2 02/02/2018	Wireless Transmission Media, Dialup Networking
15	Day 3 03/02/2018	Communication Satellites, Flow Control
Week 2		
16	Day 1 08/02/2018	Conditional Test-I All syllabus covered in the months of Jan
17	Day 2 09/02/2018	Data Link Layer: Framing,
18	Day 3 10/02/2018	Holiday
Week 3		
19	Day 1 15/02/2018	Switching & Multiplexing, Error Control,
20	Day 2 16/02/2018	Sliding Window protocols,
21	Day 3 17/02/2018	Media Access Control,
Week 4		
22	Day 1 22/02/2018	Random Access Protocols, Token Passing Protocols,
23	Day 2 23/02/2018	Token Ring, Introduction to LAN technologies,
24	Day 3 24/02/2018	Ethernet, Switched Ethernet,
March		
Week 1		
25	Day 1 01/03/2018	Holiday
26	Day 2 02/03/2018	Holiday(Holi)
27	Day 3 03/03/2018	Holiday
Week 2		
28	Day 1 08/03/2018	VLAN, Fast Ethernet, Gigabit
29	Day 2 09/03/2018	Ethernet FDDI, Wireless LANs,Bluetooth,
30	Day 3 10/03/2018	Test of Unit I & II

Week 3		
31	Day 1 15/03/2018	Network Hardware Components: Connectors, Repeaters, Hubs,
32	Day 2 16/03/2018	Network Layer & Routing Concepts,
33	Day 3 17/03/2018	Virtual Circuits & Datagrams,
Week 4		
34	Day 1 22/03/2018	Routing Algorithms,
35	Day 2 23/03/2018	Holiday
36	Day 3 24/03/2018	Congestion Control Algorithms
Week 5		
37	Day 1 29/03/2018	Holiday
38	Day 2 30/03/2018	Conditional Test
39	Day 3 31/03/2018	Internetworking,
April		
Week 1		
40	Day 1 02/04/2018	Network Interface Cards & PC Cards, Bridges, Switches, Routers, Gateways,
41	Day 2 03/04/2018	Continued
42	Day 3 04/04/2018	Class test of Unit-III
Week 2		
43	Day 1 09/04/2018	Network Security Issues
44	Day 2 10/04/2018	Continued
45	Day 3 11/04/2018	continued
Week 3		
46	16/4	Encryption Methods,
47	17/4	Authentication Methods
48	18/4	Continued
Week 4		
		Queries of students and discuss previous qns papers

