

Name of the Teacher: Dr. Anju Dhall

Class: B.Sc I

Name of Subject: Solid geometry

Week 1	
Day 1	Preliminaries
Day 2	general equation of second degree
Day3	Theorem
Day 4	Examples
Day 5	More examples
Day 6	Exercise questions
Week	
Day 1	tracing of conics
Day 2	examples
Day3	tangent at the point to the conic
Day 4	Theorem
Day 5	examples
Day 6	Discussion question
Week 3	
Day 1	chord of contact
Day 2	Practice question
Day3	pole of line to conic
Day 4	director circle of conic
Day 5	Exercise (practice)
Day 6	Solved examples(discussion)
Week 4	
Day 1	systems of conics
Day 2	Practice question
Day3	confocal conics
Day 4	examples
Day 5	Practice question
Day 6	Doubt of students
Week 5	
Day 1	polar equation of conic

Day 2	examples
Day3	Doubt of students
Day 4	tangent and normal to conic
Day 5	Discussion of question
Day 6	Doubt of students
Week 6	
Day 1	plane section of sphere
Day 2	examples
Day3	Practice solved examples
Day 4	sphere through a given circle
Day 5	examples
Day 6	doubt of students
Week 7	
Day 1	intersections of two spheres
Day 2	examples
Day 3	examples
Day 4	doubt discussion
Day 4	test
Day 5	test discussion
Day 6	radical plane of two sphere
WEEK 8	
DAY1	examples
DAY 2	assignment 1
DAY 3	coaxial system of spheres
Day 2	examples
DAY 4	right circular cone
DAY5	examples
Day 6	enveloping cone
WEEK 9	
DAY 1	examples
DAY 2	Doubt of students
DAY 3	reciprocal cones
DAY 4	right circular cylinder and enveloping cylinder
DAY 5	examples
DAY 6	Exercise question
Week 10	
Day 1	equation of tangent plane
Day 2	director sphere and examples

Day3	normal of coincoinds
Day 4	More examples
Day 5	Exercise question
Day 6	Doubt of students
Week 11	
Day 1	polar plane of the point
Day 2	examples
Day3	enveloping cone of a coincoind
Day 4	Discussion of problem of students
Day 5	Exercise question
Day 6	Doubt of students
Week 12	
Day 1	enveloping cylinder of a coincoind
Day 2	examples
Day3	examples
Day 4	doubt discussion
Day 5	More examples
Day 6	test
WEEK 13	
Day 1	test discussion
Day 2	assignment 2
Day3	definitions
Day 4	circular section
Day 5	Examples
Day 6	Examples
Week 14	
Day 1	plane section of coincoinds
Day 2	More Examples
Day3	Discussion with students
Day 4	Doubt class
Day 5	assignment 3
Day 6	test
Week 15	
Day 1	generating lines and examples
Day 2	confocal conicoid
Day3	Exercise question
Day 4	Doubt class
Day 5	reduction of second degree equations
Day 6	examples

Week 16	
Day 1	revision
Day 2	Solved examples
Day3	Discussion of question
Day 4	Exercise of question
Day 5	Typical examples
Day 6	Doubt class
Week 17	
Day 1	Revision Unit-I
Day 2	Revision Unit-I
Day3	Revision Unit-II
Day 4	Revision Unit-II
Day 5	Revision Unit-III
Day 6	Revision Unit-III
Week 18	
Day 1	Revision Unit-IV
Day 2	Revision Unit-IV
Day3	Previous year question paper
Day 4	Previous paper
Day 5	Previous paper
Day 6	Previous paper

Name of the Teacher: Dr. Anju Dhall Class: B.Sc I
Name of Subject: CALCULUS

Week 1	
Day 1	Orientation lecture about the career after graduation
Day 2	Introduction about the college and university
Day3	Syllabus and examination scheme
Day 4	What is calculus meaning, what is differentiation and integration
Day 5	Definition of limit, continuity, and derivability
Day 6	types of discontinuities
Week 2	
Day 1	Differentiability of function
Day 2	successive diff. of functions in implicit, explicit form
Day 3	in parametric form
Day 4	lebinitz theorem
Day 5	some important theorem

Day 6	some important expansion
Week 3	
Day 1	taylor theorem with lagrange form
Day 2	cauchy form of remainder after n terms
Day 3	maclaurin form
Day 4	infinite series
Day 5	examples
Day 6	examples
Week 4	
Day 1	Asymptotes parallel to coordinate axis
Day 2	oblique asymptotes in Cartesian form
Day 3	oblique asymptotes in polar form
Day 4	Curvature and its radius in catesian forms
Day 5	Radius of Curvature in parametric forms
Day 6	examples
WEEK 5	
Day 1	Radius of Curvature in pedel form
Day 2	examples
Day 3	Tangential polar curves
Day 4	examples
Day 5	center of Curvature
Day 6	examples
Week 6	
Day 1	singular points and theorem
Day 2	point of inflexion and theorem
Day 3	multiple points and related theorem
Day4	cusps, node and conjugate points
Day 5	singular points and theorem
Day 6	point of inflexion and examples
WEEK 7	
Day 1	
Day 2	Practice of questions
Day3	Other standard results
Day 4	Practice of related questions
Day 5	Application in real life
Day 6	Problem sums

Week 8	
Day 1	Reduction formulae
Day 2	More Reduction formulae
Day3	examples
Day 4	examples
Day 5	Walli formulae
Day 6	Test
Week 9	
Day 1	tracing of curves in Cartesian coordinates
Day 2	tracing of curves in parametric and polar coordinates
Day3	theorems
Day 4	Problem sum
Day 5	Doubt sum
Day 6	test
Week 10	
Day 1	Practice questions
Day 2	Doubt of students
Day3	length of curve in Cartesian coordinates
Day 4	examples
Day 5	examples
Day 6	Doubt of students
Week 11	
Day 1	parametric and polar curves
Day 2	tracing for Cartesian coordinate
Day3	Practice questions
Day 4	Tracing for parametric curves
Day 5	Practice questions
Day 6	P for polar curves and pedel form
Week 12	
Day 1	Tangential equations, centre and circle of curvature
Day 2	Chord of curvation and evolutes
Day3	Practice questions
Day 4	Doubt of students
Day 5	Test for concavity and convexity

Day 6	intrinsic equation of curves
Week 13	
Day 1	rectification
Day 2	Problem sum
Day3	Doubt class
Day 4	Rectification formulas with examples
Day 5	Derivation of formule
Day 6	Problem sum
Week 14	
Day 1	Doubt class
Day 2	Application in real life
Day3	Clarification with examples
Day 4	Tracing of curve, with other form
Day 5	Questions on rectification
Day 6	Intrinsic equation of curves
Week 15	
Day 1	Problem sum
Day 2	Doubt class
Day3	Quadrature equation
Day 4	Area bounded by closed curve
Day 5	Example of it
Day 6	More practice
Week 16	
Day 1	Doubt of students
Day 2	Doubt of students
Day3	Volumes and surface of solids of revolution, definition, example
Day 4	Example of it
Day 5	Problem sum
Day 6	Practice questions and doubt
Week 17	
Day 1	sectorial area
Day 2	theorems
Day3	Example of it

Day 4	Problem sum
Day 5	Doubt of students
Day 6	Doubt of students
Week 18	
Day 1	Discussion of unit-I with important questions
Day 2	Discussion of unit-II with important questions
Day3	Discussion of unit-III with important questions
Day 4	Discussion of unit-IV with important questions
Day 5	Discussion of previous year questions papers
Day 6	Doubt class
B.Sc III Name of Subject: Groups and ring Name of Teacher:Dr. Anju Dhall	
Week 1	
Day 1	Definition of a group with example
Day 2	Simple properties of a group
Day3	Theorems on groups
Day 4	Sub group
Day 5	Theorems on subgroups
Day 6	Theorems on subgroups
Week 2	
Day 1	Generation of groups
Day 2	Cyclic groups
Day3	Cosets,left and right cosets theorems
Day 4	Theorems on cosets
Day 5	Index of a sub groups
Day 6	Coset decomposition theorems
Week 3	
Day 1	Theorems on coset decomposition
Day 2	Lagranges the Theorem
Day3	Lagranges the Theorem consequences
Day 4	Normal Subgroup
Day 5	Theorems on Subgroup
Day 6	examples
Week 4	
Day 1	Quotient Groups

Day 2	Theorems on Quotient Groups
Day3	examples
Day 4	examples
Day 5	examples
Day 6	examples
Week 5	
Day 1	Problem discussion on groups
Day 2	Examples
Day3	Homomorphisms
Day 4	Theorems on Homomorphisms
Day 5	Examples
Day 6	Isomorphism
Week 6	
Day 1	Theorems on Isomorphisms
Day 2	Examples
Day3	Theorem on automorphisms
Day 4	Examples
Day 5	Examples
Day 6	Innermorphism
Week 7	
Day 1	Theorems on inner Isomorphisms
Day 2	Automorphism of cyclic groups
Day3	Theorems on automorphism
Day 4	Examples
Day 5	permutation groups
Day 6	Theorems on permutation groups
Week 8	
Day 1	Even and odd permutation
Day 2	Examples
Day3	Some results on permutation
Day 4	Examples
Day 5	Alternating groups
Day 6	Examples
Week 9	
Day 1	Cayleys theorem
Day 2	Result on theorem
Day3	Examples
Day 4	Center of a group
Day 5	Theorems on center

Day 6	Examples
Week 10	
Day 1	Derived group
Day 2	Examples
Day3	Examples
Day 4	Discussion on questions
Day 5	Examples
Day 6	Examples
Week 11	
Day 1	Introduction to rings
Day 2	Theorems on rings
Day3	Examples
Day 4	Subrings
Day 5	Examples
Day 6	Thermos on subrings
Week 12	
Day 1	Integral domain and field
Day 2	Examples
Day3	Theorems on Integral domain
Day 4	Theorems on field
Day 5	Examples
Day 6	Characteristics of a rings
Week 13	
Day 1	Field of quotient of an integral domain
Day 2	Examples
Day3	Examples
Day 4	Question discussion
Day 5	Examples
Day 6	Examples
Week 14	
Day 1	Euclidean rings
Day 2	Examples
Day3	Examples
Day 4	Polynomial rings
Day 5	Examples
Day 6	examples
Week 15	
Day 1	Field of quotient of an integral domain
Day 2	Examples

Day3	examples
Day 4	Question discussion
Day 5	examples
Day 6	Examples
Week 16	
Day 1	Euclidean rings
Day 2	Examples
Day3	Examples
Day 4	Polynomial rings
Day 5	examples
Day 6	Examples
Week 17	
Day 1	Polynomial over the rational field
Day 2	Examples
Day3	examples
Day 4	The eisensteins criterion of irreducibility
Day 5	Examples
Day 6	Examples
Week 18	
Day 1	Polynomial rings over commutative rings
Day 2	Examples
Day3	Unique Factorization domain
Day 4	examples
Day 5	Examples
Day 6	Question discussion
Class & Section: B.SC-II Maths (Hons.) Subject: Partial Differential Equations	
Week 1	
Day 1	Partial Differential Equations
Day 2	Examples
Day 3	Examples (Contd...)
Day 4	Problems
Day 5	P.D.E by Eliminating the function
Day 6	P.D.E by Eliminating the function (Contd...)
Week 2	

Day 1	First Order Linear P.D.E.
Day 2	First Order Linear P.D.E. (Contd....)
Day 3	First Order Linear P.D.E. (Contd....)
Day 4	First Order Linear P.D.E. (Contd....)
Day 5	Problems
Day 6	Problems & Submission of Assignment-I
Week 3	
Day 1	First Order Non Linear P.D.E.
Day 2	examples
Day 3	First Order Non Linear P.D.E (Contd....)
Day 4	First Order Non Linear P.D.E (Contd....)
Day 5	Charpit Method
Day 6	Charpit Method (Contd....)
Week 4	
Day 1	Charpit Method (Contd....)
Day 2	Complete Integral
Day 3	Complete Integral (Contd....)
Day 4	Jacobi Method
Day 5	Jacobi Method (Contd....)
Day 6	Practical in real life
Week 5	
Day 1	Solutions of Homogeneous Linear P.D.E.
Day 2	Solutions of Homogeneous Linear P.D.E (Contd....)
Day 3	examples
Day 4	Solutions of Homogeneous Linear P.D.E (Contd....)
Day 5	Problems
Day 6	Solutions of Non Homogeneous Linear P.D.E.
Week 6	
Day 1	Solutions of Non Homogeneous Linear P.D.E (Contd...)
Day 2	Solutions of Non Homogeneous Linear P.D.E (Contd...)
Day 3	important theorems
Day 4	Problems
Day 5	Problems
Day 6	Test-I (Solutions of Non Homogeneous Linear P.D.E.)
Week 7	
Day 1	P.D.E With Variable Coefficients
Day 2	P.D.E With Variable Coefficients (Contd....)
Day 3	Problems

Day 4	Real life examples
Day 5	examples
Day 6	examples
Week 8	
Day 1	Introduction
Day 2	Classification of Second Order Linear P.D.E
Day 3	theorems
Day 4	examples
Day 5	examples
Day 6	exercise question discussion
Week 9	
Day 1	test
Day 2	Canonical Form (Ellipse)
Day 3	Canonical Form (Ellipse Contd...)
Day 4	Canonical Form (Parabola)
Day 5	Canonical Form (Parabola Contd....)
Day 6	Canonical Form (Hyperbola)
Week 10	
Day 1	Canonical Form (Hyperbola Contd....)
Day 2	Problems
Day 3	Problems
Day 4	Submission of Assignment –II
Day 5	examples
Day 6	
Week 11	
Day 1	Monge's Method
Day 2	Monge's Method (Contd....)
Day 3	Monge's Method (Contd....)
Day 4	Problems
Day 5	Problems
Day 6	Group Discussion
Week 12	
Day 1	Introduction
Day 2	Characteristics of Second Order P.D.E
Day 3	Characteristics of Second Order P.D.E (Contd....)
Day 4	Cauchy Problem
Day 5	Exercise
Day 6	Problems

Week 13	
Day 1	One Dimensional Wave Equation
Day 2	examples
Day 3	One Dimensional Wave Equation (Contd.....)
Day 4	Problems
Day 5	Two Dimensional Wave Equation
Day 6	Two Dimensional Wave Equation (Contd....)
Week 14	
Day 1	One Dimensional Heat Equation
Day 2	One Dimensional Heat Equation (Contd,,,))
Day 3	Two Dimensional Heat Equation
Day 4	Two Dimensional Heat Equation (Contd....)
Day 5	Problems
Day 6	Problems
Week 15	
Day 1	One Dimensional Laplace Equation
Day 2	One Dimensional Laplace Equation (Contd....)
Day 3	Test – II (Heat Equations)
Day 4	Revision
Day 5	Revision
Day 6	Applications in real life
Week 16	
Day 1	Short answer type problems a unit I, Revision of previous Question papers
Day 2	Short answer type problems a unit I, Revision of previous Question papers
Day 3	Short answer type problems a unit I, Revision of previous Question papers
Day 4	Short answer type problems a unit II, Revision of previous Question papers
Day 5	Short answer type problems a unit II, Revision of previous Question papers
Day 6	Short answer type problems a unit II, Revision of previous Question papers
Week 17	
Day 1	Short answer type problems a unit III, Revision of previous Question papers
Day 2	Short answer type problems a unit III, Revision of previous Question papers
Day 3	Short answer type problems a unit III, Revision of previous Question papers
Day 4	Revision

Day 5	Revision
Day 6	Revision
Week 18	
Day 1	Revision
Day 2	previous year question discussion
Day 3	previous year question discussion
Day 4	previous year question discussion
Day 5	previous year question discussion
Day 6	previous year question discussion

Lesson Plan of Botany

Name Incharge Teacher: – Dr. Kanta Rani

Subject : - Botany Theory

Lesson Plan : - 15 Weeks (April 2021 – June 2021)

week	Days	Class B.Sc.-I, sem. II (Paper I)	Class B.Sc-II, sem. IV (Paper II)	Class B.Sc-III, sem. VI (Paper II)
1	1	General characters of bryophytes	Flower-a modified shoot,	Vavilov's centres of origin of crop plants,
	2	classification (upto classes) and economic importance	Microsporangium, its wall and dehiscence mechanism.	Origin, distribution, botanical description and cultivation and economic uses of Wheat
	3	alternation of generations, evolution of sporophytes	Contd.	Contd.
2	1	Structure and reproduction (excluding development) of <i>Marchantia</i>	Microsporogenesis	Origin, distribution, botanical description and cultivation and economic uses of Rice
	2	Contd.	Contd.	Environmental factors- climatic (wind)
	3	Contd.	pollen grains and its structure (pollen wall).	Origin, distribution, botanical description and cultivation and economic uses of Maize

Contd.

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
3	1	Structure and reproduction of <i>Anthoceros</i> (Anthocerotopsida)	Contd.	Test
	2	Contd.	Test	Pulses - Gram
	3	Contd.	Pollen germination (microgametogenesis),	Pulses - Arhar
4	1	Structure and reproduction of <i>Funaria</i> (Bryopsida)	Male gametophyte	Pulses - Pea
	2	Contd.	Contd. And Revision	Test
	3	Contd.	Pollen-pistil interaction	Vegetables - Potato
5	1	Test	Test	Vegetables - Tomato
	2	General characters of Pteridophytes	self incompatibility	Vegetables - Onion
	3	classification and economic importance of Pteridophytes	Test	Test

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
6	1	Alternation of generations, heterospory, apospory, apogamy	Pollination: types and agencies	Fibers- cotton
	2	General account of stellar evolution	Contd.	Fibers- Jute
	3	Contd.	Test	Fibers- Flax.
7	1	Test	Structure of Megasporangium (ovule), its curvatures	Test
	2	Structure and reproduction (excluding development) of <i>Rhynia</i>	Megasporogenesis and Megagametogenesis	Oils- Groundnut
	3	Contd. And Revision	Contd.	Oils- Mustard,
8	1	Structure and reproduction of <i>Selaginella</i> (Lycopsida),	Test	Oils- Sunflower.
	2	Contd.	Female gametophyte (mono, bi and tetrasporic)	Oils- Coconut.
	3	Contd.	Contd.	Test

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
9	1	Contd.	Double fertilization	Spices- coriander, ferula
	2	Test	Endosperm types and its biological importance.	Spices- ginger, turmeric
	3	Structure and reproduction of <i>Equisetum</i> (Sphenopsida)	Embryogenesis in Dicot	Spices- cloves. And Revision
10	1	Contd.	Embryogenesis in Monocot	Test
	2	Contd.	Test	Medicinal plants- <i>Cinchona</i> , <i>Rauwolfia</i> ,
	3	Revision	Polyembryony,	Medicinal plants- <i>Atropa</i> , <i>Opium</i> ,
11	1	<i>Pteris</i> (Pteropsida)	Structure of Dicot and Monocot seed,	Medicinal plants- <i>Cannabis</i> , <i>Azadirachta</i> ,
	2	Contd.	Contd.	Medicinal plants- <i>Withania</i> .
	3	Contd.	Fruit types	Revision

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
12	1	Revision and Test	Contd.	Beverages- tea and coffee;
	2	Revision and Test	Revision and Test	Contd.
	3	Revision and Test	Dispersal mechanisms in fruits and seeds.	Rubber - <i>Hevea</i> ;
13	1	Revision and Test	Contd.	Test
	2	Revision and Test	Revision and test	Sugar- sugarcane
	3	Revision and Test	Revision and test	General account and sources of timber
14	1	Revision and Test	Revision and test	energy plantations and bio-fuels.
	2	Revision and Test	Revision and test	Contd.
	3	Revision and Test	Revision and test	Revision and discussion

Dr. Kanta Rani

Department Of Botany

Lesson Plan of Botany

Name Incharge Teacher: – Dr. Kanta Rani

Subject : - Botany Theory

Lesson Plan : - 15 Weeks (October 2021 – Jan 2022)

week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
1	1	Bacteria: Structure & nutrition	Meristematic Tissue	Introduction to Ecology: Definition; scope and importance;
	2	Reproduction and economic importance of Bacteria	permanent (simple) Tissue	Levels of organization
	3	Cyanobacteria: General characters; life-history of Nostoc	Contd.	Environmental factors- climatic (Light)
2	1	Algae: General characters	Xylem	Environmental factors- climatic (water and humidity)
	2	Classification (upto classes) and economic importance of Algae	Contd.	Environmental factors- climatic (wind)
	3	General account Of Algal blooms	Phloem	Environmental factors- climatic (temperature)

Contd.

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
3	1	Important features and life-history (excluding development) of Volvox	Contd. And Revision	Edaphic (soil profile)
	2	Contd.	Secretory Tissue	Edaphic (physico -chemical properties)
	3	Important features and life-history of Oedogonium	Epidermal and ground tissue	Revision and group discussion
4	1	Contd.	Vascular Tissue	Test
	2	Important features and life-history of Vaucheria (Xanthophyceae)	The Shoot system – SAM and its histological organizations.	Topographic factor
	3	Contd.	Contd.	Biotic factors (species interaction)
5	1	Important features and life-history of Ectocarpus (Phaeophyceae)	Test	Morphological and Anatomical features of Hydrophytes
	2	Contd.	Root system: RAM ; histological organization	Morphological and anatomical features of, Xerophytes
	3	Important features and life-history of Polysiphonia (Rhodophyceae)	Contd.	Morphological and anatomical features of Halophytes

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
6	1	Contd.	Cambium - structure and functions	Test
	2	Contd. And Test	Periderm	Population ecology: Basic concept & characteristics
	3	Viruses: General account of Viruses	Secondary growth in dicot stem	Biotic potential, Growth curves; Ecotypes and Ecads
7	1	Structure of TMV and Bacteriophages	characteristics of growth rings; sap wood and heart wood	Community ecology: Concepts; characteristics (qualitative)
	2	Fungi: General characters, classification (upto classes)	Anomalous secondary growth (Dracaena)	Community ecology: Concepts; characteristics (Quantitative-analytical and synthetic)
	3	Contd.	Anomalous secondary growth (Boerhaavia and Achyranthes)	Methods of analysis
8	1	Economic importance of Fungi	Test and Revision	Test
	2	General account of Lichens	Secondary growth in dicot root	Ecological succession
	3	Contd.	Structural modifications in roots: Storage (Beta) .	Ecological succession

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
9	1	Important features and life-history of Phytophthora (Mastigomycotina)	Structural modifications in roots: Respiratory (Rhizophora)Epiphytic (Vanda).	Ecosystem: Structure (components)
	2	Life history of Mucor (Zygomycotina),	Test and revision	Ecosystem: and functions (trophic levels, food chains, food webs)
	3	Contd.	Leaf: Types of leaves (simple and compound);	Ecological pyramids and Energy flow
10	1	Life history of Penicillium (Ascomycotina)	Phyllotaxy and venation	Biogeochemical cycles: Carbon, Nitrogen,
	2	Contd.	Contd. And Revision	Biogeochemical cycles: Phosphorus and Hydrological cycle.
	3	Contd.	Stomatal apparatus and their morphological types	Revision and Group discussion
11	1	Life history of Puccinia	Epidermis- epidermal appendages and their morphological types.	Test
	2	Contd.	Contd.	Phyto-geographical regions of India;
	3	Contd.	Anatomy of typical Monocot Leaf	Vegetation types of India (forests).

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
12	1	Test	Anatomy of typical Dicot leaf	Sources, types and control of water pollution
	2	Life history of Agaricus (Basidiomycotina)	Revision	Sources, types and control of air pollution
	3	Contd.	Test	Greenhouse effect and greenhouse gases and impacts of global warming
13	1	Contd.	Leaf abscission	Test
	2	Contd. and discussion	Revision and test	Ozone layer depletion;
	3	Life history of Colletotrichum (Deuteromycotina)	Revision and test	Carbon trading
14	1	Contd.	Revision and test	Biomagnification
	2	Test	Revision and test	Revision and discussion
	3	Revision &Test	Revision and test	Revision and discussion

Week	Days	Class B.Sc.-I (Paper I)	Class B.Sc-II (Paper II)	Class B.Sc-III (Paper II)
15	1	Revision &Test	Revision and test	Revision and test
	2	Revision &Test	Revision and test	Revision and test
	3	Revision &Test	Revision and test	Revision and test

Dr. Kanta Rani
Department Of Botany

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 1

Day1
Elements of Heredity
Day 2
Variations
Day 3
The varieties of gene interactions part -1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 2

Day1
The varieties of gene interactions part-2
Day 2
The varieties of gene interactions part-3
Day 3
The varieties of gene interactions part-4
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 3

Day1
Problem solving and revision
Day 2
Linkage and recombination
Day 3
Coupling and repulsion hypothesis
Day 4
Coupling and repulsion hypothesis continuation
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 4

Day1
Crossing-over and chiasma formation
Day 2
Crossing-over and chiasma formation continuation
Day 3
Gene mapping
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 5

Day1
Sex determination and its mechanism
Day 2
Male and female heterozygous systems
Day 3
Genetic balance system
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 yr. ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 6

Day1
Role of Y -chromosome
Day 2
Male haploidy
Day 3
Cytoplasmic and environmental factors
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 7

Day1
Role of hormones in sex determination.
Day 2
Sex linked inheritance
Day 3
Haemophilia
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 8

Day1
Colour blindness in man
Day 2
Eye colour in Drosophila
Day 3
Non-disjunction of sex-chromosome in Drosophila;
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 9

Day1
Sex-linked and sex influenced inheritance
Day 2
Extra chromosomal and cytoplasmic inheritance
Day 3
Kappa particles in Paramecium.
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 10

Day1
Shell coiling in snails.
Day 2
Milk factor in mice
Day 3
Multiple allelism
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 11

Day1
Eye colour in Drosophila; A, B, 0 blood group in man.
Day 2
Eye colour in Drosophila; A, B, 0 blood group in man continuation
Day 3
Human genetics: Human karyotype
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 12

Day1
Chromosomal abnormalities involving autosomes
Day 2
Sex chromosomes, monozygotic and dizygotic twins.
Day 3
Inborn errors of metabolism - Alcaptonuria,
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 13

Day1
Phenylketonuria and Albinism,
Day 2
Sickle-cell anaemia
Day 3
Nature and function of genetic material
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 14

Day1
Structure and type of nucleic acids
Day 2
Protein synthesis
Day 3
Spontaneous and induced (chemical and radiations) mutations
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 15

Day1
Gene mutations; chemical basis of mutations
Day 2
Transition and transversion
Day 3
Structural chromosomal aberrations (deletion, duplication, inversion and translocation)
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 16

Day1
Structural chromosomal aberrations (deletion, duplication, inversion and translocation) continuation
Day 2
Numerical aberrations (autopolyploidy, euploidy and polyploidy in animals)
Day 3
Applied genetics: Eugenics, euthenics and euphenics
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc-1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 17

Day1
Genetic counseling, pre-natal diagnostics,
Day 2
Genetic counseling, pre-natal diagnostics,
Day 3
DNA-finger printing and transgenic animals
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the Associate /Assistant Professor ...HEMLATA.....

Class and section B.Sc -1 ZOOLOGY..... semester...2ND Sem.

Subject lesson plan: 18 weeks GENETICS

Week 18

Day1
Problem solving and revision
Day 2
Problem solving and revision
Day 3
Problem solving and revision
Day 4
Day 5
Day 6

Specimen of Lesson Plan Format

Name of the Associate/Assistant Professor.....Dr.Manisha Agrawal.....

Class and Section...Bsc I (med.)... 2nd sem.....

Subject - GENETICS(BOT.2.2)

Week - I

Day 1
DNA, the genetic material – part 1
Day2
DNA , the genetic material – part 2
Day 3
DNA structure

Week - II

Day 1
DNA replication
Day2 , DNA protein interaction
Day 3
The Nucleosome model

Week-III

Day 1
Genetic Code
Day2
Satellite DNA
Day 3
Repetitive DNA

Week- IV

Day 1
Mendelism
Day2
Law of segregation
Day 3
Law of independent assortment

Week - V

Day 1
Linkage Analysis
Day2
Allelic interactions
Day 3
Non Allelic interactions

Week- V I

Day 1
Presence and function of mitochondrial DNA
Day2
Presence and function of Plastid DNA
Day 3
Plasmids

Week- VII

Day 1

Mutations

Day2

Spontaneous mutations

Day 3

Induced mutations

Week- VIII

Day 1

Transposable genetic elements

Day2

DNA Damage

Day 3

DNA Repair

Week- IX

Day 1
Modern concept of gene
Day2
RNA
Day 3
Ribosomes

Week- X

Day 1
Transfer of genetic informations
Day2
Transcription - 1
Day 3
Transcription - 2

Week- XI

Day 1
Translation - 1
Day
Translation - 2
Day 3
Structure of proteins - 1

Week- XII

Day 1
Structure of proteins - 2
Day2
Regulation of gene expression
Day 3
Regulation of gene expression in prokaryotes

Week-XIII

Day 1
Regulation of gene expression in eukaryotes
Day2
oral test of unit 1
Day 3
oral test of unit 2

Week- XIV

Day 1
Presentation of students on unit 1
Presentation of students on unit 2
Day 3
Written test of half syllabus

Week – XIV

Day 1

Oral test of unit - 3

Day2

Oral test of unit - 4

Day 3

Presentation of students on unit – 3

Week – xv**Day - 1**

Presentations of students on unit – 4

Day – 2

Written test of another half syllabus

Day - 3

Written test of whole syllabus

Specimen of Lesson Plan Format

Name of the Associate/Assistant Professor.....Dr.Manisha Agrawal.....

Class and Section...Bsc I (med.).....

Subject - Cell Biology(BOT.1.2)

Week - I

Day 1
Introduction to syllabus
Day2
Structure and function of cell wall
Day 3
Structure of plasma membrane

Week - II

Day 1
Function of plasma membrane
Day2
Day 3
Structure and function of golgi apparatus and peroxisomes
Structure and function of lysosomes and vacuoles

Week-III

Day 1
Structure and function of endoplasmic reticulum
Day2
Revision of entire unit
Day 3
Written test of unit 1

Week- IV

Day 1
Structure and function of chloroplast
Day2
Structure and function of mitochondria
Day 3
Structure and function of nucleus and nucleolus

Week - V

Day 1
Morphology and Structure of chromosome
Day2
Brief study of ultra structure of chromosome and study of kinetochore, centromere and telomere
Day 3
Revision of entire unit

Week- V I

Day 1
Written test of entire unit
Day2
General account of cell cycle
Day 3
Mitosis different stages study

Week- VII

Day 1
Meiosis -1 different stages study
Day2
Meiosis -2 different stages study
Day 3
Difference between mitosis and meiosis and significance

Week- VIII

Day 1
Revision of entire unit
Day2
Written test of entire unit
Day 3
Oral test of unit 1

Week- IX

Day 1
Structural changes in chromosomes as deletion, duplication
Day2
Structural changes in chromosomes as translocation, inversions etc
Day 3
Numerical changes in chromosomes

Week- X

Day 1
Aneuploidy study
Day2
Polyploidy study
Day 3
Sex chromosomes study

Week- XI

Day 1
Structure of sex chromosomes
Day
Sex determination in plants
Day 3
Revision of entire unit

Week- XII

Day 1
Written test of entire unit
Day2
Oral test of unit 2
Day 3
Oral test of unit 3

Week-XIII

Day 1
Oral test of unit 4
Day2
Written test of unit 3 and 4
Day 3
Written test of unit 1 and 2

Week- XIV

Day 1
Presentation of students on unit 3and 4
Presentation of students on unit 1 and 2
Day 3
Written test of half syllabus

Week – XIV

Day 1

Written test of another half syllabus

Day2

Oral test of whole syllabus

Day 3

Written test of whole syllabus

Specimen of Lesson Plan Format

Name of the Associate/Assistant Professor.....Dr.Manisha Agrawal.....

Class and Section...Bsc II (med.)..., 4th sem.....

Subject - Biology and Diversity of Seed Plants - 2 (BOT.4.1)

Week - I

Day 1
Taxonomy and Systematics
Day2
Fundamental components of taxonomy
Day 3
Role of chemotaxonomy

Week - II

Day 1
Role of cytotaxonomy
Day 2
Role of Numerical taxonomy
Day 3
Botanical Nomenclature

Week-III

Day 1
Principal of priority
Day2
Keys to identification of plants
Day 3
Oral test of whole syllabus of unit -1

Week- IV

Day 1
Type concept
Day2
Taxonomic ranks
Day 3
Bentham and Hooker Classification

Week - V

Day 1
Engler and Prantl Classification
Day2
Floral terms
Day 3
Types of inflorescence

Week- V I

Day 1
Revision of entire second unit
Day2
Written test of unit - 1
Day 3
Written test of unit - 2

Week- VII

Day 1
Ranunculaceae family
Day2
Brassicaceae family
Day 3
Malvaceae family

Week- VIII

Day 1
Euphorbiaceae family
Day2
Rutaceae family
Day 3
Fabaceae family

Week- IX

Day 1
Cucurbitaceae family
Day2
Oral test of first half of unit - 3
Day 3
Oral test of second half of unit - 3

Week- X

Day 1
Written test of entire unit - 3
Day2
Apiaceae family
Day 3
Asclepiadaceae family

Week- XI

Day 1
Lamiaceae family
Day
Solanaceae family
Day 3
Asteraceae family

Week- XII

Day 1
Liliaceae family
Day2
Poaceae family
Day 3
Oral test of first half of unit - 4

Week-XIII

Day 1
Oral test of another half of unit- 4
Day2
Oral test of whole unit- 4
Day 3
Written test of whole unit- 4

Week- XIV

Day 1
Presentation on first unit by students
Presentation on second unit by students
Day 3
Quiz conduction on unit 1 and unit 2

Week – XV

Day 1

Presentation on unit -3

Day2

Presentation on unit -4

Day 3

Quiz on unit 3 and unit 4

Specimen of Lesson Plan Format

Name of the Associate/Assistant Professor.....Dr.Manisha Agrawal.....

Class and Section...B.Sc 3rd year (med.)... 6th sem.....

Subject – Biochemistry and Plant Biotechnology (BOT 6.1)

Week - I

Day 1
Discovery and Nomenclature of enzymes
Day2
Characteristics of Enzymes
Day 3
Concept of holoenzyme

Week - II

Day 1
Apoenzyme
Day2
Coenzyme and Co-factors
Day 3
Regulation of enzyme activity

Week-III

Day 1
Mechanism of enzyme action
Day2
Oral test of unit -1
Day 3
Written test of unit - 1

Week- IV

Day 1
ATP The biological energy currency
Day2
Aerobic respiration
Day 3
Anaerobic respiration

Week - V

Day 1
Krebs cycle
Day2
Electron Transport System
Day 3
Redox potential

Week- V I

Day 1
Oxidative phosphorylation
Day2
Pentose phosphate pathway
Day 3
Oral test of whole unit - 2

Week- VII

Day 1
Written test of unit - 2
Day2
Lipid metabolism
Day 3
Structure and function of lipids

Week- VIII

Day 1
Fatty acid biosynthesis
Day2
Betaoxidation
Day 3
Saturated and unsaturated fatty acids

Week- IX

Day 1
Storage and mobilization of fatty acids
Day2
Nitrogen metabolism
Day 3
Oral test of first half of unit -3

Week- X

Day 1
Oral test of another half of unit -3
Day2
Written test of first half of unit -3
Day 3
Written test of another half of unit -3

Week- XI

Day 1
Tools and techniques of recombinant DNA technology
Day
Cloning vectors
Day 3
Genomic and c DNA library

Week- XII

Day 1
Transposable elements
Day2
Aspects of plant tissue culture
Day 3
Cellular totipotency

Week-XIII

Day 1
Differentiation and morphogenesis
Day2
Biology of Agrobacterium
Day 3
Vectors for gene delivery and marker genes

Week- XIV

Day 1
Oral test of first half of unit 4
Oral test of second half of unit 4
Day 3
Written test of unit -4

Week – XV

Day 1

Written test of unit 1 and unit 2

Day2

Written test of unit 3 and unit 4

Day 3

Written test of whole syllabus

Specimen of Lesson Plan Format

Name of the Associate/Assistant Professor.....Dr.Manisha Agrawal.....

Class and Section...B.Sc 3rd year (med.).....

Subject – Plant Physiology (BOT 5.1)

Week - I

Day 1
Introduction to syllabus
Day2
Plant water relations,physical properties of water
Day 3
Importance of water to plant life ,imbibition process

Week - II

Day 1
Diffusion and osmosis
Day2
Absorption and transport of water
Day 3
Structure of stomata, types of stomata

Week-III

Day 1
Transpiration process
Day2
Macro and micro nutrients
Day 3
Mineral uptake and deficiency symptoms of micro and macro nutrients

Week- IV

Day 1
Revision of entire unit
Day2
Written test of first half of unit 1
Day 3
Written test of another half of unit 1

Week - V

Day 1
Phloem structure and transport of food(source and sink relationship)
Day2
Factors affecting translocation
Day 3
Photosynthesis pigments

Week- V I

Day 1
Action spectra and enhancement effect
Day2
Study of PS I and PS II
Day 3
Light reaction

Week- VII

Day 1
Calvin cycle
Day2
C4 cycle
Day 3
CAM cycle

Week- VIII

Day 1
Photorespiration
Day2
Revision of entire unit
Day 3
Written test of translocation

Week- IX

Day 1
Written test of photosynthesis
Day2
Phases of growth and development
Day 3
Seed dormancy

Week- X

Day 1
Plant movements
Day2
Photoperiodism
Day 3
Physiology of flowering(florigen concept)

Week- XI

Day 1
Physiology of senescence
Day
Fruit ripening
Day 3
Revision of entire unit

Week- XII

Day 1
Written test of half portion of unit 3
Day2
Written test of another half portion of unit 3
Day 3
Auxin hormone and functions

Week-XIII

Day 1
Gibberellin hormone and functions
Day2
Cytokinin hormone and functions
Day 3
Abscissic acid and ethylene hormone and functions

Week- XIV

Day 1
photomorphogenesis
Phytochromes ,their role and mechanism of action
Day 3
Written test of first half of unit 4

Week – XIV

Day 1

Written test of another half portion of unit 4

Day2

Oral test of whole syllabus

Day 3

Written test of whole syllabus

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks BIODIVERSITY CONSERVATION

Week 1

Day1
Biodiversity: concept and national & global status
Day 2
Biodiversity: concept and national & global status continuation
Day 3
Extinction
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 2

Day1
Hotspots and hottest hotspots
Day 2
Study of Indian biodiversity hot spot
Day 3
Study of Indian biodiversity hot spot continuation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 03

Day1
Local plant diversity and its socio-economic importance
Day 2
Causes of biodiversity depletion
Day 3
Causes of biodiversity depletion continuation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 4

Day1
Principles of conservation,
Day 2
Biodiversity Conservation strategies
Day 3
Protected areas in India - Wildlife sanctuaries
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 5

Day1
National parks; Biosphere reserves
Day 2
Wetlands and Ramsar convention
Day 3
Role of botanical gardens
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 6

Day1
<i>in- vitro</i> repositories and cryobanks in biodiversity conservation.
Day 2
Plant explorations
Day 3
National Bureau of Plant Genetic Resources (NBPGR)
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 7

Day1
Indian initiatives in biodiversity conservation,
Day 2
National Biodiversity Authority (NBA)
Day 3
Importance of Ethnobotany in Indian context
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 8

Day1
Farmers' Rights.
Day 2
Phytogeography and forest types of India
Day 3
Ecological and economic importance of forests
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 9

Day1
Afforestation and deforestation
Day 2
Social forestry
Day 3
Endangered plants
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 10

Day1
Endemism and invasive species
Day 2
Desertification and wasteland reclamation
Day 3
Energy plantations
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 11

Day1
Effects of global warming
Day 2
Climatic change and.
Day 3
Stratospheric ozone depletion on plant diversity
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 12

Day1
Speciation
Day 2
Speciation continuation
Day 3
Endemism
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 13

Day1
Endemism continuation
Day 2
Levels of biodiversity
Day 3
Levels of biodiversity continuation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 14

Day1
Significance of biodiversity
Day 2
Significance of biodiversity continuation
Day 3
ICUN categories of threat; Red Data Books
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 15

Day1
ICUN categories of threat; Red Data Books continuation
Day 2
Invasions
Day 3
Invasions and introductions of invasive species
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week16

Day1
Major approaches to management of Biodiversity
Day 2
Major approaches to management of Biodiversity continuation
Day 3
Convention of Biological Diversity (CBD)
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week17

Day1
Convention of Biological Diversity (CBD) continuation
Day 2
Revision test
Day 3
Seed banks
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorHEMLATA.....

Class and sectionM.Sc 4th semester BOTANY

Subject lesson plan: 18 weeks, BIODIVERSITY CONSERVATION

Week 18

Day1
Intellectual Property Rights.
Day 2
Problem solving and revision
Day 3
Problems solving and revision
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 1

Day1
Unique features of plant development
Day 2
Difference between animal and plant development
Day 3
Organization of shoot apical meristem (SAM) part 1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 2

Day1
Organization of shoot apical meristem (SAM) part 2
Day 2
Cytological analysis of SAM
Day 3
Molecular analysis of SAM
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 3

Day1
Cell to cell communication part 1
Day 2
Cell to cell communication part 2
Day 3
Secretory ducts and laticifers
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 4

Day1
Revision test
Day 2
Organization of root apical meristem (RAM) part 1
Day 3
Organization of root apical meristem (RAM) part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 5

Day1
Cell fate and lineages
Day 2
Lateral roots
Day 3
Root hair development
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 6

Day1
Root – microbe interactions part 1
Day 2
Root – microbe interactions part 2
Day 3
Revision test
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 7

Day1
Leaf growth and differentiation
Day 2
Determination of leaf growth
Day 3
Phyllotaxy part 1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 8

Day1
Phyllotaxy part 2
Day 2
Differentiation of epidermis with special reference to trichomes
Day 3
Differentiation of mesophyll
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 9

Day1
Vegetative options in flower development
Day 2
Sexual reproduction in flowers
Day 3
Genetics of floral organ differentiation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 10

Day1
ABC model part 1
Day 2
ABC model part 2
Day 3
Mechanism of class B gene activity part 1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 11

Day1
Mechanism of class B gene activity part 2
Day 2
Homeotic mutants of mutants in <i>Arabidopsis</i> part 1
Day 3
Homeotic mutants of mutants in <i>Arabidopsis</i> part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 12

Day1
Revision test
Day 2
Seed development part 1
Day 3
Seed development part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 13

Day1
Physiological aspects of seed development
Day 2
Biochemical aspects of seed development
Day 3
Seed germination
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 14

Day1
Seedling growth
Day 2
Mobilization of food reserves part 1
Day 3
Mobilization of food reserves part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 15

Day1
Tropisms part 1
Day 2
Tropisms part 2
Day 3
Hormonal control of seedling growth part 1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 16

Day1
Hormonal control of seedling growth part 2
Day 2
Use of mutants in understanding seedling development part 1
Day 3
Use of mutants in understanding seedling development part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 17

Day1
Revision test
Day 2
Revision
Day 3
Revision
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks – Plant Development

Week 18

Day1
Revision
Day 2
Revision
Day 3
Revision
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal.....

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 1

Day1
Structure of atom, molecules
Day 2
Forces stabilizing macromolecules 1
Day 3
Forces stabilizing macromolecules 2
Day 4
Weak and covalent bonds
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 2

Day1
Buffers
Day 2
pKa values
Day 3
Fundamentals of enzymology general aspect of enzymes
Day 4
Nature of enzyme catalysis
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 3

Day1
Enzyme kinetics
Day 2
Enzyme regulation and inhibition part 1
Day 3
Enzyme regulation and inhibition part 2
Day 4
Isozymes , vitamins and cofactors of enzymes
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 2nd sem

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 4

Day1
Bioenergetics, principles of thermodynamics.
Day 2
Free energy chemical and redox
Day 3
Chemical and redox , potential
Day 4
Structure and function of ATP
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 2nd semester Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 05

Day1
Photobiology and photosynthesis general concept
Day 2
Nature of light
Day 3
Photoreceptors and photosynthetic pigments
Day 4
Light harvesting complexes
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay Pal

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 06

Day1
Photosystem I and photosystem II
Day 2
Photooxidation of water
Day 3
Photophosphorylation and photoinhibition part 1
Day 4
Photophosphorylation and photoinhibition
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal.....

Class and sectionM.Sc 2nd semester Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 07

Day1
Rubisco- structure and function
Day 2
Carbon dioxide assimilation in C3 plants
Day 3
Carbon dioxide assimilation in C4 plants
Day 4
CAM Pathway
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 08

Day1
Difference between C3,C4,and CAM
Day 2
Biosynthesis of Starch and sucrose,
Day 3
Bacterial photosynthesis part 1
Day 4
Bacterial photosynthesis part 2
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 2nd Botany.....

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 09

Day1
Carbohydrates structure and classification
Day 2
Metabolism of carbohydrates general concept
Day 3
Glycolysis
Day 4
Pentose phosphate pathway
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 2nd semester

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 10

Day1
Gluconeogenesis
Day 2
Kreb cycle
Day 3
Glycoxylate cycle (C2)
Day 4
Electron transport system
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week 11

Day1
Oxidative phosphorylation and alternative oxidase part 1
Day 2
Oxidative phosphorylation and alternative oxidase part 2
Day 3
Photorespiration
Day 4
Photorespiration vs dark reaction
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 2nd sem Botany

Subject lesson plan: 18 weeks - Plant Biochemistry and Metabolism

Week12

Day1
Lipid structure, composition, function and classification
Day 2
Biosynthesis and oxidation of structure and storage lipids part1
Day 3
Biosynthesis and oxidation of structure and storage lipids part2
Day 4
Protein composition, structure and classification part 1
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 2nd semester Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 13

Day1
Protein composition, structure and classification part 2
Day 2
Conformation of protein Ramachandran plot
Day 3
Secondary, Tertiary and Quaternary structure, domains, motifs and fold of proteins part1
Day 4
Secondary, Tertiary and Quaternary structure, domains, motifs and fold of proteins part2
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 2nd sem Botany.....

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 14

Day1
Amino acid biosynthesis and catabolism part 1
Day 2
Amino acid biosynthesis and catabolism part 2
Day 3
Proteomics, protein protein interaction and its application part 1
Day 4
Proteomics, protein protein interaction and its application part 2
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal.....

Class and section ...M.Sc 2nd sem Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 15

Day1
Nitrogen fixation introduction and type
Day 2
Nodule formation and nod factors
Day 3
Mechanism of nitrate uptake and reduction
Day 4
Ammonium assimilation
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal.....

Class and section ...M.Sc 2nd sem Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 16

Day1
Sulfate uptake and transport 1
Day 2
Sulfate uptake and transport 2
Day 3
Sulfate assimilation 1
Day 4
Sulfate assimilation 2
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 2nd sem Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 17

Day1
Revision and problem solving
Day 2
Revision and problem solving
Day 3
Revision and problem solving
Day 4
Revision and problem solving
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and section ...M. Sc 2nd sem Botany

Subject lesson plan: 18 weeks Plant Biochemistry and Metabolism

Week 18

Day1
Revision and problem solving
Day 2
Revision and problem solving
Day 3
Revision and problem solving
Day 4
Revision and problem solving
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal.....

Class and sectionM.Sc 4th semester Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 1

Day1
Structure of chromosome
Day 2
Chromosome packing part1
Day 3
Chromosome packing part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc...4th sem.....Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 2

Day1
Molecular organization of centromere
Day 2
Molecular organization of telomere
Day 3
Euchromatin and heterochromatin region of chromosome
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal.....

Class and sectionM.Sc 4th sem ...Botany

Subject lesson plan: 18 weeks Plant Genetics

Week03

Day1
Karyotype and ideogram
Day 2
Karyotype evolution
Day 3
Banding patterns of chromosome
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 4th sem.....Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 4

Day1
Special type of chromosome polytene and lambrush
Day 2
B chromosome
Day 3
Sex chromosome
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM. Sc 4th semBotany

Subject lesson plan: 18 weeks Plant Genetics

Week 5

Day1
Structural and numerical alternations
Day 2
Mutation part 1
Day 3
Mutation part2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M. Sc 4th sem ...Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 6

Day1
Mutagens and their molecular mechanism of occurrence
Day 2
Site directed mutagenesis part 1
Day 3
Site directed mutagenesis part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay Pal

Class and sectionM.Sc 4th sem ...Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 7

Day1
DNA repair mechanism part 1
Day 2
DNA repair mechanism part 2
Day 3
DNA repair mechanism part 3
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay Pal

Class and sectionM.Sc 4th semester ...Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 8

Day1
Transposable elements
Day 2
DNA methylation
Day 3
Meiosis breeding behavior, origin
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and section ...M.Sc semesterBotany

Subject lesson plan: 18 weeks Plant Genetics

Week 9

Day1
Chromosomal deficiency
Day 2
Chromosomal duplication
Day 3
Chromosomal inversion
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 4th semesterBotany.....

Subject lesson plan: 18 weeks Plant Genetics

Week 10

Day1
Chromosomal translocation
Day 2
Robertsonian translocation
Day 3
B- A translocation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 4th semBotany

Subject lesson plan: 18 weeks Plant Genetics

Week 11

Day1
Genome mapping in Bacteriophages
Day 2
Genetic recombination
Day 3
Genetics of transformation
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay Pal

Class and sectionM.Sc 4th semester

Subject lesson plan: 18 weeks Plant Genetics

Week 12

Day1
Genetics of conjugation
Day 2
Genetics of transduction
Day 3
Structure of gene, cis and trans test
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 4th Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 13

Day1
Heterochromatization
Day 2
Dosage compensation and mechanism of sex determination part1
Day 3
Dosage compensation and mechanism of sex determination part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay Pal

Class and section ...M.Sc 4th Botany

Subject lesson plan: 18 weeks plant Genetics

Week 14

Day1
Genetics of recombination and mapping in eukaryotes
Day 2
Genetic recombination in eukaryotes part 2
Day 3
Law of independent assortment and crossing over part 1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and section ...M.Sc 4th sem Botany.....

Subject lesson plan: 18 weeks Plant Genetics

Week 15

Day1
Law of independent assortment and crossing over part 2
Day 2
Role of recA and rec BCD enzyme
Day 3
Site specific recombination
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and sectionM.Sc 4th sem Botany

Subject lesson plan: 18 weeks Plant Genetics

Week16

Day1
Linkage group
Day 2
Physical mapping
Day 3
Construction of molecular map part1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant Professor ...Vijay pal

Class and sectionM.Sc 4th sem Botany

Subject lesson plan: 18 weeks Plant Genetics

Week17

Day1
Construction of molecular map part 2
Day 2
Correlation of genetic and physical maps
Day 3
Somatic cell genetics an alternative approach to gene mapping part1
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorVijay pal

Class and section ...M.Sc 4th sem Botany

Subject lesson plan: 18 weeks Plant Genetics

Week 18

Day1
Somatic cell genetics an alternative approach to gene mapping part 2
Day 2
Problem solving and revision
Day 3
Problems solving and revision
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 1

Day1
Origin and evolution of angiosperms
Day 2
general principles of angiosperm phylogeny
Day 3
Evolutionary trends in angiosperms
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan

Class and sectionM.Sc.....2nd Semester.....Botany

Subject lesson plan: 18 weeks – Taxonomy of Angiosperms

Week 2

Day1
Ecads and ecotypes
Day 2
Speciation
Day 3
Various species concept
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 3

Day1
Adaptive radiation
Day 2
Adaptive modifications part 1
Day 3
Adaptive modifications part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 4

Day1
Concepts of taxonomic characters and character weighting
Day 2
Taxonomic hierarchy and different taxonomic categories
Day 3
Revision test
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 5

Day1
Principles of taxonomy
Day 2
Characters considered before plant identification
Day 3
Identification keys
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 6

Day1
Computer aided identification
Day 2
Floral formula part 1
Day 3
Floral formula part 2
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 7

Day1
Floral diagram part 1
Day 2
Floral diagram part 2
Day 3
Salient features of ICBN
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 8

Day1
Rules of nomenclature
Day 2
Phylocode as a new system of nomenclature
Day 3
Revision test
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 9

Day1
Systems of angiosperms classification
Day 2
Phonetic versus phylogenetic systems
Day 3
Cladistics in taxonomy
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 10

Day1
Merits of major systems of classification
Day 2
Demerits of major systems of classification
Day 3
Taxonomic evidences- morphological
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 11

Day1
Taxonomic evidences- anatomical
Day 2
Taxonomic evidences- palynological
Day 3
Taxonomic evidences- embryological
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 12

Day1
Taxonomic evidences- cytological
Day 2
Modern trends in plants taxonomy
Day 3
Numerical taxonomy
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 13

Day1
Chemotaxonomy
Day 2
Molecular taxonomy
Day 3
Revision test
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 14

Day1
Purpose of modern herbarium
Day 2
Techniques of herbarium preparation
Day 3
Description of flowering plants in different types of herbaria
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 15

Day1
Major Indian herbaria
Day 2
Major Indian botanical gardens
Day 3
Importance of herbarium in botanical researches
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 16

Day1
Importance of botanical gardens in botanical researches
Day 2
Relevance of taxonomy to conservation
Day 3
Sustainable utilization of bio-resources and ecosystem researches
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 17

Day1
Revision
Day 2
Revision
Day 3
Revision
Day 4
Day 5
Day 6

Specimen of lesson plan

Name of the associate /assistant ProfessorKanchan.....

Class and sectionM.Sc. 2nd Semester Botany

Subject lesson plan: 18 weeks - Taxonomy of Angiosperms

Week 18

Day1
Revision
Day 2
Revision
Day 3
Revision
Day 4
Day 5
Day 6

Lesson Plan Summary : 01 April – 30 June 2021

Name of Assistant Professor: Dr. Raman Saini

Class & Section: B.Sc II sem Section A & B

Subject Lesson Plan: Organic Chemistry

Week 1	Chapter1: ALKENES
Day 1	Alkenes: Introduction, Nomenclature & physical properties
Day 2	Preparation methods of Alkenes
Week 2	Chapter1: ALKENES
Day 1	Chemical Reactions- electrophilic and free radical addition
Day 2	Saytzeff rule & Markovnikov's rule
Week 3	Chapter2: ALKENES
Thursday , 18/01/18	Hydroboration-oxidation & oxymercuration-reduction,
Friday, 19/01/18	Ozolysis, hydroxylation & oxidation
Week 4	Chapter2: ALKENES
Day 1	Test I Alkenes
Day 2	Arenes: Nomenclature, aromaticity, Annulenes
Week 5	Chapter2: ARENES
Day 1	Huckle rule Aromatic behavior of various compounds
Day 2	Aromatic Electrophilic substitution reactions
Week 6	Chapter2: ARENES
Day 1	Energy profile diagram for ES Reactions,
Day 2	Directive influence and orientation
Week 7	Chapter 3 DIENES & ALKYNES
Day 1	Test 2 Arenes
Day 2	Dienes; Nomenclature Classification and structures
Week 8	Chapter3: DIENES & ALKYNES
Day 1	Reactions of dienes- Electrophilic mechanism Free Radicals reaction mechanism Diels-Alder reaction
Day 2	Alkynes: Nomenclature, structure and bonding, Preparation methods

Week 9	Chapter 3: DIENES & ALKYNES
Day 1	Acidity of alkynes
Day 2	Reactions of alkynes
Week 10	Chapter 4: ALKYL AND ARYL HALIDES
Day 1	Test 3 dienes and Alkynes
Day 2	Alkyl halides: Nomenclature, classification, Preparation methods
Week 11	Chapter 4: ALKYL AND ARYL HALIDES
Day 1	Mechanism, energy profile of S_N rxns
Day 2	stereochemistry of S_N Reactions
Week 12	Chapter 4: ALKYL AND ARYL HALIDES
Day 1	Aryl Halides: Nomenclature, structure
Day 2	Preparation methods
Week 13	Chapter 4: ALKYL AND ARYL HALIDES
Day 1	S_N Reactions of aromatic halides
Day 2	Reactivities of allyl, vinyl and aryl halides

Lesson Plan Summary: October-December, 2021

Name of Assistant Professor: Dr. Vanita Kumari Sapra

Class & Section: B.Sc I semester

Subject Lesson Plan: Physical Chemistry

Week 1	
Day 1	Orientation Activity
Day 2	Introduction of Syllabus, Paper Pattern and Recommended Books
Week 2	Chapter 1: Gaseous States
Day 1	Maxwell's distribution of velocities and energies
Day 2	Calculation of root mean square velocity, average velocity and most probable velocity
Week 3	Chapter 1: Gaseous States
Day 1	Collision diameter, collision number, collision frequency and mean free path.
Day 2	Deviation of Real gases from ideal behaviour.
Week 4	Chapter 1: Gaseous States
Day 1	Derivation of Vander Waal's Equation of State, Explanation of behaviour of real gases using Vander Waal's equation
Day 2	Application of Vander Waal's Equation in the calculation of Boyle's temperature (compression factor)
Week 5	Chapter 2: Critical Phenomenon
Day 1	Critical temperature, Critical Pressure, Critical Volume and their determination. PV isotherms of real gases, Continuity of states
Day 2	relationship between critical constants and Vander Waal's constants. Critical compressibility factor. The Law of corresponding states.
Week 6	Chapter 2: Critical Phenomenon
Day 1	Liquefaction of gases.
Day 2	Assignment and doubt Class
Week 7	Chapter 3: Liquid States
Day 1	Class Test 1
Day 2	Structure of liquids. Introduction to Properties of liquids
Week 8	Chapter 3: Liquid States
Day 1	Surface Tension and their determination.
Day 2	Surface Tension and their determination.

Week 9	Chapter 3: Liquid States
Day 1	Viscosity and their determination.
Day 2	Viscosity and their determination.
Week 10	Chapter 3: Liquid States
Day 1	Vapour Pressure and their determination.
Day 2	Optical Rotations and their determination.
Week 11	Chapter 3: Liquid States
Day 1	Optical Rotations and their determination.
Day 2	Doubt Class
Week 12	Chapter 4: Solid State
Day 1	Classification of solids
Day 2	Laws of crystallography – (i) Law of constancy of interfacial angles (ii) Law of rationality of indices (iii) Law of symmetry.
Week 13	Chapter 4: Solid State
Day 1	Symmetry elements of crystals.
Day 2	Definition of unit cell & space lattice. Bravais lattices, crystal system.
Week 14	Chapter 4: Solid State
Day 1	X ray diffraction by crystals. Derivation of Bragg equation.
Day 2	Determination of crystal structure of NaCl, KCl.
Week15	Chapter 4: Alkanes and Cycloalkanes
Day 1	Liquid crystals: Difference between solids, liquids and liquid crystals
Day 2	Types of liquid crystals. Applications of liquid crystals.

Teacher Signature

Lesson Plan Summary : October-December, 2021

Name of Associate Professor: Dr. Anju

Class & Section : B.Sc 3rd sem

Subject Lesson Plan: Inorganic Chemistry

Week 1	Chapter 1: Chemistry of Elements of 1st transition series
Day 1	Introduction to syllabus
Day 2	Definition of transition elements, Position in the periodic table
Week 2	Chapter 1: Chemistry of Elements of 1st transition series
Day 1	General characteristics & Properties of 1st Transition Elements Continues
Day 2	General characteristics & Properties of 1st Transition Elements Continues
Week 3	Chapter 1: Chemistry of Elements of 1st transition series
Day 1	General characteristics & Properties of 1st Transition Elements
Day 2	Structures & Properties of Compounds of Transition Elements – TiO_2 , VOCl_2 , FeCl_3
Week 4	Chapter 1: Chemistry of Elements of 1st transition series
Day 1	Structures & Properties of some Compounds of Transition Elements – CuCl_2 and $\text{Ni}(\text{CO})_4$
Day 2	Doubt Class
Week 5	Chapter 2: Chemistry of Elements of 2nd & 3rd transition series
Day 1	General Characteristics and Properties of the 2nd and 3rd Transition Elements Continues
Day 2	General Characteristics and Properties of the 2nd and 3rd Transition Elements
Week 6	Chapter 2: Chemistry of Elements of 2nd & 3rd transition series
Day 1	Comparison of Properties of 3d Elements with 4d & 5d Elements with reference to ionic radii, oxidation state
Day 2	Comparison of Properties of 3d Elements with 4d & 5d Elements with reference to magnetic and Spectral properties and stereochemistry
Week 7	Chapter 2: Chemistry of Elements of 2nd & 3rd transition series
Day 1	Doubt Class
Day 2	Class Test I
Week 8	Chapter 3: Coordination Compounds
Day 1	Werner's Coordination Theory, Effective Atomic Number Concept
Day 2	Chelates and Chelating Effect

Week 9	Chapter 3: Coordination Compounds
Day 1	Nomenclature of Coordination Compounds,
Day 2	Isomerism in Coordination Compounds
Week 10	Chapter 3: Coordination Compounds
Day 1	Valence Bond Theory of Transition metal complexes continues
Day 2	Valence Bond Theory of Transition metal complexes
Week 11	Chapter 4: Non-aqueous Solvents
Day 1	Physical Properties of a Solvent
Day 2	Types of Solvents
Week 12	Chapter 4: Non-aqueous Solvents
Day 1	General Characteristics of Solvents
Day 2	Reactions in Non-Aqueous Solvents with reference to liquid NH_3 Continues
Week 13	Chapter 4: Non-aqueous Solvents
Day 1	Reactions in Non-Aqueous Solvents with reference to liquid NH_3
Day 2	Reactions in Non-Aqueous Solvents with reference to liquid SO_2 Continues
Week 14	Chapter 4: Non-aqueous Solvents
Day 1	Reactions in Non-Aqueous Solvents with reference to liquid NH_3 and liquid SO_2
Day 2	Doubt Class
Week15	Chapter 4: Non-aqueous Solvents
Day 1	Class Test II
Day 2	Revision

Teacher Signature

Lesson Plan Summary : November-March 2021

Name of Associate Professor: Dr. Anju

Class & Section: B.Sc 4th sem

Subject Lesson Plan: Inorganic Chemistry

Week 1	Chapter 1: Chemistry of f – block elements Lanthanides
Day 1	Introduction to Lanthanides
Day 2	Electronic structure, oxidation states and ionic radii
Week 2	Chapter 1: Chemistry of f – block elements Lanthanides
Day 1	lanthanide contraction
Day 2	complex formation
Week 3	Chapter 1: Chemistry of f – block elements Lanthanides
Day 1	<i>occurrence and isolation, lanthanide compounds.</i>
Day 2	<i>occurrence and isolation, lanthanide compounds.</i>
Week 4	Chapter 1: Chemistry of f – block elements Lanthanides
Day 1	Discussion Class
Day 2	Test
Week 5	Chapter 2: Chemistry of f – block elements Actinides
Day 1	General features and chemistry of actinides
Day 2	General features and chemistry of actinides
Week 6	Chapter 2: Chemistry of f – block elements Actinides
Day 1	<i>chemistry of separation of Np, Pu and Am from U</i>
Day 2	<i>chemistry of separation of Np, Pu and Am from U</i>
Week 7	Chapter 2 Chemistry of f – block elements Actinides
Day 1	Comparison of properties of Lanthanides and Actinides and with transition elements
Day 2	Comparison of properties of Lanthanides and Actinides and with transition elements
Week 8	Chapter 3: Theory of Qualitative and Quantitative Inorganic Analysis-I
Day 1	Chemistry of analysis of various acidic radicals
Day 2	Chemistry of analysis of various acidic radicals

Week 9	Chapter 3: Theory of Qualitative and Quantitative Inorganic Analysis-I
Day 1	Chemistry of identification of acid radicals in typical combinations
Day 2	Chemistry of identification of acid radicals in typical combinations
Week 10	Chapter 3: Theory of Qualitative and Quantitative Inorganic Analysis-I
Day 1	Chemistry of interference of acid radicals including their removal in the analysis of basic radicals
Day 2	Chemistry of interference of acid radicals including their removal in the analysis of basic radicals
Week 11	Chapter 4: Theory of Qualitative and Quantitative Inorganic Analysis-II
Day 1	Chemistry of analysis of various groups of basic radicals
Day 2	Chemistry of analysis of various groups of basic radicals
Week 12	Chapter 4: Theory of Qualitative and Quantitative Inorganic Analysis-II
Day 1	Theory of precipitation, co- precipitation
Day 2	Post- precipitation, purification of precipitates.
Week 13	Chapter 4: Theory of Qualitative and Quantitative Inorganic Analysis-II
Day 1	Discussion Class
Day 2	Discussion Class

Teacher Signature

Lesson Plan Summary : 1 April - June, 2021

Name of Assistant Professor: Dr. Ruchi Sharma

Class & Section : B.Sc 4th sem

Subject Lesson Plan: Organic Chemistry

Week 1	Chapter 1: Infrared (IR) absorption spectroscopy
Day 1	Molecular vibrations, Hooke's law, selection rules, intensity and position of IR bands
Day 2	measurement of IR spectrum
Week 2	Chapter 1: Infrared (IR) absorption spectroscopy
Day 1	fingerprint region, characteristic absorptions of various functional groups
Day 2	interpretation of IR spectra of simple organic compounds.
Week 3	Chapter 1: Infrared (IR) absorption spectroscopy
Day 1	interpretation of IR spectra of simple organic compounds.
Day 2	Applications of IR spectroscopy in structural elucidation of simple organic compounds.
Week 4	Chapter 2: Amines
Day 1	Structure and nomenclature of amines, physical properties.
Day 2	Separation of a mixture of primary, secondary and tertiary amines. Structural features affecting basicity of amines.
Week 5	Chapter 2: Amines
Day 1	Preparation of alkyl and aryl amines (reduction of nitro compounds, nitriles, reductive amination of aldehydic and ketonic compounds)
Day 2	Gabriel phthalimide reaction, Hofmann bromamide reaction
Week 6	Chapter 2: Amines
Day 1	electrophilic aromatic substitution in aryl amines
Day 2	reactions of amines with nitrous acid.
Week 7	Chapter 3: Diazonium Salts
Day 1	Mechanism of diazotisation, structure of benzene diazonium chloride
Day 2	Replacement of diazo group by H, OH, F, Cl, Br, I, NO ₂ and CN groups
Week 8	Chapter 3: Diazonium Salts
Day 1	reduction of diazonium salts to hydrazines
Day 2	coupling reaction and its synthetic application

Week 9 Chapter 4: Nitro Compounds	
Day 1	Preparation of nitro alkanes and nitro arenes and their chemical reactions
Day 2	Mechanism of electrophilic substitution reactions in nitro arenes and their reductions in acidic, neutral and alkaline medium.
Week 10 Chapter 5: Aldehydes and Ketones	
Day 1	Nomenclature and structure of the carbonyl group. Synthesis of aldehydes and ketones with particular reference to the synthesis of aldehydes from acid chlorides, advantage of oxidation of alcohols with chromium trioxide (Sarett reagent) pyridinium chlorochromate (PCC) and pyridinium dichromate
Day 2	<i>Physical properties. Comparison of reactivities of aldehydes and ketones.</i>
Week 11 Chapter 5: Aldehydes and Ketones	
Day 1	benzoin, aldol, Perkin and Knoevenagel condensations.
Day 2	Condensation with ammonia and its derivatives.
Week 12 Chapter 5: Aldehydes and Ketones	
Day 1	Wittig reaction. Mannich reaction. Oxidation of aldehydes, Baeyer–Villiger oxidation of ketones
Day 2	Cannizzaro reaction. MPV, Clemmensen, Wolff-Kishner, LiAlH_4 and NaBH_4 reductions.

Teacher Signature

Lesson Plan Summary: October- December, 2021

Name of Assistant Professor: Dr. Ruchi Sharma

Class & Section: B.Sc 5th sem

Subject Lesson Plan: Inorganic Chemistry

Week 1	Chapter 1: Metal-ligand Bonding in Transition Metal Complexes
Day 1	Orientation and Introduction to syllabus
Day 2	Limitations of valence bond theory
Week 2	Chapter 1: Metal-ligand Bonding in Transition Metal Complexes
Day 1	An elementary idea of Crystal-Field Theory
Day 2	Crystal Field splitting in octahedral Complexes
Week 3	Chapter 1: Metal-ligand Bonding in Transition Metal Complexes
Day 1	Crystal Field splitting in tetrahedral complexes
Day 2	Crystal Field splitting in square planar complexes
Week 4	Chapter 1: Metal-ligand Bonding in Transition Metal Complexes
Day 1	CFSE and Factors affecting it
Day 2	Factors affecting the Crystal-Field Parameters
Week 5	Chapter 1: Metal-ligand Bonding in Transition Metal Complexes
Day 1	An elementary idea of Ligand Field Theory
Day 2	Assignment & Doubt class
Week 6	Chapter 2: Thermodynamic and Kinetic Aspects of Metal Complexes
Day 1	A brief outline of thermodynamic stability of metal complexes
Day 2	Factors affecting the stability
Week 7	Chapter 2: Thermodynamic and Kinetic Aspects of Metal Complexes
Day 1	Substitution reactions of square planar complexes of Pt(II).continues
Day 2	Substitution reactions of square planar complexes of Pt(II).
Week 8	Chapter 2: Thermodynamic and Kinetic Aspects of Metal Complexes
Day 1	Assignment & Doubt class
Day 2	Class Test 1

Week 9	Chapter 3: Magnetic Properties of Transition Metal Complexes
Day 1	Types of magnetic behavior
Day 2	Methods of determining Magnetic Susceptibility
Week 10	Chapter 3: Magnetic Properties of Transition Metal Complexes
Day 1	Spin-only formula. L-S Coupling
Day 2	<i>correlation between moment and magnetic susceptibility values</i>
Week 11	Chapter 3: Magnetic Properties of Transition Metal Complexes
Day 1	Orbital contribution to magnetic moments
Day 2	Application of magnetic moment data for 3d metal complexes.
Week 12	Chapter 4 : Electron Spectra of Transition Metal Complexes
Day 1	Doubt Class
Day 2	Types of electronic transitions
Week 13	Chapter 4 : Electron Spectra of Transition Metal Complexes
Day 1	Selection Rules for d-d transitions
Day 2	Spectroscopic Ground States continues
Week 14	Chapter 4 : Electron Spectra of Transition Metal Complexes
Day 1	Spectroscopic Ground States
Day 2	Spectrochemical Series
Week 15	Chapter 4 : Electron Spectra of Transition Metal Complexes
Day 1	Orgel-Energy Level diagram for d^1 and d^9 states
Day 2	Discussion of the electronic Spectrum of $[\text{Ti}(\text{H}_2\text{O})_6]^{3+}$ complex ion

Teacher Signature

Lesson Plan Summary: October-December, 2021

Name of Assistant Professor: Dr. Vanita Kumari Sapra

Class & Section: B.Sc 5th sem

Subject Lesson Plan: Organic Chemistry

Week 1	Chapter 1: NMR Spectroscopy-I
Day 1	Orientation and Introduction to syllabus
Day 2	Principle of Nuclear Magnetic Resonance & the PMR Spectrum
Week 2	Chapter 1: NMR Spectroscopy-I
Day 1	Number of signals, Equivalent and Non Equivalent Protons
Day 2	Peak Areas & Proton Counting,
Week 3	Chapter 1: NMR Spectroscopy-I
Day 1	Positions of Signals and Chemical Shift
Day 2	Shielding and Deshielding of Protons and factors affecting it
Week 4	Chapter 1: NMR Spectroscopy-I
Day 1	Splitting of Signals and Coupling Constants
Day 2	Magnetic equivalence of Protons.
Week 5	Chapter 1: NMR Spectroscopy-I
Day 1	Practice Problems on NMR
Day 2	Assignment & Doubt class
Week 6	Chapter 2: NMR Spectroscopy-II
Day 1	Discuss ion of PMR spectra of the molecules: Ethyl bromide, n-propyl bromide, Isopropyl bromide, 1,1-Dibromoethane
Day 2	Discuss ion of PMR spectra of the molecules: 1,1,2-Tribromoethane, Ethanol, Acetaldehyde, Ethyl acetate
Week 7	Chapter 2: NMR Spectroscopy-II
Day 1	Discuss ion of PMR spectra of the molecules: Toluene, Benzaldehyde and Acetophenone.
Day 2	Simple problems on PMR spectroscopy for structure determination of organic compounds.
Week 8	Chapter 2: NMR Spectroscopy-II
Day 1	Assignment & Doubt class
Day 2	Class Test 1

Week 9	Chapter 3: Carbohydrates-I
Day 1	Carbohydrate: Definition, Classification and Nomenclature
Day 2	Monosaccharides: Glucose -Properties & Mechanism of Osazone formation
Week 10	Chapter 3: Carbohydrates-I
Day 1	Fructose -Properties & Mechanism of Osazone formation
Day 2	Inter conversion of Glucose and Fructose
Week 11	Chapter 3: Carbohydrates-I
Day 1	Chain lengthening and Chain shortening of aldoses.
Day 2	Configuration of Monosaccharides. Erythro and Threo diastereomers
Week 12	Chapter 3: Carbohydrates-I
Day 1	Determination of ring size of Glucose and Fructose.
Day 2	Open chain and Cyclic structure of D(+)-Glucose & D(-) Fructose. Mechanism of Mutarotation.
Week 13	Chapter 3: Carbohydrates-I
Day 1	Conversion of Glucose in to Mannose. Formation of Glycosides, Ethers and Esters. Structures of Ribose and Deoxyribose.
Day 2	Doubt Class
Week 14	Chapter 4: Carbohydrates-II
Day 1	An introduction to Disaccharides (Maltose, Sucrose and Lactose)
Day 2	An introduction polysaccharides (Starch and Cellulose)
Week15	Chapter 5: Organometallic Compounds
Day 1	Organomagnesium compounds: The Grignard Reagents-Formation, Structure and Chemical reactions.
Day 2	Organozinc compounds: Formation and Chemical reactions.
Week 16	Chapter 5: Organometallic Compounds
Day 1	Organolithium compounds: Formation and Chemical reactions.
Day 2	Class Test II

Teacher Signature

Lesson Plan Summary : April-June, 2021

Name of Assistant Professor: Dr. Ruchi Sharma

Class & Section : B.Sc 6th sem

Subject Lesson Plan: Inorganic Chemistry

Week 1	Chapter 1: Organometallic Chemistry
Day 1	Definition, nomenclature and classification of organometallic compounds
Day 2	Preparation, properties, and bonding of alkyls of Li & Al
Week 2	Chapter 1: Organometallic Chemistry
Day 1	Preparation, properties, and bonding of alkyls of Hg, and Sn
Day 2	a brief account of metal-ethylenic complexes
Week 3	Chapter 1: Organometallic Chemistry
Day 1	mononuclear carbonyls and the nature of bonding in metal carbonyls.
Day 2	mononuclear carbonyls and the nature of bonding in metal carbonyls.
Week 4	Chapter 2: Acids and Bases, HSAB Concept
Day 1	Arrhenius, Bronsted – Lowry, the Lux – Flood Concept
Day 2	Solvent system and Lewis concepts of acids & bases
Week 5	Chapter 2: Acids and Bases, HSAB Concept
Day 1	relative strength of acids & bases
Day 2	Concept of Hard and Soft Acids & Bases
Week 6	Chapter 2: Acids and Bases, HSAB Concept
Day 1	Symbiosis
Day 2	electronegativity and hardness and softness
Week 7	Chapter 3: Bioinorganic Chemistry
Day 1	Essential and trace elements in biological processes
Day 2	metalloporphyrins with special reference to haemoglobin and myoglobin
Week 8	Chapter 3: Bioinorganic Chemistry
Day 1	metalloporphyrins with special reference to haemoglobin and myoglobin
Day 2	Biological role of alkali

Week 9	Chapter 3: Bioinorganic Chemistry
Day 1	Biological role of alkaline earth metal ions with special reference to Ca^{2+} .
Day 2	Nitrogen fixation.
Week 10	Chapter 4: Silicones and Phosphazenes
Day 1	Silicones and their preparation, properties, structure and uses
Day 2	<i>Silicones and their properties</i>
Week 11	Chapter 4: Silicones and Phosphazenes
Day 1	Silicones and their structure and uses
Day 2	Phosphazenes and their preparation
Week 12	Chapter 4: Silicones and Phosphazenes
Day 1	Phosphazenes and their properties
Day 2	Phosphazenes and their structure and uses

Teacher Signature

Lesson Plan Summary : October- December, 2021

Name of Assistant Professor: Dr. Raman Saini

Class & Section : B.Sc Non-med 3rd semester

Subject Lesson Plan: Physical Chemistry

Week 1	Chapter 1: Thermodynamics
Day 1	Introduction to thermodynamics, Extensive & Intensive properties
Day 2	Types of thermodynamic processes; Reversible & Irreversible
Week 2	Chapter 1: Thermodynamics
Day 1	State & Path functions & their differentials
Day 2	Concept of Heat & Work, First Law of Thermodynamics
Week 3	Chapter 1: Thermodynamics
Day 1	Internal energy, Enthalpy & Heat capacities
Day 2	Relation between C_p & C_v , Joule's Law
Week 4	Chapter 1: Thermodynamics
Day 1	Joule Thomson Effect; Joule-Thomson coefficient & its relation with enthalpy
Day 2	Inversion Temperature, Calculation of q , W , dU & dH for isothermal process
Week 5	Chapter 1: Thermodynamics
Day 1	Calculation of q , W , dU & dH for adiabatic process
Day 2	Comparison of Isothermal & Adiabatic process, Assignment on covered topics
Week 6	Chapter 2: Thermochemistry
Day 1	Hess's Law of constant Heat Summation
Day 2	Applications of Hess's Law
Week 7	Chapter 2: Thermochemistry
Day 1	Bond Energy /Enthalpy & its calculation.
Day 2	Temperature dependence of Enthalpy(Kirchoff's Equation) + Assignment
Week 8	Chapter 2:Thermochemistry
Day 1	Doubt class on covered topics & Assignment discussion
Day 2	Class Test I

Week 9	Chapter 3: Chemical Equilibrium
Day 1	Law of chemical equilibrium & equilibrium constant
Day 2	Concept of Chemical Potential & Gibbs-Duhem Equation
Week 10	Chapter 3: Chemical Equilibrium
Day 1	Concept of fugacity & activity
Day 2	Free energy as a criterion of spontaneity
Week 11	Chapter 3: Chemical Equilibrium
Day 1	Thermodynamic derivation of Law of Chemical Equilibrium
Day 2	Van't Hoff Reaction Isotherm & Isochore
Week 12	Chapter 3: Chemical Equilibrium
Day 1	Le-Chateliers's Principle & its application
Day 2	Clausius-Clapeyron Equation & its application + assignment
Week 13	Chapter 4: Distribution Law
Day 1	Nernst Distribution Law & its experimental determination
Day 2	Thermo dynamic Derivation of Distribution Law
Week 14	Chapter 4: Chemical Equilibrium
Day 1	Modified Distribution Law
Day 2	Application of Distribution law
Week 15	Chapter 4: Chemical Equilibrium
Day 1	Application of Distribution law + Assignment
Day 2	Doubt Class

Teacher Signature

Lesson Plan Summary : 01 April – June 2021

Name of Assistant Professor: Dr. Raman Saini

Class & Section : B.Sc Non-med 4th semester

Subject Lesson Plan: Physical Chemistry

Week 1	Chapter 1: Thermodynamics III
Day 1	Second law of thermodynamics, need for the law, different statements of the law
Day 2	Carnot's cycles and its efficiency, Carnot's theorem
Week 2	Chapter 1: Thermodynamics III
Day 1	Thermodynamics scale of temperature. Concept of entropy – entropy as a state function
Day 2	entropy as a function of V & T, entropy as a function of P & T, entropy change in physical change
Week 3	Chapter 1: Thermodynamics III
Day 1	entropy as a criterion of spontaneity and equilibrium
Day 2	Entropy changes in ideal gases and mixing of gases.
Week 4	Chapter 2: Thermodynamics IV
Day 1	Third law of thermodynamics: Nernst heat theorem
Day 2	statement of concept of residual entropy, evaluation of absolute entropy from heat capacity data
Week 5	Chapter 2: Thermodynamics IV
Day 1	<i>Gibbs and Helmholtz functions; Gibbs function (G) and Helmholtz function (A) as thermodynamic quantities,</i>
Day 2	A & G as criteria for thermodynamic equilibrium and spontaneity, their advantage over entropy change
Week 6	Chapter 2: Thermodynamics IV
Day 1	Variation of G and A with P, V and
Day 2	Variation of G and A with P, V and
Week 7	Chapter 3: Electrochemistry-III
Day 1	Electrolytic and Galvanic cells – reversible & Irreversible cells , conventional representation of electrochemical cells.
Day 2	EMF of cell and its measurement, Weston standard cell, activity and activity coefficients. Calculation of thermodynamic quantities of cell reaction
Week 8	Chapter 3: Electrochemistry-III
Day 1	Types of reversible electrodes – metal- metal ion gas electrode, metal – insoluble salt- anion and redox electrodes. Electrode reactions
Day 2	Nernst equations, derivation of cell EMF and single electrode potential.

Week 9	Chapter 3: Electrochemistry-III
Day 1	Standard Hydrogen electrode, reference electrodes, standard electrodes potential, sign conventions
Day 2	electrochemical series and its applications.
Week 10	Chapter 4: Electrochemistry-IV
Day 1	Concentration cells with and without transference, liquid junction potential,
Day 2	application of EMF measurement i.e. valency of ions,
Week 11	Chapter 4: Electrochemistry-IV
Day 1	solubility product activity coefficient,
Day 2	potentiometric titration (acid- base and redox).
Week 12	Chapter 4: Electrochemistry-IV
Day 1	Determination of pH using Hydrogen electrode, Quinhydrone electrode and glass electrode by potentiometric methods.
Day 2	Determination of pH using Hydrogen electrode, Quinhydrone electrode and glass electrode by potentiometric methods.

Teacher Signature

**Name of Assistant
Professor
Class and Section**

**Dr. Raman saini
B.Sc (Vth Sem) Sec. C (1,2)**

Subject

**CH-503 (October- December,2021
Physical Chemistry**

Week	1		
Week 1, Day 1		1.1.1	Quantum Mechanic s-I Black- body radiation
Week 1, Day 2		1.2.1	Plank's radiation law, photoelectric effect.
Week	2		
Week 2, Day 1		2.1.1	Heat capacity of solids, Compton effect, wave function and its significance of Postulates of quantum mechanics
Week 2, Day 2		2.2.1	Quantum mechanical operator, commutation relations.
Week	3		
Week 3, Day 1		3.1.1	Hamiltonian operator, Hermitian operator, average value of square of Hermitian as a positive quantity.
Week 3, Day 2		3.2.1	Test on Quantum Mechanics
Week	4		
Week 4, Day 1		4.1.2	Role of operators in quantum mechanics, To show quantum mechanically that position and momentum cannot be predicated simultaneously,
Week 4, Day 2		4.2.2	Determination of wave function & energy of a particle in one dimensional box, Pictorial representation and its significance.

Week 5			
Week 5, Day 1		5.1.2	Physical Properties and molecular Structure: Optical activity, polarization – (clausius – Mossotti equation).
Week 5, Day 2		5.2.2	Orientation of dipoles in an electric field, dipole moment, included dipole moment.
Week	6		
Week 6, Day 1		6.1.2	Measurement of dipole moment-temperature method and refractivity method, dipole moment and structure of molecules.
Week 6, Day 2		6.2.2	Magnetic permeability, magnetic susceptibility and its determination.
Week	7		
Week 7, Day 1		7.1.1	Applica tion of magnetic susceptibility.
Week 7, Day 2		7.2.2	Magnetic properties – paramagnetism, diamagnetism and ferromagnetics.
Week	8		
Week 8, Day 1		8.1.1	Electromagnetic radiation, regions of spectrum, basic features of spectroscopy.
Week 8, Day 2		8.2.2	Statement of Bornoppenheimer approximation, Degrees of freedom.
Week	9		
Week 9, Day 1		9.1.1	Rotational Spectrum Diatomic molecules.

Week 9, Day 2		9.2.2	Energy levels of rigid rotator (semi-classical principles),
Week	10		
Week 10, Day 1		10.1.1	Selection rules.
Week 10, Day 2		10.2.2	Spectral intensity distribution using population distribution (Maxwell-Boltzmann distribution).
Week	11		
Week 11, Day 1		11.1.1	Determination of bond length.
Week 11, Day 2		11.2.2	Qualitative description of non-rigid rotor.
Week	12		
Week 12, Day 1		12.1.1	Isotope effect.
Week 12, Day 2		12.2.2	Assignment & Revision
Week	13		
Week 13, Day 1		13.1.1	Infrared spectrum: Energy levels of simple harmonic oscillator, selection rules.
Week 13, Day 2		13.2.2	Pure vibrational spectrum, intensity.
Week	14		
Chapter			
Week 14, Day 1			Determination of force constant and qualitative relation of force constant and bond energies.

Week 14, Day 2			Effects of anharmonic motion and isotopic effect on the spectra., idea of vibrational frequencies of different functional groups.
Week	15		
Chapter			
Week 15, Day 1			Raman Spectrum: Concept of polarizability, pure rotational and pure vibrational Raman spectra of diatomic molecules, selection rules.
Week 15, Day 2			Quantum theory of Raman spectra.
Week	16		
Chapter			
Week 16, Day 1			Assignment based on Spectroscopy
Week 16, Day 2			Revision
Week	17		
Chapter			
Week 17, Day 1			TEST
Week 17, Day 2			Assignment & Revision
Week	18		Revision

Lesson Plan Summary: 01 April – 30 June 2021

Name of Assistant Professor: Dr. Vanita Sapra

Class & Section: B.Sc Non-med VI Sem Section A, B & C (3,4)

Subject Lesson Plan: Organic Chemistry

Week 1	Chapter 1: HETEROCYCLIC COMPOUNDS I
Day 1	M. O pictures of Pyrrol, furan
Day 2	M. O pictures of Thiophene, Pyridine
Week 2	Chapter 1: HETEROCYCLIC COMPOUNDS I
Day 1	Methods of synthesis of Pyrrol, furan
Day 2	Methods of synthesis of Thiophene, Pyridine
Week 3	Chapter 1: HETEROCYCLIC COMPOUNDS I
Day 1	Chemical rxns of Pyrrol, furan
Day 2	Chemical rxns of Thiophene, Pyridine
Week 4	Chapter 1: HETEROCYCLIC COMPOUNDS I
Day 1	Mechanism of SN & ES in heterocyclic compound, Comparison of basicity of pyridine, piperidine, pyrrole
Day 2	Introduction to condensed 5-6 membered heterocycles, Preparation and rxns of indole
Week 5	Chapter 2: HETEROCYCLIC COMPOUNDS II
Day 1	Preparation and rxns of quinolone, isoquinoline
Day 2	Mechanism of ES rxns of , quinoline, isoquinoline
Week 6	Chapter 2: HETEROCYCLIC COMPOUNDS II
Day 1	Nomenclature and Structural Features, Methods of formations and chemical rxns of thioethers
Day 2	Nomenclature and Structural Features, Methods of formations and chemical rxns of thiol
Week 7	Chapter 3: ORGANOSULPHUR COMPOUNDS
Day 1	Nomenclature and Structural Features, Methods of formations and chemical rxns of sulphonic acids
Day 2	Methods of formations and chemical rxns of sulphonamides, sulphaguanidine, sythetic detergents
Week 8	Chapter 3: ORGANOSULPHUR COMPOUNDS
Day 1	Organic synthesis via enolates: Introduction Acidity of α -hydrogens
Day 2	Alkylation of diethyl melonate Alkylation of ethyl acetoacetate

Day 1	Claisen Condensation Keto-enol tautomerism of ethyl acetoacetate
Day 2	
Week 10	Chapter 4: ORGANIC SYNTHESIS VIA ENOLATES
Day 1	Synthetic Polymers: Addition, Free-radical, polymerization ionic vinyl polymerization, Ziegler-Natta Polymerization
Day 2	Condensation polymerization, Polyesters, Polyamides
Week 11	Chapter 4: ORGANIC SYNTHESIS VIA ENOLATES
Day 1	Natural & Synthetic rubbers Examples of different types of Polymers
Day 2	Classification of amino acids, Acid-base behaviour, isoelectric point
Week 12	Chapter 4: ORGANIC SYNTHESIS VIA ENOLATES
Day 1	Electrophoresis, Preparation of α -amino acids
Day 2	Peptides & Proteins, peptide structure determination
Week 13	Chapter 5: SYNTHETIC POLYMERS
Day 1	Classical peptide synthesis, solid-phase peptide synthesis
Day 2	Structure of peptides & proteins

Signature of Assistant/Associate Professor

Lesson Plan Summary : November - March 2021

Name of Assistant Professor: Dr. S.S.Saini

Class & Section: B.A 2nd sem

Subject Lesson Plan: Microeconomics

Week 1 Chapter 1:	
Day 1	Orientation and Introduction to Syllabus
Day 2	The Economic Problem: Scarcity and Choice
Day 3	Functions of an Economic System
Day 4	Circular Flow of Economic Activities
Day 5	Circular Flow of Economic Activities
Day 6	System of Economic Organization
Week 2 Chapter 1:	
Day 1	<i>Micro Economics</i>
Day 2	<i>Micro Economics</i>
Day 3	<i>Macro Economics</i>
Day 4	<i>Macro Economics</i>
Day 5	Law of Demand
Day 6	<i>Elasticity of Demand: concept</i>
Week 3 Chapter 1	
Day 1	<i>Elasticity of Demand: typesd</i>
Day 2	<i>Elasticity of Demand: measurement</i>
Day 3	<i>Elasticity of Demand: determinants</i>
Day 4	<i>Elasticity of Demand: importance</i>
Day 5	Discussion Class
Day 6	Class Test
Week 4 Chapter 2 Consumer Theory	
Day 1	<i>Concept of utility</i>
Day 2	<i>Concept of utility</i>
Day 3	<i>Cardinal utility analysis</i>
Day 4	<i>Cardinal utility analysis</i>
Day 5	<i>marginal and total utility</i>
Day 6	<i>marginal and total utility</i>
Week 5 Chapter 2	
Day 1	<i>consumer's equilibrium</i>
Day 2	<i>consumer's equilibrium</i>
Day 3	<i>Derivation of demand curve</i>
Day 4	<i>Derivation of demand curve</i>
Day 5	<i>consumer's surplus</i>
Day 6	<i>consumer's surplus</i>

Week 6 Chapter 3 Ordinal Utility Theory	
Day 1	<i>Indifference curves analysis</i>
Day 2	<i>Indifference curves analysis</i>
Day 3	<i>characteristics of substitution</i>
Day 4	<i>budget line of substitution</i>
Day 5	<i>marginal rate of substitution</i>
Day 6	Consumer's Equilibrium
Week 7 Chapter 3:	
Day 1	Consumer's Equilibrium
Day 2	<i>Price, income and substitution effects</i>
Day 3	<i>Price, income and substitution effects</i>
Day 4	<i>Price, income and substitution effects</i>
Day 5	Derivation of demand curve
Day 6	Derivation of demand curve
Week 8 Chapter 3:	
Day 1	<i>Limitations of utility theory of demand.</i>
Day 2	<i>Limitations of utility theory of demand.</i>
Day 3	Discussion Class
Day 4	Class Test
Day 5	Producer's behaviour and Supply
Day 6	Producer's behaviour and Supply
Week 9 Chapter 4: Producer's behaviour and Supply	
Day 1	<i>Firm as an agent of production</i>
Day 2	<i>Firm as an agent of production</i>
Day 3	Law of variable proportions
Day 4	Law of variable proportions
Day 5	Returns to scale
Day 6	characteristics of Iso-quants
Week 10 Chapter 4:	
Day 1	characteristics of Iso-quants
Day 2	Ridge lines
Day 3	least cost combination of factors
Day 4	least cost combination of factors
Day 5	<i>Internal economies and diseconomies</i>
Day 6	<i>external economies and diseconomies</i>

Week 11 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Movements and shifts in supply curve
Day 2	Movements and shifts in supply curve
Day 3	Movements and shifts in supply curve
Day 4	<i>Elasticity of supply</i>
Day 5	<i>Elasticity of supply</i>
Day 6	<i>Doubt Class</i>
Week 12 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Doubt Class
Day 2	<i>Class Test</i>
Day 3	Revision
Day 4	Revision
Day 5	Revision
Day 6	Revision
Week 13 – Week 15 Revision	
Day 1	Revision
Day 2	Revision
Day 3	Revision
Day 4	Revision
Day 5	Revision
Day 6	Revision

Teacher Signature

Lesson Plan Summary : April- June 2021

Name of Associate Professor: Dr. S.S.Saini

Class & Section: B. A 2nd sem online/offline

Subject Lesson Plan: Microeconomics

Week 1 Unit 1 Perfect Competition	
Day 1	Profit maximization and Equilibrium of Firm and industry
Day 2	Profit maximization and Equilibrium of Firm and industry
Day 3	Profit maximization and Equilibrium of Firm and industry
Day 4	Short Run and Long Run Supply Curves
Day 5	Short Run and Long Run Supply Curves
Day 6	Short Run and Long Run Supply Curves
Week 2 Unit 1 Perfect Competition	
Day 1	Price and Output Determination
Day 2	Price and Output Determination
Day 3	Price and Output Determination
Day 4	Practical applications
Day 5	Practical applications
Day 6	Practical applications
Week 3 Unit 1 Monopoly	
Day 1	Determination of price under monopoly
Day 2	<i>Determination of price under monopoly</i>
Day 3	<i>Equilibrium of Firm</i>
Day 4	Equilibrium of Firm
Day 5	Comparison between Monopoly and perfect competition
Day 6	Comparison between Monopoly and perfect competition
Week 4 Unit 1 Monopoly	
Day 1	Price Discrimination
Day 2	Price Discrimination
Day 3	<i>Multiplant Monopoly</i>
Day 4	<i>Multiplant Monopoly</i>
Day 5	Practical applications
Day 6	Practical applications
Week 5 Unit 2 Monopolistic Competition	
Day 1	<i>Meaning and Characteristics</i>
Day 2	<i>Meaning and Characteristics</i>
Day 3	<i>Meaning and Characteristics</i>
Day 4	<i>Price and output determination under Monopolistic Competition</i>
Day 5	<i>Price and output determination under Monopolistic Competition</i>
Day 6	<i>Price and output determination under Monopolistic Competition</i>

Week 6 Unit 2 Monopolistic Competition	
Day 1	<i>Price and output determination under Monopolistic Competition</i>
Day 2	<i>Product Differentiation</i>
Day 3	<i>Product Differentiation</i>
Day 4	<i>Selling cost</i>
Day 5	<i>Selling cost</i>
Day 6	Comparison with perfect competition
Week 7 Unit 2 Monopolistic Competition	
Day 1	Comparison with perfect competition
Day 2	Comparison with perfect competition
Day 3	<i>Excess Capacity under Monopolistic Competition</i>
Day 4	<i>Excess Capacity under Monopolistic Competition</i>
Day 5	<i>Excess Capacity under Monopolistic Competition</i>
Day 6	<i>Excess Capacity under Monopolistic Competition</i>
Week 8 Unit 2 Oligopoly	
Day 1	<i>Features</i>
Day 2	<i>Price rigidity Model</i>
Day 3	<i>Price rigidity Model</i>
Day 4	<i>Duopoly model</i>
Day 5	Duopoly model
Day 6	Price leadership
Week 9 Unit 3	
Day 1	Marginal productivity
Day 2	Marginal productivity
Day 3	<i>Theory and demand for factors</i>
Day 4	<i>Theory and demand for factors</i>
Day 5	<i>Theory and demand for factors</i>
Day 6	<i>Theory and demand for factors</i>
Week 10 Unit 3	
Day 1	<i>Nature of supply of factor inputs</i>
Day 2	<i>Nature of supply of factor inputs</i>
Day 3	<i>Nature of supply of factor inputs</i>
Day 4	<i>Determination of wage rates under Perfect competition</i>
Day 5	<i>Determination of wage rates under Perfect competition</i>
Day 6	<i>Determination of wage rates under Perfect competition</i>
Week 11 Unit 3	
Day 1	<i>Determination of wage rates under monopoly</i>
Day 2	<i>Determination of wage rates under monopoly</i>
Day 3	<i>Determination of wage rates under monopoly</i>
Day 4	Exploitation of labour
Day 5	Exploitation of labour
Day 6	Exploitation of labour
Week 12 Unit 3	
Day 1	Rent Concept
Day 2	Recardian concept
Day 3	Recardian concept
Day 4	Modern theory of rent
Day 5	Modern theory of rent
Day 6	Quasi Rent
WEEK 13 Unit 4	
Interest: Concept, Theories;	
WEEK 14 Unit 4	
Profit: Concept and theories	

WEEK 15 Unit 4
Break Event point Analysis
WEEK 16 Unit 4
Revision

Teacher Signature

Lesson Plan Summary : November- March 2021

Name of Assistant Professor: Dr. S.S.Saini

Class & Section: B.A 3rd sem

Subject Lesson Plan: Macroeconomics

Week 1 Chapter 1: Introduction to Macroeconomics and National Income Accounting	
Day 1	Orientation and Introduction to Syllabus
Day 2	Macroeconomics: Nature and Scope
Day 3	Macroeconomic Issues in an Economy
Day 4	Macroeconomic Issues in an Economy
Day 5	Concepts of GDP and National Income
Day 6	Concepts of GDP and National Income
Week 2 Chapter 1: Introduction to Macroeconomics and National Income Accounting	
Day 1	Concepts of GDP and National Income
Day 2	Measurement of National Income and Related Aggregates
Day 3	Measurement of National Income and Related Aggregates
Day 4	Nominal and Real Income
Day 5	Nominal and Real Income
Day 6	Limitations of the GDP concept
Week 3 Chapter 1: Introduction to Macroeconomics and National Income Accounting	
Day 1	Methods of measurement of India's National Income by CSO.
Day 2	Methods of measurement of India's National Income by CSO.
Day 3	Methods of measurement of India's National Income by CSO.
Day 4	Methods of measurement of India's National Income by CSO.
Day 5	Discussion Class
Day 6	Class Test
Week 4 Chapter 2: National Income Determination	
Day 1	Actual and potential GDP; Aggregate.
Day 2	Actual and potential GDP; Aggregate.
Day 3	<i>Expenditure –Consumption Function</i>
Day 4	<i>Expenditure –Consumption Function</i>
Day 5	Investment Function
Day 6	Investment Function
Week 5 Chapter 2: National Income Determination	
Day 1	Equilibrium GDP
Day 2	Equilibrium GDP
Day 3	Concepts of MPC
Day 4	Concepts of APC
Day 5	Concepts of MPS
Day 6	Concepts of APS

Week 6 Chapter 2: National Income Determination	
Day 1	Autonomous Expenditure
Day 2	Autonomous Expenditure
Day 3	The Concept of Multiplier
Day 4	The Concept of Multiplier
Day 5	Assignment & Doubt Class
Day 6	Class Test
Week 7 Chapter 3: National Income Determination in an Open Economy with Government	
Day 1	Fiscal Policy - Impact of Changes in Govt.Expenditure and Taxes
Day 2	Fiscal Policy - Impact of Changes in Govt.Expenditure and Taxes
Day 3	Fiscal Policy - Impact of Changes in Govt.Expenditure and Taxes
Day 4	Fiscal Policy - Impact of Changes in Govt.Expenditure and Taxes
Day 5	Net Export Function
Day 6	Net Export Function
Week 8 Chapter 3: National Income Determination in an Open Economy with Government	
Day 1	Net Export Function
Day 2	Net Exports and Equilibrium GDP
Day 3	Net Exports and Equilibrium GDP
Day 4	Net Exports and Equilibrium GDP
Day 5	Discussion Class
Day 6	Class Test
Week 9 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Aggregate Demand and Aggregate Supply
Day 2	Aggregate Demand and Aggregate Supply
Day 3	Aggregate Demand and Aggregate Supply
Day 4	Aggregate Demand and Aggregate Supply
Day 5	Multiplier Analysis with AD curve
Day 6	Multiplier Analysis with AD curve
Week 10 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Multiplier Analysis with AD curve
Day 2	Multiplier Analysis with AD curve
Day 3	Price level Changes
Day 4	Price level Changes
Day 5	Price level Changes
Day 6	Price level Changes

Week 11 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Aggregate Supply in Short Run
Day 2	Aggregate Supply in Short Run
Day 3	Aggregate Supply in Short Run
Day 4	Aggregate Supply in Short Run
Day 5	Aggregate Supply in long Run
Day 6	Aggregate Supply in long Run
Week 12 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	Aggregate Supply in long Run
Day 2	Aggregate Supply in long Run
Day 3	<i>Discussion Class</i>
Day 4	Doubt Class
Day 5	<i>Class Test</i>
Day 6	Revision
Week 13 – Week 15 Revision	
Day 1	Revision
Day 2	Revision
Day 3	Revision
Day 4	Revision
Day 5	Revision
Day 6	Revision

Teacher Signature

Lesson Plan Summary : April- June 2021

Name of Associate Professor: Dr. S.S.Saini

Class & Section: B.A 4th sem Online/ Offline

Subject Lesson Plan: Macroeconomics

Week 1 Chapter 1: Money in a Modern Economy	
Day 1	<i>Concept of Money in a Modern Economy</i>
Day 2	<i>Concept of Money in a Modern Economy</i>
Day 3	<i>Concept of Money in a Modern Economy</i>
Day 4	<i>Monetary Aggregates</i>
Day 5	<i>Monetary Aggregates</i>
Day 6	<i>Monetary Aggregates</i>
Week 2 Chapter 1: Money in a Modern Economy	
Day 1	<i>Demand for Money</i>
Day 2	<i>Demand for Money</i>
Day 3	<i>Quantity Theory of Money</i>
Day 4	<i>Quantity Theory of Money</i>
Day 5	<i>Liquidity Preference and Rate of Interest</i>
Day 6	<i>Liquidity Preference and Rate of Interest</i>
Week 3 Chapter 1: Money in a Modern Economy	
Day 1	<i>Money Supply</i>
Day 2	<i>Money Supply</i>
Day 3	<i>Credit Creation and Monetary Policy</i>
Day 4	<i>Credit Creation and Monetary Policy</i>
Day 5	Discussion Class
Day 6	Class Test
Week 4 Chapter 2: IS-LM Analysis, Trade Cycle Theory and Growth Theory	
Day 1	<i>Derivation of IS and LM Functions</i>
Day 2	<i>Derivation of IS and LM Functions</i>
Day 3	<i>Derivation of IS and LM Functions</i>
Day 4	<i>Derivation of IS and LM Functions</i>
Day 5	<i>IS-LM and Aggregate Demand</i>
Day 6	<i>IS-LM and Aggregate Demand</i>
Week 5 Chapter 2: IS-LM Analysis, Trade Cycle Theory and Growth Theory	
Day 1	<i>Shifts in AD Curve</i>
Day 2	<i>Shifts in AD Curve</i>
Day 3	<i>Theories of Trade cycles</i>
Day 4	<i>Theories of Trade cycles</i>
Day 5	<i>Samulson and Hicks models</i>
Day 6	<i>Samulson and Hicks models</i>

Week 6 Chapter 2: IS-LM Analysis, Trade Cycle Theory and Growth Theory	
Day 1	<i>Harrod and Domar growth model.</i>
Day 2	<i>Harrod and Domar growth model.</i>
Day 3	<i>Harrod and Domar growth model.</i>
Day 4	Revision
Day 5	Assignment & Doubt Class
Day 6	Class Test
Week 7 Chapter 3: Balance of Payments and Exchange Rate	
Day 1	<i>Gains from International Trade</i>
Day 2	<i>Gains from International Trade</i>
Day 3	<i>Gains from International Trade</i>
Day 4	<i>Balance of Payments</i>
Day 5	<i>Balance of Payments</i>
Day 6	<i>Balance of Payments</i>
Week 8 Chapter 3: Balance of Payments and Exchange Rate	
Day 1	<i>Market for Foreign Exchange</i>
Day 2	<i>Market for Foreign Exchange</i>
Day 3	<i>Market for Foreign Exchange</i>
Day 4	<i>Determination of Exchange Rates</i>
Day 5	<i>Determination of Exchange Rates</i>
Day 6	<i>Determination of Exchange Rates</i>
Week 9 Chapter 4: Public Finance	
Day 1	<i>Nature and Scope of Public Finance</i>
Day 2	<i>Nature and Scope of Public Finance</i>
Day 3	<i>Nature and Scope of Public Finance</i>
Day 4	<i>Principle of Maximum Social Advantage</i>
Day 5	<i>Principle of Maximum Social Advantage</i>
Day 6	<i>Principle of Maximum Social Advantage</i>
Week 10 Chapter 4: Public Finance	
Day 1	Effects of Public Expenditure
Day 2	<i>Effects of Public Expenditure</i>
Day 3	<i>Effects of Public Expenditure</i>
Day 4	<i>Impact and Incidence of taxes,</i>
Day 5	<i>Impact and Incidence of taxes,</i>
Day 6	<i>Impact and Incidence of taxes,</i>

Week 11 Chapter 4: Public Finance	
Day 1	Characteristics of a Good Taxation System.
Day 2	<i>Characteristics of a Good Taxation System.</i>
Day 3	<i>Characteristics of a Good Taxation System.</i>
Day 4	<i>Characteristics of a Good Taxation System.</i>
Day 5	<i>Characteristics of a Good Taxation System.</i>
Day 6	<i>Characteristics of a Good Taxation System.</i>
Week 12 Chapter 4: GDP and Price Level in Short and Long Run	
Day 1	<i>Discussion Class</i>
Day 2	Doubt Class
Day 3	<i>Class Test</i>
Day 4	<i>Revision</i>
Day 5	<i>Revision</i>
Day 6	Revision

Teacher Signature

Lesson Plan Summary : November- March 2021

Name of Assistant Professor: Dr. S.S.Saini

Class & Section: B. Com 1st sem

Subject Lesson Plan: Business Economics

Week 1 Chapter 1	
Day 1	Orientation and Introduction to Syllabus
Day 2	Introduction: Basic problem of an economy
Day 3	working of price mechanism
Day 4	concept of Elasticity of demand
Day 5	concept of Elasticity of demand; measurement
Day 6	concept of Elasticity of demand; importance
Week 2 Chapter 1	
Day 1	determinants of elasticity of demand
Day 2	Average revenue; elasticity of demand
Day 3	marginal revenue and elasticity of demand
Day 4	elasticity of demand and elasticity of supply
Day 5	elasticity of demand and elasticity of supply
Day 6	Doubt Class
Week 3 Chapter 2	
Day 1	Production Function: Law of variable proportions
Day 2	Production Function: Law of variable proportions
Day 3	Isoquants
Day 4	Economic regions and optimum factor combination
Day 5	expansion path; returns to scale
Day 6	expansion path; returns to scale
Week 4 Chapter 2	
Day 1	Internal economies and diseconomies;
Day 2	external economies and diseconomies;
Day 3	Ridge lines
Day 4	; Theory of costs: concepts of cost;
Day 5	; <i>Theory of costs: concepts of cost;</i>
Day 6	; <i>Theory of costs: concepts of cost;</i>
Week 5 Chapter 2	
Day 1	Short run and Long run cost curves- Traditional
Day 2	Short run and Long run cost curves- Traditional
Day 3	Short run and Long run cost curves- Modern approaches.
Day 4	Short run and Long run cost curves- Modern approaches.
Day 5	Doubt Class
Day 6	<i>Test 1</i>

Week 6 Chapter 3	
Day 1	<i>Theory of consumer behaviour</i>
Day 2	<i>Theory of consumer behaviour</i>
Day 3	<i>Theory of consumer behaviour</i>
Day 4	<i>Theory of consumer behaviour</i>
Day 5	<i>Theory of consumer behaviour</i>
Day 6	<i>Theory of consumer behaviour</i>
Week 7 Chapter 3	
Day 1	<i>utility curve analysis</i>
Day 2	<i>utility curve analysis</i>
Day 3	<i>utility curve analysis</i>
Day 4	<i>utility curve analysis</i>
Day 5	<i>utility curve analysis</i>
Day 6	<i>indifference curve analysis</i>
Week 8 Chapter 3	
Day 1	<i>indifference curve analysis</i>
Day 2	<i>indifference curve analysis</i>
Day 3	<i>indifference curve analysis</i>
Day 4	<i>indifference curve analysis</i>
Day 5	Doubt Class
Day 6	Test 2
Week 9-12 Chapter 4:	
Day 1	<i>Market, classification and structure.</i>
Day 2	<i>Market, classification and structure.</i>
Day 3	<i>Market, classification and structure.</i>
Day 4	<i>Market, classification and structure.</i>
Day 5	<i>Market, classification and structure.</i>
Day 6	<i>Market, classification and structure.</i>
Week 13 – Week 15 Revision	
Day 1	Revision
Day 2	Revision
Day 3	Revision
Day 4	Revision
Day 5	Revision
Day 6	Revision

Teacher Signature

Lesson Plan Summary : April- June 2021

Name of Associate Professor: Dr. S.S.Saini

Class & Section: B. Com 2nd sem online/offline

Subject Lesson Plan: Business Economics

Week 1 Unit 1 Perfect Competition	
Day 1	Profit maximization and Equilibrium of Firm and industry
Day 2	Profit maximization and Equilibrium of Firm and industry
Day 3	Profit maximization and Equilibrium of Firm and industry
Day 4	Short Run and Long Run Supply Curves
Day 5	Short Run and Long Run Supply Curves
Day 6	Short Run and Long Run Supply Curves
Week 2 Unit 1 Perfect Competition	
Day 1	Price and Output Determination
Day 2	Price and Output Determination
Day 3	Price and Output Determination
Day 4	Practical applications
Day 5	Practical applications
Day 6	Practical applications
Week 3 Unit 1 Monopoly	
Day 1	Determination of price under monopoly
Day 2	<i>Determination of price under monopoly</i>
Day 3	<i>Equilibrium of Firm</i>
Day 4	Equilibrium of Firm
Day 5	Comparison between Monopoly and perfect competition
Day 6	Comparison between Monopoly and perfect competition
Week 4 Unit 1 Monopoly	
Day 1	Price Discrimination
Day 2	Price Discrimination
Day 3	<i>Multiplant Monopoly</i>
Day 4	<i>Multiplant Monopoly</i>
Day 5	Practical applications
Day 6	Practical applications
Week 5 Unit 2 Monopolistic Competition	
Day 1	<i>Meaning and Characteristics</i>
Day 2	<i>Meaning and Characteristics</i>
Day 3	<i>Meaning and Characteristics</i>
Day 4	<i>Price and output determination under Monopolistic Competition</i>
Day 5	<i>Price and output determination under Monopolistic Competition</i>
Day 6	<i>Price and output determination under Monopolistic Competition</i>

Week 6 Unit 2 Monopolistic Competition	
Day 1	<i>Price and output determination under Monopolistic Competition</i>
Day 2	<i>Product Differentiation</i>
Day 3	<i>Product Differentiation</i>
Day 4	<i>Selling cost</i>
Day 5	<i>Selling cost</i>
Day 6	Comparison with perfect competition
Week 7 Unit 2 Monopolistic Competition	
Day 1	Comparison with perfect competition
Day 2	Comparison with perfect competition
Day 3	<i>Excess Capacity under Monopolistic Competition</i>
Day 4	<i>Excess Capacity under Monopolistic Competition</i>
Day 5	<i>Excess Capacity under Monopolistic Competition</i>
Day 6	<i>Excess Capacity under Monopolistic Competition</i>
Week 8 Unit 2 Oligopoly	
Day 1	<i>Features</i>
Day 2	<i>Price rigidity Model</i>
Day 3	<i>Price rigidity Model</i>
Day 4	<i>Duopoly model</i>
Day 5	Duopoly model
Day 6	Price leadership
Week 9 Unit 3	
Day 1	Marginal productivity
Day 2	Marginal productivity
Day 3	<i>Theory and demand for factors</i>
Day 4	<i>Theory and demand for factors</i>
Day 5	<i>Theory and demand for factors</i>
Day 6	<i>Theory and demand for factors</i>
Week 10 Unit 3	
Day 1	<i>Nature of supply of factor inputs</i>
Day 2	<i>Nature of supply of factor inputs</i>
Day 3	<i>Nature of supply of factor inputs</i>
Day 4	<i>Determination of wage rates under Perfect competition</i>
Day 5	<i>Determination of wage rates under Perfect competition</i>
Day 6	<i>Determination of wage rates under Perfect competition</i>
Week 11 Unit 3	
Day 1	<i>Determination of wage rates under monopoly</i>
Day 2	<i>Determination of wage rates under monopoly</i>
Day 3	<i>Determination of wage rates under monopoly</i>
Day 4	Exploitation of labour
Day 5	Exploitation of labour
Day 6	Exploitation of labour
Week 12 Unit 3	
Day 1	Rent Concept
Day 2	Recardian concept
Day 3	Recardian concept
Day 4	Modern theory of rent
Day 5	Modern theory of rent
Day 6	Quasi Rent
WEEK 13 Unit 4	
Interest: Concept, Theories;	
WEEK 14 Unit 4	
Profit: Concept and theories	

WEEK 15 Unit 4
Break Event point Analysis
WEEK 16 Unit 4
Revision

Teacher Signature

Lesson Plan: 2nd, 4th, 6th Semesters

Dr Manjula Batra

HOD, Department of English

P1: **Ideas Aglow** (B.Sc 1)

P2: **Centre Stage: A textbook of Plays and Language Skills** (BA -2)

P3: **The Merchant of Venice by William Shakespeare** (BA-3)

Week	B. Sc -1 (3 days)	BA- 2 (6 days)	BA- 3
1	1 Introduction of English Essay 2 Text book: chapters briefing 3 Introduction of "Our Civilisation" by C.E.M. Joad	1 Introduction of English Drama 2 The Envoy by Bhasa * Introduction 3 Text Explained 4 Paraphrasing 5 Explanation 6 Explanation	<ul style="list-style-type: none"> • Introduction to William Shakespeare • Introduction to the play The Merchant of Venice • Major Characters of the play • Plot structure • Brief Summary • Text begins
2	- Our Civilisation -Explanation - Praise of Our Civilization	<ul style="list-style-type: none"> • Explanation • Synonyms - Antonyms • Short Questions • Questions (long answers) • Retrospective view of the play • Group Discussion 	<ul style="list-style-type: none"> • Text (Scene 1, Act 1) • Explanation • Paraphrasing • Explanation • Paraphrasing • Vocabulary
3	-Defects of our Civilisation -Conclusion -Question-Answer	<ul style="list-style-type: none"> • Introduction of The Swan Song • About the Playwright • Characters in the Play • Paraphrasing • Paraphrasing • Paraphrasing 	<ul style="list-style-type: none"> • Significance of opening scene discussed • Role-Play • Comprehension • Text • Text(scene 2) • Text
4	It's Question Time Intro -Text -Text	* Explanation * Explanation * Exercises on Vocabulary	<ul style="list-style-type: none"> • Text • Scene 3 • Text • Text • Paraphrasing

		<ul style="list-style-type: none"> * Exercises on Comprehension * Language Skills * Synonyms-Antonyms 	<ul style="list-style-type: none"> • Comprehension • Act 2 , Scene 1 • Text • Paraphrasing
5	<ul style="list-style-type: none"> * Comprehension * Vocabulary * Questions 	<ul style="list-style-type: none"> • Transcription symbols • Vowels, Consonants, diphthongs • Stressed – Unstressed Words • Word transcription exercise • Word transcription • Questions 	<ul style="list-style-type: none"> • Comprehension • Text • Scene 2 • Text • Scene 4 • Text • Simultaneous Role Play and GD with each scene
6	-An Interview with Christian Barnard by N. Ram -Intro -Text -Text	<ul style="list-style-type: none"> • Questions • Grammar • Grammar • Grammar • Grammar • Retrospective view of the play 	<ul style="list-style-type: none"> • Scene 5 • Text • Text • Scene 6 • Text • Explanation
7	-Explanation - Vocabulary - Questions	<ul style="list-style-type: none"> • Test 1 • Introduction of <i>The Monkey's Paw</i> • Text • Text • Explanation • Explanation 	<ul style="list-style-type: none"> • Scene 7 • Paraphrasing • Explanation • Text • Text • Scene 8
8	-Untouchability and the Caste System by B. R. Ambedkar Introduction -Text and paraphrasing - Text	<ul style="list-style-type: none"> • Text • Text • Text • Text • Explanation • Explanation 	<ul style="list-style-type: none"> • Text • Explanation • Important dialogues • Paraphrasing • Scene 9 • Text
9	-Text -Explanation -Paraphrasing	<ul style="list-style-type: none"> • Comprehension • Vocabulary • Language Skills 	<ul style="list-style-type: none"> • Act 3, Scene 1 • Text • Text • Paraphrasing

		<ul style="list-style-type: none"> • Synonyms-Antonyms • Questions • Questions 	<ul style="list-style-type: none"> • Explanation • Vocabulary
10	<ul style="list-style-type: none"> * Test 1 * Test Discussed * Answers and Explanation 	<ul style="list-style-type: none"> • Characters in the play • Passages for explanation • Retrospective view • Grammar • Grammar • Grammar 	<ul style="list-style-type: none"> • Scene 2 • Paraphrasing • Explanation • Paraphrasing • Explanation • Text
11	Inhumanisation of War by Huck Gutman <ul style="list-style-type: none"> • Intro • Text Explanation • Text 	<ul style="list-style-type: none"> • Introduction of Before Breakfast • Textual paraphrasing • Text • Text • Text • Text 	<ul style="list-style-type: none"> • Scene 3 • Explanation • Explanation • Paraphrasing • Paraphrasing • Vocabulary
12	<ul style="list-style-type: none"> • Text • Questions • Questions 	<ul style="list-style-type: none"> • Paraphrasing • Explanation • Explanation • Language Skills • Synonyms-Antonyms • Questions 	<ul style="list-style-type: none"> • Scene 4 • Text • Text • Explanation • Paraphrasing • Paraphrasing
13	<ul style="list-style-type: none"> • Grammar : Nouns • Articles • Correct the sentences 	<ul style="list-style-type: none"> • Questions • Questions • Questions • Passages for Explanation • Grammar • Grammar 	<ul style="list-style-type: none"> • Scene 5 • Explanation • Act 4, Scene1 • Text • Explanation • Paraphrasing
14	<ul style="list-style-type: none"> * Paraphrasing * Explanation * Questions 	<ul style="list-style-type: none"> • Transcription • Transcription • Transcription • Grammar • Grammar 	<ul style="list-style-type: none"> • Test • Act 4, scene 2 • Text • Explanation • Paraphrasing

		<ul style="list-style-type: none"> • Grammar 	<ul style="list-style-type: none"> • Explanation
15	<ul style="list-style-type: none"> • Questions • Vocabulary • Comprehension 	<ul style="list-style-type: none"> • Test • Group Discussion • Characters • Plot discussed • Comparative Analysis of the plays covered • Analysis 	<ul style="list-style-type: none"> • Act 5, scene1 • Text • Explanation • Paraphrasing • Important Stanzas from the text • :Questions exam-style explanation with reference to context • Stanzas
16	<ul style="list-style-type: none"> • Comprehension • Test • Assignment explained 	<ul style="list-style-type: none"> • Introduction of <i>The Sleepwalkers</i> • About the playwright • Theme • Text • Text • Text 	<ul style="list-style-type: none"> • Short Questions • Essay-type questions • Questions • Notes • Précis Writing • Summarising and Abstracting
17	<ul style="list-style-type: none"> • Revision • Revision • Group Discussion 	<ul style="list-style-type: none"> • Text • Text • Conclusion • Synonyms-Antonyms • Transcription • Questions • Intonation 	<ul style="list-style-type: none"> • One-word substitute • One-word substitute • Letter writing • Comprehension • Comprehension
18	<ul style="list-style-type: none"> • Revision • Comprehension 		
	<ul style="list-style-type: none"> * Test 		
	<ul style="list-style-type: none"> * Précis * Test Problems of the students 		
	<ul style="list-style-type: none"> * Test problems 		

Lesson Plan: 2nd, 4th, 6th Semesters

Mr Balkar Singh

Department of English

P1: Ideas Aglow (B.Sc 1)

P2: Centre Stage: A textbook of Plays and Language Skills (BA -2)

P3: The Merchant of Venice by William Shakespeare (BA-3)

Week	B. Sc -1 (3 days)	BA- 2 (6 days)	BA- 3
1	1 Introduction of English Essay 2 Text book: chapters briefing 3 Introduction of "Our Civilisation" by C.E.M. Joad	1 Introduction of English Drama 2 The Envoy by Bhasa * Introduction 3 Text Explained 4 Paraphrasing 5 Explanation 6 Explanation	<ul style="list-style-type: none"> • Introduction to William Shakespeare • Introduction to the play The Merchant of Venice • Major Characters of the play • Plot structure • Brief Summary • Text begins
2	- Our Civilisation -Explanation - Praise of Our Civilization	<ul style="list-style-type: none"> • Explanation • Synonyms - Antonyms • Short Questions • Questions (long answers) • Retrospective view of the play • Group Discussion 	<ul style="list-style-type: none"> • Text (Scene 1, Act 1) • Explanation • Paraphrasing • Explanation • Paraphrasing • Vocabulary
3	-Defects of our Civilisation -Conclusion -Question-Answer	<ul style="list-style-type: none"> • Introduction of The Swan Song • About the Playwright • Characters in the Play • Paraphrasing • Paraphrasing • Paraphrasing 	<ul style="list-style-type: none"> • Significance of opening scene discussed • Role-Play • Comprehension • Text • Text(scene 2) • Text
4	It's Question Time Intro -Text -Text	* Explanation * Explanation * Exercises on Vocabulary	<ul style="list-style-type: none"> • Text • Scene 3 • Text • Text • Paraphrasing

		<ul style="list-style-type: none"> * Exercises on Comprehension * Language Skills * Synonyms-Antonyms 	<ul style="list-style-type: none"> • Comprehension • Act 2 , Scene 1 • Text • Paraphrasing
5	<ul style="list-style-type: none"> * Comprehension * Vocabulary * Questions 	<ul style="list-style-type: none"> • Transcription symbols • Vowels, Consonants, diphthongs • Stressed – Unstressed Words • Word transcription exercise • Word transcription • Questions 	<ul style="list-style-type: none"> • Comprehension • Text • Scene 2 • Text • Scene 4 • Text • Simultaneous Role Play and GD with each scene
6	-An Interview with Christian Barnard by N. Ram -Intro -Text -Text	<ul style="list-style-type: none"> • Questions • Grammar • Grammar • Grammar • Grammar • Retrospective view of the play 	<ul style="list-style-type: none"> • Scene 5 • Text • Text • Scene 6 • Text • Explanation
7	-Explanation - Vocabulary - Questions	<ul style="list-style-type: none"> • Test 1 • Introduction of <i>The Monkey's Paw</i> • Text • Text • Explanation • Explanation 	<ul style="list-style-type: none"> • Scene 7 • Paraphrasing • Explanation • Text • Text • Scene 8
8	-Untouchability and the Caste System by B. R. Ambedkar Introduction -Text and paraphrasing - Text	<ul style="list-style-type: none"> • Text • Text • Text • Text • Explanation • Explanation 	<ul style="list-style-type: none"> • Text • Explanation • Important dialogues • Paraphrasing • Scene 9 • Text
9	-Text -Explanation -Paraphrasing	<ul style="list-style-type: none"> • Comprehension • Vocabulary • Language Skills 	<ul style="list-style-type: none"> • Act 3, Scene 1 • Text • Text • Paraphrasing

		<ul style="list-style-type: none"> • Synonyms-Antonyms • Questions • Questions 	<ul style="list-style-type: none"> • Explanation • Vocabulary
10	<ul style="list-style-type: none"> * Test 1 * Test Discussed * Answers and Explanation 	<ul style="list-style-type: none"> • Characters in the play • Passages for explanation • Retrospective view • Grammar • Grammar • Grammar 	<ul style="list-style-type: none"> • Scene 2 • Paraphrasing • Explanation • Paraphrasing • Explanation • Text
11	Inhumanisation of War by Huck Gutman <ul style="list-style-type: none"> • Intro • Text Explanation • Text 	<ul style="list-style-type: none"> • Introduction of Before Breakfast • Textual paraphrasing • Text • Text • Text • Text 	<ul style="list-style-type: none"> • Scene 3 • Explanation • Explanation • Paraphrasing • Paraphrasing • Vocabulary
12	<ul style="list-style-type: none"> • Text • Questions • Questions 	<ul style="list-style-type: none"> • Paraphrasing • Explanation • Explanation • Language Skills • Synonyms-Antonyms • Questions 	<ul style="list-style-type: none"> • Scene 4 • Text • Text • Explanation • Paraphrasing • Paraphrasing
13	<ul style="list-style-type: none"> • Grammar : Nouns • Articles • Correct the sentences 	<ul style="list-style-type: none"> • Questions • Questions • Questions • Passages for Explanation • Grammar • Grammar 	<ul style="list-style-type: none"> • Scene 5 • Explanation • Act 4, Scene1 • Text • Explanation • Paraphrasing
14	<ul style="list-style-type: none"> * Paraphrasing * Explanation * Questions 	<ul style="list-style-type: none"> • Transcription • Transcription • Transcription • Grammar • Grammar 	<ul style="list-style-type: none"> • Test • Act 4, scene 2 • Text • Explanation • Paraphrasing

		<ul style="list-style-type: none"> Grammar 	<ul style="list-style-type: none"> Explanation
15	<ul style="list-style-type: none"> Questions Vocabulary Comprehension 	<ul style="list-style-type: none"> Test Group Discussion Characters Plot discussed Comparative Analysis of the plays covered Analysis 	<ul style="list-style-type: none"> Act 5, scene1 Text Explanation Paraphrasing Important Stanzas from the text :Questions exam-style explanation with reference to context Stanzas
16	<ul style="list-style-type: none"> Comprehension Test Assignment explained 	<ul style="list-style-type: none"> Introduction of <i>The Sleepwalkers</i> About the playwright Theme Text Text Text 	<ul style="list-style-type: none"> Short Questions Essay-type questions Questions Notes Précis Writing Summarising and Abstracting
17	<ul style="list-style-type: none"> Revision Revision Group Discussion 	<ul style="list-style-type: none"> Text Text Conclusion Synonyms-Antonyms Transcription Questions Intonation 	<ul style="list-style-type: none"> One-word substitute One-word substitute Letter writing Comprehension Comprehension
18	<ul style="list-style-type: none"> Revision Comprehension 		
	<ul style="list-style-type: none"> * Test * Précis * Test Problems of the students * Test problems 		

Lesson Plan for Session OCT2021-JAN2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 1

Day 1	Theory	Practical
	B.Sc. I: Scalars and Vectors	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: dot and cross product	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Triple vector product	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Interference	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Interference by Division of Wavefront	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Fresnel's Biprism	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 2

Day 1	Theory	Practical
	B.Sc. I: Scalar and Vector fields	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Differentiation of a vector	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Gradient of a scalar	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Fresnel's Biprism	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Application of Fresnel's Biprism to determine wavelength of Sodium Light	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Application of Fresnel's Biprism to determine wavelength of Sodium Light	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 3

Day 1	Theory	Practical
	B.Sc. I: Significance of gradient of a scalar	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Line Integration of a vector	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Surface integration of a vector	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Application of Fresnel's Biprism to determine thickness of Mica Sheet	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Lloyd's Mirror	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Lloyd's Mirror	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 4

Day 1	Theory	Practical
	B.Sc. I: Volume integration of a vector	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: physical significance of integration	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Gauss divergence theorem (GD)	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Lloyd's Mirror	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Phase Change on Reflection	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Phase Change on Reflection	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 5

Day 1	Theory	Practical
	B.Sc. I: Numericals of GD	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Stokes theorem	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Numerical on stokes theorem	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Revision of Unit I	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Revision of Unit I	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Class Test of Unit I	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 6

Day 1	Theory	Practical
	B.Sc. I: Revision of Unit I	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Revision of Unit I	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Class Test of Unit I	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Matrix methods in paraxial optics	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Matrix methods in paraxial optics	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Effect of Translation	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 7

Day 1	Theory	Practical
	B.Sc. I: Derivation of field E from potential	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: derivation of Laplace Equation	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: derivation of Poisson's Equation	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Effect of Refraction	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Derivation of Thin Lens Formula	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Derivation of Thin Lens Formula	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 8

Day 1	Theory	Practical
	B.Sc. I: Electric Flux	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Gauss's Law	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Application to spherical shell	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Derivation of Thick Lens Formula	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Derivation of Thick Lens Formula	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Unit Plane	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 9

Day 1	Theory	Practical
	B.Sc. I: App. To infinitely charged plane	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Uniformly charged straight wire	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: mechanical force of charged surface	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Nodal Plane	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: System of Thin Lenses	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Chromatic Aberration	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 10

Day 1	Theory	Practical
	B.Sc. I: Energy per unit volume	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Magneto statics	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Magnetic Induction	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Spherical Aberration	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Coma Aberration	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Astigmatism	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 11

Day 1	Theory	Practical
	B.Sc. I: Magnetic flux	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: solenoidal nature of Vector field	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Properties of B	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Distortion Aberration	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Remedies of Aberrations	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Remedies of Aberrations	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 12

Day 1	Theory	Practical
B.Sc. I: Revision of Unit II		B.Sc. Practical for Three Periods
Day 2		
B.Sc. I: Revision of Unit II		B.Sc. Practical for Three Periods
Day 3		
B.Sc. I: Class Test of Unit II		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II: Revision of Unit II		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II: Revision of Unit II		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II: Class Test of Unit II		B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 13

Day 1	Theory	Practical
	B.Sc. I: Electronic theory of dia and para magnetism (Langevin's theory)	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Domain theory of ferromagnetism	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Cycle of Magnetisation	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Fourier Analysis	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Fourier Transform	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Speed of transverse waves on a uniform string	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 14

Day 1	Theory	Practical
	B.Sc. I: Hysteresis (Energy dissipation, Hysteresis loss and importance of Hysteresis curve)	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Maxwell equation and their derivations	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Displacement Current. Vector and scalar potentials	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Speed of longitudinal waves in a fluid	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Superposition of waves (physical idea)	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Superposition of waves	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 15

Day 1	Theory	Practical
	B.Sc. I: boundary conditions at interface between two different media	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Propagation of electromagnetic wave	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Propagation of electromagnetic wave	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Fourier Analysis of complex waves	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Application of Fourier Analysis to solution of triangular wave	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Application of Fourier Analysis to Solution of Rectangular wave	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

Name of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 16

Day 1	Theory	Practical
	B.Sc. I: Poynting vector and Poynting theorem	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Numerical problems	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Numerical problems	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Application of Fourier Analysis to Solution of Half wave rectifier	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Application of Fourier Analysis to Solution of Full wave rectifier	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Application of fourier transform	B.Sc. Practical for Three Periods

Lesson Plan for Session OCT2021-JAN 2022 .(Odd Semester)

ssName of Assistant Professor- Dr. Dhruv Kumar Sharma

Class and Section- B. Sc. I (PHY 102 : ELECTRICITY AND MAGNETISM)

B. Sc. II (PHY 302: Optics – I)

Subject Lesson Plan: 17 weeks

Week 17

Day 1	Theory	Practical
	B.Sc. I: Revision of Unit III	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. I: Revision of Unit III	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. I: Class Test of Unit III	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Revision of Unit III	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Revision of Unit III	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Class Test of Unit III	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 1

Day 1	Theory	Practical
	B.Sc. III: Crystalline and glassy forms	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Liquid crystals	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Crystal structure	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Mechanics of single and system of particles	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Mechanics of single and system of particles	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Conservation of laws of linear momentum	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 2

Day 1	Theory	Practical
	B.Sc. III: Periodicity, lattice and basis	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Crystal translational vectors and axes	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Crystal translational vectors and axes	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Conservation of laws of Angular Momentum	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Conservation of laws of Mechanical Energy	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Conservation of laws of Mechanical Energy	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 3

Day 1	Theory	Practical
	B.Sc. III: Unit cell and primitive cell	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Unit cell and primitive cell	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Winger Seitz primitive Cell	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Center of Mass	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Equation of motion	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Equation of Motion	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 4

Day 1	Theory	Practical
	B.Sc. III: Symmetry operations for a two dimensional crystal	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Symmetry operations for a two dimensional crystal	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Bravais lattices in two dimensions	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Constraints of Motion	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Constraints of Motion	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Definition of Degree of Freedom	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 5

Day 1	Theory	Practical
	B.Sc. III: Bravais lattices in three dimensions	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Solution of Numerical Problems based on Unit I	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Solution of Numerical Problems based on Unit I	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Example of Degree of Freedom	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Numerical problems based on Degree of Freedom	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Numerical problems based on Degree of Freedom	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 6

Day 1	Theory	Practical
B.Sc. III: Revision of Unit I		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III: Revision of Unit I		B.Sc. Practical for Three Periods
Day 3		
B.Sc. III: Class Test of Unit I		B.Sc. Practical for Six Periods
Day 4		
B.Sc. I: Revision of Unit I		B.Sc. Practical for Three Periods
Day 5		
B.Sc. I: Revision of Unit I		B.Sc. Practical for Three Periods
Day 6		
B.Sc. I: Class Test of Unit I		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 7

Day 1	Theory	Practical
	B.Sc. III: Crystal planes	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Miller indices	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Miller indices	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Generalized coordinates	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Generalized Displacement	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Generalized Velocity	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 8

Day 1	Theory	Practical
	B.Sc. III: Interplanar spacing	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Crystal structures of Zinc sulphide	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Crystal structures of Sodium Chloride	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Generalized Acceleration	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Generalized Momentum	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Generalized Force and Potential	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 9

Day 1	Theory	Practical
	B.Sc. III: Crystal structures of Diamond	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: X-ray diffraction	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: X-ray diffraction	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Hamilton's variational principle	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Lagrange's equation of motion from Hamilton's Principle	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Lagrange's equation of motion from Hamilton's Principle	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 10

Day 1	Theory	Practical
	B.Sc. III: Bragg's Law	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Bragg's Law	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Experimental x-ray diffraction methods	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Linear Harmonic oscillator	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Simple Pendulum	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Atwood's Machine	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 11

Day 1	Theory	Practical
	B.Sc. III: Experimental x-ray diffraction methods	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: K-Space	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: K-Space	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Numerical Based on Langrange's Equation of Motion	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Numerical Based on Langrange's Equation of Motion	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Numerical Based on Langrange's Equation of Motion	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 12

Day 1	Theory	Practical
B.Sc. III: Revision of Unit II		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III: Revision of Unit II		B.Sc. Practical for Three Periods
Day 3		
B.Sc. III: Class Test of Unit II		B.Sc. Practical for Six Periods
Day 4		
B.Sc. I: Revision of Unit II		B.Sc. Practical for Three Periods
Day 5		
B.Sc. I: Revision of Unit II		B.Sc. Practical for Three Periods
Day 6		
B.Sc. I: Class Test of Unit II		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 13

Day 1	Theory	Practical
	B.Sc. III: Reciprocal lattice	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Physical Significance of Reciprocal lattice	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Reciprocal lattice vectors	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Rotation of Rigid body	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Moment of inertia	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Torque, angular momentum, kinetic energy of rotation	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 14

Day 1	Theory	Practical
	B.Sc. III: Reciprocal lattice to a simple cubic lattice	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Reciprocal lattice to a b.c.c.	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Reciprocal lattice to a f.c.c.	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Theorems of perpendicular and parallel axes with proof	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Moment of inertia of solid sphere	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Moment of inertia of hollow sphere	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 15

Day 1	Theory	Practical
	B.Sc. III: Specific heat	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Specific heat of solids	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Specific heat of solids	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Moment of inertia of spherical shell	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Moment of inertia of solid cylinder	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Moment of inertia of hollow cylinder	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 16

Day 1	Theory	Practical
	B.Sc. III: Einstein Theory of Specific Heat	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Debye's Theory of Specific Heat	B.Sc. Practical for Three Periods
Day 3		
	B.Sc. III: Debye's Theory of Specific Heat	B.Sc. Practical for Six Periods
Day 4		
	B.Sc. I: Moment of inertia of solid bar of rectangular cross-section	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. I: Acceleration of a body rolling down on an inclined plane	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. I: Acceleration of a body rolling down on an inclined plane	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- Dr. Jitender

Class and Section- B. Sc. I (PHY 101 : Mechanics)

B. Sc. III (PHY 501 : Solid State Physics)

Subject Lesson Plan: 17 weeks

Week 17

Day 1	Theory	Practical
B.Sc. III: Revision of Unit III		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III: Revision of Unit III		B.Sc. Practical for Three Periods
Day 3		
B.Sc. III: Class Test of Unit III		B.Sc. Practical for Six Periods
Day 4		
B.Sc. I: Revision of Unit III		B.Sc. Practical for Three Periods
Day 5		
B.Sc. I: Revision of Unit III		B.Sc. Practical for Three Periods
Day 6		
B.Sc. I: Class Test of Unit III		B.Sc. Practical for Three Periods

Name of Faculty- Dr. Jitender

P_2: Nuclear Physics (PHY-602)

P₁:- Electronic Devices
P₂:- Nuclear Physics

	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Week	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2
1	Scalars and Vectors	-	dot and cross product	-	Triple vector product	-	-	Nuclear mass and binding energy	-	systematics nuclear binding energy	-	nuclear stability
2	Scalar and Vector fields	-	Differentiation of a vector	-	Gradient of a scalar	-	-	Nuclear size, spin	-	parity, statistics	-	magnetic dipole moment
3	physical significance of Gradient	-	Integration of a vector	-	Line Integral	-	-	quadrupole moment (shape concept)	-	Determination of mass by Bain-Bridge	-	Bain-Bride and Jordan mass spectrograph
4	Surface Integral	-	Volume Integral	-	Physical Significance	-	-	Determination of charge by Mosley law	-	Determination of size of nuclei by Rutherford Back Scattering	-	Revision
5	Gauss's Divergence Theorem	-	Numerical practice on Gauss Divergence Theorem	-	Stokes Theorem and numerical practice	-	-	Class Test of Unit 1	-	Interaction of heavy charged particles (Alpha particles)	-	alpha disintegration and its Theory
6	Electrostatic field & its Derivation from potential as gradient	-	Derivation of Laplace and Poisson equations.	-	Practice of numericals based on Laplace theorem	-	-	Energy loss of heavy charged particle (idea of Bethe formula)	-	Energetics of alpha-decay	-	Range and straggling of alpha particles

3.

Lesson Plan for Session 2020-21 (Even Semester)

Name of Faculty- Dr. Jitender

P_1: Electro-magnetic Induction and Electronic Devices (PHY-202)
P_2: Nuclear Physics (PHY-602)

	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Week	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2
7	Electric flux	-	Gauss's law & its derivation	-	Gauss theorem to Spherical Shell and uniformly charged straight wire	-	-	Geiger-Nuttal law	-	Introduction of light charged particle (Beta-particle)	-	Origin of continuous beta-spectrum (neutrino hypothesis)
8	Practice of numericals based on Gauss theorem	-	Gauss Theorem to uniformly charged infinite plane	-	Mechanical force of a charged surface	-	-	types of beta decay and energetics of beta decay	-	Energy loss of Beta Particles (Ionization)	-	Range of Electrons
9	Calculation of Energy per unit volume	-	Revision of Unit 1	-	Class test of Unit 1	-	-	absorption of beta-particles	-	Interaction of Gamma Ray	-	Nature of gamma rays & Energetics of gamma rays
10	Introduction to Magnetostatics	-	Defination of Magnetic Induction, Magnetic Flux	-	Solenoidal nature of vector field of Induction	-	-	passage of Gamma radiations through matter (photoelectric,	-	electron position annihilation	-	Asorption of Gamma rays (Mass attenuation coefficient) and
11	Explanation of Properties of B	-	Electronic Theory of Diamagnetism	-	Electronic Theory of Paramagnetism	-	-	Practice of Numericals based on Unit 2	-	Revision of theoretical concepts	-	Class test of Unit 2

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Lesson Plan for Session 2020-21 (Even Semester)

Name of Faculty- Dr. Jitender

P_1: Electro-magnetic Induction and Electronic Devices (PHY-202)

P_2: Nuclear Physics (PHY-602)

	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Weak	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2
12	Practice of numericals based on diamagnetism and paramagnetism	-	Domain theory of ferromagnetism	-	Numerical practice on ferromagnetism	-	Nuclear reactions	-	Elastic scattering and Inelastic scattering	-	Nuclear disintegration	
13	Cycle of magnetisation: Hysteresis	-	Energy dissipation	-	Hysteresis loss and importance of Hysteresis curve	-	photoneuclear reaction	-	Radiative capture	-	Direct reaction	
14	Revision of Unit 2	-	Electromagnetic Theory	-	Introductions to Maxwell's Equation	-	heavy ion reactions and spallation Reactions	-	conservation laws	-	Q-value and reaction threshold	
15	Derivation of Maxwell Equations	-	Numericals based on Maxwell's Equations	-	Displacement Current	-	Nuclear Reactors: General aspects of Reactor design	-	Nuclear fission Reactor(Principles, construction, working and use)	-	Nuclear Fusion reactors (Principles, construction, working and use)	
16	Vector and Scalar Potentials	-	Boundary Conditions at the interface of two media	-	Propagation of Electromagnetic waves	-	Linear accelerator and Tandem accelerator	-	Cyclotron and Betatron accelerators	-	Ionization chamber and proportional counter	

Jitender

Lesson Plan for Session 2020-21 (Even Semester)

Name of Faculty- Dr. Jitender

P_1: Electro-magnetic Induction and Electronic Devices (PHY-202)

P_2: Nuclear Physics (PHY-602)

	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Weak	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2	P_1	P_2
17	Poynting Vector	-	Poynting Theorem	-	Numericals based on Boundary conditions and Poynting Theorem	-	G.M. counter detailed study	-	scintillation counter	-	semiconductor detector	-
18	Class test of Unit 3	-	Revision of Unit 1, 2, 3	-	Combined test of Complete syllabus	-	Practice of Numericals based on Unit 3	-	Revision of theoretical concepts of Unit 3	-	Class test of Unit 3	-

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Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 1

Day 1	Theory	Practical
	B.Sc. III:Failure of (Classical) E.M. Theory	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Quantum theory of radiation (old quantum theory)	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Photon, photoelectric effect and Einsteins photoelectric equation	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Computer Programming	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Computer Programming	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Computer Organization	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 2

Day 1	Theory	Practical
B.Sc. III:Compton effect (theory and result)		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:Inadequacy of old quantum theory		B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:De-Broglie hypothesis		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:Computer Organization		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Binary Representation		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Algorithm development		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 3

Day 1	Theory	Practical
	B.Sc. III: Davisson and Germer experiment	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: G.P. Thomson experiment	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III: Phase velocity group velocity	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Algorithm development	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Fortran Preliminaries	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Integer and floating point arithmetic expression	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 4

Day 1	Theory	Practical
	B.Sc. III: Heisenberg's uncertainty principle	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III: Time-energy and angular momentum	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III: Position uncertainty	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II: Functions executable	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II: Non-executable statements	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II: Input and output statements	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 5

Day 1	Theory	Practical
	B.Sc. III:Uncertainty principle from de-Broglie wave, (wave-partice duality)	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Gamma Ray Microscope	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Electron diffraction from a slit	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Formats	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:I.F. DO and GO TO statements	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Dimesion arrays statement	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 6

Day 1	Theory	Practical
B.Sc. III:Revision of Unit I		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:Revision of Unit I		B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:Class Test of Unit I		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:function and function subprogram		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Revision of Unit I		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Class Test of Unit I		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 7

Day 1	Theory	Practical
	B.Sc. III:Derivation of time dependent Schrodinger wave equation	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Eigen values	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Eigen values	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Second law of thermodynamics	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Carnot theorem	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Carnot theorem	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 8

Day 1	Theory	Practical
B.Sc. III:Eigen Functions		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:Eigen Functions		B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:Eigen Functions (Extended)		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:Scale of temperature		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Absolute Zero		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Entropy, show that $dQ/T=O$		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 9

Day 1	Theory	Practical
	B.Sc. III:Normalization of wave function	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Normalization of wave function	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Concept of Observable	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:T-S diagram	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Nernst heat law	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Joule's free expansion	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 10

Day 1	Theory	Practical
	B.Sc. III:Concept of Operator	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Numerical Problems based on Operator and Observable	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Numerical Problems based on Operator and Observable	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Joule Thomson (Porous plug) experiment	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Joule - Thomson effect	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Liquefaction of gases	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 11

Day 1	Theory	Practical
	B.Sc. III:Solution of Schrodinger equation for harmomic oscillator ground states and Excited State	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Solution of Schrodinger equation for harmomic oscillator ground states and Excited State	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Solution of Schrodinger equation for harmomic oscillator ground states and Excited State	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Air pollution due to internal combustion Engine	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Revision of Unit II	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Class Test of Unit II	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 12

Day 1	Theory	Practical
B.Sc. III:Revision of Unit II		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:Revision of Unit II		B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:Class Test of Unit II		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:Derivation of Clausius - Claperyron latent heat equation		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Derivation of Clausius - Claperyron latent heat equation		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Phase diagram and triple point of a substance		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 13

Day 1	Theory	Practical
	B.Sc. III:Solution of Schrodinger equation for Free particle in one dimensional box	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Eigen Function and Eigen Values of Free Particle in One Dimentional Box	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Quantization of Energy of Free Particle in One Dimentional Box	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Phase diagram and triple point of a substance	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Development of Maxwell thermodynamical relations	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Application of Maxwell relations in the derivation of relations between entropy	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 14

Day 1	Theory	Practical
	B.Sc. III:Nodes and antinodes, zero point energy of Free particle in One Dimensional Box	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:Revision of problems on Free Particle in One Dimentional Box	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:Revision of problems on Free Particle in One Dimentional Box	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Specific heats and thermodynamic variables	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Internal energy (U)	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Helmholtz function (F)	B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 15

Day 1	Theory	Practical
B.Sc. III:One-dimensional Transmission coefficient)	potential barrier $E > V_0$ (Reflection and	B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:One-dimensional Transmission coefficient)	potential barrier $E > V_0$ (Reflection and	B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:One-dimensional Transmission coefficient)	potential barrier $E > V_0$ (Reflection and	B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:Enthalpy (H)		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Gibbs function (G)		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Relations between the Thermodynamic Variables		B.Sc. Practical for Three Periods

Lesson Plan for Session 2021-22 (Odd Semester)

Name of Assistant Professor- POONAM PAHUJA

Class and Section- B. Sc. II (PHY 301: Computer Programming, Thermodynamics)

B. Sc. III (PHY 502 : QUANTUM MECHANICS)

Subject Lesson Plan: 17 weeks

Week 16

Day 1	Theory	Practical
	B.Sc. III:One-dimensional potential barrier, $E < V_0$ (Reflection Coefficient)	B.Sc. Practical for Three Periods
Day 2		
	B.Sc. III:One-dimensional potential barrier, $E < V_0$ (penetration of leakage coefficient, penetration depth)	B.Sc. Practical for Six Periods
Day 3		
	B.Sc. III:One-dimensional potential barrier, $E < V_0$ (penetration of leakage coefficient, penetration depth)	B.Sc. Practical for Three Periods
Day 4		
	B.Sc. II:Practice of Numerical Problems on Thermodynamic Variables	B.Sc. Practical for Three Periods
Day 5		
	B.Sc. II:Practice of Numerical Problems on Thermodynamic Variables	B.Sc. Practical for Three Periods
Day 6		
	B.Sc. II:Practice of Numerical Problems on Thermodynamic Variables	B.Sc. Practical for Three Periods

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Week 17

Day 1	Theory	Practical
B.Sc. III:Revision of Unit III		B.Sc. Practical for Three Periods
Day 2		
B.Sc. III:Revision of Unit III		B.Sc. Practical for Six Periods
Day 3		
B.Sc. III:Class Test of Unit III		B.Sc. Practical for Three Periods
Day 4		
B.Sc. II:Revision of Unit III		B.Sc. Practical for Three Periods
Day 5		
B.Sc. II:Revision of Unit III		B.Sc. Practical for Three Periods
Day 6		
B.Sc. II:Class Test of Unit III		B.Sc. Practical for Three Periods