

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Life and diversity from Protozoa
to Porifera and Cell Biology - I

Class: B.Sc. I

Name of the Teachers (Section Wise) : Pawan Kumar

WEEK	DATE	TOPICS
1	September (6-10)	Porifera: General Characters
		Porifera: Classification
SUNDAY - 11.09.2022		
2	September (12-17)	Porifera: Biodiversity
		Porifera: Economic Importance
		Porifera: Type Study-Sycon
SUNDAY - 18.09.2022		
3	September (19-24)	Porifera: Type Study-Sycon
		Porifera: Type Study-Sycon
		Porifera: Type Study-Sycon
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Porifera: Canal System in Sponges
		Porifera: Spicules in Sponges
		class test
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Protozoa: General Character
		Protozoa: Classification
		Protozoa: Biodiversity
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Protozoa: Plasmodium
		Protozoa: Plasmodium
		Protozoa: Entamoeba
SUNDAY - 16.10.2022		
7	October (17-21)	Protozoa: Trypanosoma
		Protozoa: Leishmania
		Protozoa: Giardia
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Cell Biology: Plasma Membrane
		Cell Biology: Plasma Membrane
		Cell Biology: Endoplasmic Reticulum
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Cell Biology: Golgi Complex
		Cell Biology: Ribosomes
		Cell Biology: Lysosomes
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Cell Biology: Mitochondria
		Cell Biology: Mitochondria
		class test
SUNDAY - 20.11.2022		
12	November (21-26)	Cell Biology: Cytoskeleton
		Cell Biology: Cytoskeleton
		class test
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Cell Biology: Cytoskeleton
		Cell Biology: Cytoskeleton
		Cell Biology: Cytoskeleton
SUNDAY - 04.12.2022		
14	December (5-10)	Revision
		Revision
		Revision
SUNDAY - 11.12.2022		
15	December (12-14)	Revision
		Revision
		Revision

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LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Life and Diversity from colenterata And helminthes and cell biology II Class: B.Sc. Medical

Name of the Teachers (Section Wise) : Ms. BHAWNA MALIK

WEEK	DATE	TOPICS
1	September (6-10)	
		General characters of Coelenterates
		Biodiversity and Economic importance
SUNDAY - 11.09.2022		
2	September (12-17)	
		Type study <i>Obelia</i>
		Type study <i>Obelia</i>
SUNDAY - 18.09.2022		
3	September (19-24)	
		Type study <i>Obelia</i>
		Type study <i>Obelia</i>
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	
		Type study <i>Obelia</i>
		Type study <i>Obelia</i>
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	
		Corel and corel reefs
		Polymorphism in Siphonophores
Revision test		
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	
		General characters of Helminthes
		Biodiversity and Economic importance
		Type study <i>Fasciola hepatica</i>
SUNDAY - 16.10.2022		
7	October (17-21)	
		Type study <i>Fasciola hepatica</i>
		Type study <i>Fasciola hepatica</i>
		Type study <i>Fasciola hepatica</i>
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Type study <i>Fasciola hepatica</i>
		Type study <i>Fasciola hepatica</i>
		Type study <i>Fasciola hepatica</i>
SUNDAY - 30.10.2022		
9	October (31)	
	November (1-5)	Helminthes parasites
		Helminthes parasites
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	
		Helminthes parasites
		Ultrastructure and structure of nucleus
		Nuclear membrane, Nucleolus
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	
		Fine structure of chromosomes
		Nucleosome concept and role of histones
		Euchromatin and heterochromatin
SUNDAY - 20.11.2022		
12	November (21-26)	
		Mitosis and Meiosis
		Mitosis and Meiosis
		Mitosis and Meiosis
SUNDAY - 27.11.2022		

13	November (28-30)	
	December (1-3)	Brief account of cause of cancer
		Brief account of cause of cancer
		Brief account of cause of cancer
SUNDAY - 04.12.2022		
14	December (5-10)	
		Cellular basis of Immunity
		Cellular basis of Immunity
		Revision test
SUNDAY - 11.12.2022		
15	December (12-14)	

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(Odd Semester)

UG (1st Semester)

Name of the Paper:-Electricity, Magnetism and Electromagnetic theory Class: B.Sc

Name of the Teachers (Section Wise) : Prof. Garima Tarika

WEEK	DATE	TOPICS
1	September (6-10)	Unit - I : Mathematical Background Gradient of a scalar and
		its physical significance
		Line Integral Surface Integral and its physical significance
SUNDAY - 11.09.2022		
2	September (12-17)	Numerical
		Volume integrals of a vector
		and their physical significance
		Numericals
SUNDAY - 18.09.2022		
3	September (19-24)	Flux of a vector field,
		Divergence of a vector and
		their physical significance
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Gauss's divergence theorem
		Numerical
		Discussion
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Stoke's theorem
		Derivation of electric field E from potential as gradient
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Derivation of Laplace and Poisson equations
		Electric flux, Gauss's Law
		Numericals
SUNDAY - 16.10.2022		
7	October (17-21)	Mechanical force of charged surface
		Unit 2: Magnetism : Magnetic induction, Magnetic flux
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Numericals
		Solenoidal nature of vector field of induction
		properties of B (i) , (ii)
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Electronic theory of dia and paramagnetism
		Derivation
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Domain theory of ferromagnetism (Langevin's theory)
		Cycle of magnetization- hysteresis loop
		Numericals
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Unit 3: Electromagnetism : Maxwell equations and their derivations
		Derivation (Alternate Method)
		Derivation Continued, Displacement current
SUNDAY - 20.11.2022		
12	November (21-26)	Vector and Scalar potentials,
		Boundary conditions at interface between two different media
		Propagation of electromagnetic wave (Basic idea, no derivation),
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Poynting vector and Poynting theorem.
		Unit 4 : A.C. circuit analysis using complex
		variable with (a) Capacitance and Resistance
		(b) Resistance and Inductance
		(c) Capacitance and Inductance (LC)
SUNDAY - 04.12.2022		
14	December (5-10)	Capacitance, Inductance and Resistance (LCR),
		Series and parallel resonance circuit, Quality factor (sharpness of resonance)
		Revision
SUNDAY - 11.12.2022		
15	December (12-14)	

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LESSON PLAN

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Weekly Lesson Plan

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UG (1st Semester)

Name of the Paper:- Classical Mechanics

Class: B.Sc

Name of the Teachers (Section Wise) : Ms. Anjali Singla

WEEK	DATE	TOPICS
1	September (6-10)	UNIT-I (BASIC CONCEPTS OF CLASSICAL MECHANICS) INTRODUCTION OF CLASSICAL MECHANICS , MECHANICS OF A SINGLE PARTICLE
		TYPES OF FORCES, SOME IMPORTANT TERMS USED IN CLASSICAL MECHANICS AND THEIR BRIEF DESCRIPTION
SUNDAY - 11.09.2022		
2	September (12-17)	NEWTON'S SECOND LAW OF MOTION, WORK DONE IN TERMS OF KINETIC ENERGY AND POTENTIAL ENERGY
		CONSERVATION THEOREM OF LINEAR MOMENTUM FOR A SINGLE PARTICLE
		CONSERVATION THEOREM OF ANGULAR MOMENTUM FOR A SINGLE PARTICLE
SUNDAY - 18.09.2022		
3	September (19-24)	CONSERVATION THEOREM OF ENERGY FOR A SINGLE PARTICLE
		MECHANICS OF A SYSTEM OF PARTICLES
		CONSERVATION THEOREM OF LINEAR AND ANGULAR MOMENTUM FOR A SYSTEM OF PARTICLES
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martyrdom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	CONSERVATION THEOREM OF ANGULAR MOMENTUM OF A SYSTEM OF PARTICLES IN TERMS OF C.M
		CONSERVATION THEOREM OF ENERGY FOR A SYSTEM OF 'N' PARTICLES
		KINETIC ENERGY IN TERM OF CENTRE OF MASS
		NUMERICALS AND CONCEPTUAL QUESTIONS
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	CONSTRAINTS AND THEIR CLASSIFICATION,EXAMPLES OF CONSTRAINTS
		DEGREE OF FREEDOM,DISCUSSION OF PROBLEMS BASED ON UNIT-I ASSIGNMENT -1
		DEGREES OF FREEDOM, GENERALIZED CO-ORDINATES,
		TRANSFORMATION EQUATIONS ,GENERALIZED DISPLACEMENT
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	GENERALIZED VELOCITY, GENERALIZED ACCELERATION
		GENERALIZED MOMENTUM
		GENERALIZED FORCE , GENERALIZED POTENTIAL
		ADVANTAGES OF GENERALIZED COORDINATE
SUNDAY - 16.10.2022		
7	October (17-21)	CONFIGURATION SPACE , HAMILTON'S VARIATIONAL PRINCIPLE
		DERIVATION OF LAGRANGE'S EQUATIONS OF MOTION FROM HAMILTON 'S PRINCIPLE
		LINEAR HARMONIC OSCILLATOR, ATWOOD'S MACHINE
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	SIMPLE PENDULUM ,PROBLEM DISCUSSION
		DISCUSSION OF PROBLEMS BASED ON UNIT-2,CONCEPTUAL QUESTIONS
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	UNIT -III (THEORY OF RELATIVITY) FRAME OF REFERENCE , LIMITATION OF NEWTON'S LAW OF MOTION
		INERTIAL FRAME OF REFERENCE, NON-INERTIAL FRAME OF REFERENCE
		GALILEAN TRANSFORMATION , GALILEAN INVARIANCE (MEASUREMENT OF LENGTH & VELOCITY)
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	CONDITIONAL TEST
		GALILEAN INVARIANCE (MEASUREMENT OF ACCELERATION) CONSERVATIONS LAWS ACCORDING TO GALILEAN'S TRANSFORMATIONS (CONSERVATION OF MOMENTUM)
		TRANSFORMATION EQUATION FOR A FRAME OF REFERENCE INCLINED TO AN INERTIAL FRAME
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	TRANSFORMATION EQUATION FOR ROTATING FRAME OF REFERENCE , NON INERTIAL FRAME OF REFERENCE
		THE ACCELERATED FRAME OF REFERENCE AND ROTATING FRAME OF REFERENCE
		EFFECT OF CENTRIFUGAL FORCE ON THE VALUE OF g due to Gravity on Earth
SUNDAY - 20.11.2022		
12	November (21-26)	CORIOLIS FORCE EFFECT ON FREELY FALLING PARTICLE
		MICHELSON-MORLEY EXPERIMENT CONCEPT OF EINSTEIN'S RELATIVITY
		UNIT IV: (APPLICATION OF THEORY OF RELATIVITY) SPECIAL THEORY OF RELATIVITY
		LORENTZ COORDINATE AND PHYSICAL SIGNIFICANCE OF LORENTZ INVARIANCE
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	LENGTH CONTRACTION , TIME DILATION
		TWIN PARADOX, VELOCITY ADDITION THEOREM
		VELOCITY ADDITION THEOREM OF RELATIVISTIC ADDITION OF VELOCITIES
		VARIATION OF MASS WITH VELOCITY ,MASS ENERGY EQUIVALENCE
		EINSTEIN'S MASS ENERGY RELATIONSHIP
SUNDAY - 04.12.2022		
14	December (5-10)	TRANSFORMATION OF RELATIVISTIC MOMENTUM AND ENERGY
		RELATION BETWEEN RELATIVISTIC MOMENTUM AND ENERGY
		MASS, VELOCITY ,MOMENTUM AND ENERGY OF ZERO REST MASS
SUNDAY - 11.12.2022		
15	December (12-14)	Revision
		Revision
		Revision

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Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- SOLID GEOMETRY

Class: B.SC.-I

Name of the Teachers (Section Wise) : SHIVANI MITTAL

WEEK	DATE	TOPICS
1	September (6-10)	CONIC SECTION, GENERAL EQ OF SECOND DEGREE
		TO FIND THE LENGTH AND EQUATION OF THE AREAS OF A CENTRAL CONIC
		THE PARABOLA GENERAL
		PROBLEM DISCUSSION
		CH-2 TRACING OF A CENTRAL CONIC- ELLIPSE
SUNDAY - 11.09.2022		
2	September (12-17)	TRACING OF A HYPERBOLA , PARABOLA
		PROBLEM DISCUSSION
		TEST OF CH-1,2
		CH-3 TANGENT AND NORMAL TO A CONIC
		POLE AND POLAR
		NUMERICALS ON POLE AND POLAR OF CONIC
SUNDAY - 18.09.2022		
3	September (19-24)	CH-4 SYSTEM OF CONICS
		RELATED ARTICLES AND NUMERICAL OF SYSTEM OF CONICS
		PROBLEM DISCUSSION OF CH-3,4
		CH-5 CONFOCAL CONICS
		RELATED NUMERICAL
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martyrdom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	POLAR COORDINATES
		CONIC SECTION IN POLAR FORM
		RELATED NUMERICALS
		PROBLEM DISCUSSION OF CH-5,6
		SPHERE-CENTRE,RADIUS AND VARIOUS FORM OF SPHERE
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	SPHERE PASSING THROUGH FOUR POINTS
		PLANE SECTION OF A SPHERE
		SPHERE PASSING THROUGH A GIVEN CIRCLE
		INTERSECTION OF TWO SPHERES
		SPHERE AND A LINE
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	TANGENT TO A SPHERE
		DIAMETRAL AND POLAR PLANE
		INTERSECTION OF TWO SPHERES
		RADICAL PLANE
		EQUATION OF CONE WITH GIVEN VERTEX AND CONIC AS BASE
		EQUATION OF RIGHT CIRCULAR CONE
SUNDAY - 16.10.2022		
7	October (17-21)	EQUATION OF ENVELOPING CONE
		CONE REPRESENTATION BY GENERAL EQUATION OF SECOND DEGREE
		EQUATION OF A QUADRIC CONE THROUGH AXES
		CONDITION OF CONE TO HAVE THREE PERPENDICULAR GENERATORS
		EQUATION OF A TANGENT PLANE, CONDITION OF TANGENCY
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	EQUATION OF RECIPROCAL CONE
		PROBLEM DISCUSSION OF CH-7,8
		TEST OF CH-7,8
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	EQUATION OF CYLINDER WHOSE AXIS AND GUIDING CURVE ARE GIVEN
		EQUATION OF RIGHT CIRCULAR CYLINDER IN STANDARD FORM, GENERAL FORM
		EQUATION OF THE ENVELOPING CYLINDER
		CONICOID
		EQUATION OF TANGENT PLANE, CONDITION OF TANGENCY
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	THE EQUATION OF DIRECTOR SPHERE
		NUMBER OF NORMALS FROM A GIVEN POINT
		CUBIC CURVE THROUGH FEET OF SIX NORMALS
		QUADRIC CONE THROUGH SIX CONCURRENT NORMALS
		POLAR PLANE OF A POINT
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	RECIPROCAL PROPERTY
		POLE OF A GIVEN SPHERE
		CONDITIONS FOR TWO PLANE TO BE CONJUGATE
		POLAR OF A PLANE W.R.T. CONICOID
		ENVELOPING CYLINDER OF CONICOID
		DIAMETRAL PLANE PROPERTY
SUNDAY - 20.11.2022		
12	November (21-26)	PLANE SECTION WITH GIVEN CENTRE
		INTERSECTION OF A LINE AND PARABOLOID
		CONDITION OF TANGENCY OF A LINE FOR PARABOLOID
		LOUCS OF POINTS OF INTERSECTION
		NORMALS TO AN ELLIPTIC PARABOLOID
		NUMBER OF NORMALS FROM A GIVEN POINT
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	TEST OF CH-9,10
		CENTRAL PLANE SECTION OF CENTRAL CONICOID
		NON-CENTRAL PLANE SECTION OF CENTRAL CONICOID
		CIRCULAR SECTIONS
		PLANE SECTIONS OF THE PARABOLOID
		GENERATING LINES OF HYPERBOLIC OF ONE SHEET, HYPERBOLIC PARABOLOID
SUNDAY - 04.12.2022		
14	December (5-10)	PROBLEM DISCUSSION OF CH-11,12
		CONFOCAL CONICOIDS
		CONFOCALS THROUGH A GIVEN POINT AND GIVEN LINE
		ELLIPTIC COORDINATES
		CONT...
		REDUCTION OF SECOND DEGREE EQUATIONS
SUNDAY - 11.12.2022		
15	December (12-14)	REDUCTION OF SECOND DEGREE EQUATIONS
		REDUCTION OF SECOND DEGREE EQUATIONS
		PROBLEM DISCUSSION OF CH-13,14

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UG (1st Semester)

Name of the Paper:- Calculus

Class: B.SC.-I

Name of the Teachers (Section Wise) : Sumit Geahlan

WEEK	DATE	TOPICS
1	September (6-10)	Derivative of a Function, Basics of Differentiation and Integration
		Successive Differentiation
		Questions based on Successive Differentiation
		Differentiation of Parametric Functions
		Differentiation of Parametric Functions
SUNDAY - 11.09.2022		
2	September (12-17)	Differentiation using Partial Fractions
		Differentiation using Partial Fractions
		Leibnitz's Theorem
		Questions based on Leibnitz's Theorem
		Applications of Leibnitz's Theorem
		Applications of Leibnitz's Theorem
SUNDAY - 18.09.2022		
3	September (19-24)	Taylor's Theorem with Lagrange's form of remainder Questions based on Taylor's Theorem
		Questions based on Taylor's Theorem
		Taylor's Theorem with Cauchy's form of remainder Questions based on Taylor's Theorem with Cauchy's form of remainder
		Taylor's Theorem with Cauchy's form of remainder Questions based on Taylor's Theorem with Cauchy's form of remainder
		Infinite Series
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Applications of Taylor's Series
		Applications of Taylor's Series
		Applications of Taylor's Series
		Problem Discussion
		Expansion by Differential Equations
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Asymptotes
		Oblique Asymptotes and Questions based on it
		Oblique Asymptotes of Algebraic Curve
		Oblique Asymptotes of Algebraic Curve
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Intersection of Curve and its Asymptotes
		Intersection of Curve and its Asymptotes
		Polar Asymptotes
		Polar Asymptotes
		Curvature
		Articles related to Curvature
SUNDAY - 16.10.2022		
7	October (17-21)	Questions based on Curvature
		Questions based on Curvature
		Radius of Curvature in Polar Form
		Radius of Curvature in Polar Form
		Curvature at Origin
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Centre of Curvature and Evolute of a Curve
		Centre of Curvature and Evolute of a Curve
		Curve Tracing
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Curve Tracing
		Curve Tracing Parametric Equations
		Curve Tracing Parametric Equations
		Tracing of Polar Curves
		Reduction Formulae
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Articles related to Reduction Formulae
		Articles related to Reduction Formulae
		Questions based on Reduction Formulae
		Questions based on Reduction Formulae
		Questions based on Reduction Formulae
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Rectification, Fundamental Theorem about Rectification
		Rectification, Fundamental Theorem about Rectification
		Rectification, Fundamental Theorem about Rectification
		Rectification, Fundamental Theorem about Rectification
		Problem Discussion
		Length of Parametric Curves
SUNDAY - 20.11.2022		
12	November (21-26)	Length of Parametric Curves
		Length of Parametric Curves
		Length of Polar Curves
		Length of Polar Curves
		Length of Polar Curves
		Intrinsic Equation of a Curve
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Quadrature
		Quadrature
		Quadrature
		Quadrature
		Quadrature
		Quadrature
SUNDAY - 04.12.2022		
14	December (5-10)	PROBLEM DISCUSSION
		TEST
		REVISION
		REVISION
		REVISION
		REVISION
SUNDAY - 11.12.2022		
15	December (12-14)	REVISION
		TEST
		REVISION

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(Odd Semester)

UG (1st Semester)

Name of the Paper:- Algebra

Class: B.Sc. I

Name of the Teachers (Section Wise) : Dr. Arpana Garg

WEEK	DATE	TOPICS
1	September (6-10)	Orientation
		Matrices and Elementary Properties
		Matrices and Elementary Properties
		Matrices and Elementary Properties
SUNDAY - 11.09.2022		
2	September (12-17)	Matrices and Elementary Properties
		Matrices and Elementary Properties
		Rank of a Matrix
		Row Echelon Form
		Row Echelon Form
SUNDAY - 18.09.2022		
3	September (19-24)	Theorems
		Normal Form
		Normal Form
		Theorems based on Normal form
		Inverse of a Matrix
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Elementary matrices
		Theorems based on Elementary matrices
		Theorems based on Elementary matrices
		Linearly independent and dependant vectors
		Linearly independent and dependant vectors
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Orthogonal Matrix
		Unitary Matrix
		Unitary Matrix
		Characteristic roots of a matrix
		Characteristic roots of a matrix
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Theroems Based on characteristic roots of a matrix
		Theroems Based on characteristic roots of a matrix
		Theroems Based on characteristic roots of a matrix
		Cayley hamilton theorem
		questions based on cayley Hamilton Theorem
		Minimal Polynomial of a matrix
SUNDAY - 16.10.2022		
7	October (17-21)	Minimal Polynomial of a matrix
		Problem Discusson
		Test
		Application of matrices to solve system of equations
		Application of matrices to solve system of equations
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Application of matrices to solve system of equations
		Non-Homogeneous system of equations
		Non-Homogeneous system of equations
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Homogeneous system of equations
		Homogeneous system of equations
		General properties of polynomial and equations
		Synthetic Division
		Numericals based on polynomials
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Fundamental theorem of algebra
		Theorems based on Polynomials
		Numericals based on polynomials
		Relation between Roots and The Coefficients of an equation
		Numericals
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Common roots and Repeated Roots
		Transformation of equation
		Diminishing roots by a given number
		Equation with binomial coefficients
		Equation with binomial coefficients
		Problem Discussion
SUNDAY - 20.11.2022		
12	November (21-26)	Transform an equation whose roots are algebraic functions of the roots of the given equation
		Transform an equation whose roots are algebraic functions of the roots of the given equation
		Roots of squared differences of a cubic
		Cardan's method to solve cubic equation
		Numericals
		Descartes solution of the biquadratic
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Descartes solution of the biquadratic
		Ferraris method
		Numericals
		Descartes rule of sign
		Linear Transformation
		Bilinear Form
SUNDAY - 04.12.2022		
14	December (5-10)	Canonical Form of a Bilinear form
		Factorizable Bilinear form
		Quadratic Form
		Numericals
		Linear transformation of a Quadratic form
		Numericals
SUNDAY - 11.12.2022		
15	December (12-14)	Factorable Quadratic Form
		Numericals
		Revision

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper: English Class: B.Sc. NonMed/Computer Science/Medical/Bio Tech

Name of the Teachers (Section Wise) : Srishti Sharma

WEEK	DATE	TOPICS
1	September (6-10)	"Let me not to the Marriage of true Minds"
		"Let me not to the Marriage of true Minds"
		Question/Answer
		Revision
		Grammar Practice
SUNDAY - 11.09.2022		
2	September (12-17)	Question/Answer Discussion
		Paragraph Writing
		About John Donne
		"Death Be Not Proud"
		Revision
SUNDAY - 18.09.2022		
3	September (19-24)	"Death Be Not Proud"
		"Death Be Not Proud"
		Question/Answer Discussion
		Grammar Practice
		Revision
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	"On His Blindness"
		"On His Blindness"
		"On His Blindness"
		Grammar Practice
		Class Test
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Question/Answer Discussion
		Assignment 1
		Assignment 1
		Grammar
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	"The Retreat"
		"The Retreat"
		"The Retreat"
		Question/Answer Discussion
		Revision
		Class test
SUNDAY - 16.10.2022		
7	October (17-21)	"Shadwell"
		"Shadwell"
		"Shadwell"
		Question/Answer Discussion
		Revision
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	"Know Then Thyself"
		"Know Then Thyself"
		Question/Answer Discussion
SUNDAY - 30.10.2022		
9	October (31)	Assignment 2
		Assignment 2
	November (1-5)	"The Little Black Boy"
		"The Little Black Boy"
		"The Little Black Boy"
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Grammar
		"Three Years She Grew in Sun and Shower"
		"Three Years She Grew in Sun and Shower"
		Question/Answer Discussion
		Revision
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Grammar Practice
		Conditional Test
		"England in 1819"
		"England in 1819"
		"England in 1819"
		Revision
SUNDAY - 20.11.2022		
12	November (21-26)	Question/Answer Discussion
		Grammar
		"Crossing The Bar"
		"Crossing The Bar"
		"Crossing The Bar"
		Revision
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Grammar Practice
		Question/Answer Discussion
		Grammar Practice
		Class Test
		Revision
		Grammar Practice
SUNDAY - 04.12.2022		
14	December (5-10)	Discussion about Poets and works in Syllabus
		Discussion about Poets and works in Syllabus
		Previous year papers Discussion
		Previous year papers Discussion
		Revision
		Class Test
SUNDAY - 11.12.2022		
15	December (12-14)	Grammar Practice
		Grammar Practice
		Full Syllabus Test

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LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- PC Software

Class: B.Sc. (CS)

Name of the Teachers (Section Wise) : Deepty Juneja

WEEK	DATE	TOPICS
1	September (6-10)	
		Basics of Windows, Windows History
		Basics components of Windows, icons & type of icons
		Taskbar, Activating Windows
SUNDAY - 11.09.2022		
2	September (12-17)	
		Desktop, Title Bar, Running Applications
		Windows Explorer, Managing Files & Folder
		Windows Explorer, Managing Files & Folder
SUNDAY - 18.09.2022		
3	September (19-24)	
		Configuring System Devices
		Control Panel, Windows Accessories
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martyrdom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	
		Introduction to Office Automation
		Creating And Editing Documents, Formatting Documents
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	
		Auto Text, Autocorrect, Spelling & Grammar Tools
		Document Dictionary, Page Formatting
		Bookmark, Advance Features of MS-Word
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	
		Mail Merge
		Macro, Tables
		Assignment I
SUNDAY - 16.10.2022		
7	October (17-21)	
		File Management
		Printing, Styles
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Linking & Embedding Objects
		Introduction to MS-Excel, Creating & Editing Worksheet
		Formatting & Essential Operations
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	
		Formulas, Function
		Charts
		Pivot Table & Pivot Chart
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	
		Conditional Test
		Linking & Consolidation
		Database Management using Excel-Sorting,
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	
		Filtering
		Table, Validation
		Goal Seek, Scenario
SUNDAY - 20.11.2022		
12	November (21-26)	
		Introduction of Power Point
		Creating & Manipulating & Enhancing Slides
		Organisational Charts
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	
		Assignment II
		Excel Charts
		Word Art, Layering at Objects
SUNDAY - 04.12.2022		
14	December (5-10)	
		Class Test
		Animation And Sound, Inserting Animated Pictures or Accessing through Objects
		Inserting Recorded Sound Effects or in Built Sound Effects
SUNDAY - 11.12.2022		
15	December (12-14)	

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LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Computer Fundamentals

Class: Bsc.(cs)

Name of the Teachers (Section Wise) : Deepty Juneja

WEEK	DATE	TOPICS
1	September (6-10)	Computer Fundamentals: Definition,
		Block Diagram along with its components
		characteristics & classification of computers
SUNDAY - 11.09.2022		
2	September (12-17)	Applications of computers in various fields
		Memory: Concept of primary & secondary memory
		RAM, ROM
SUNDAY - 18.09.2022		
3	September (19-24)	types of ROM
		flash memory
		Secondary storage devices
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Secondary storage devices
		Secondary storage devices
		Sequential & direct access devices
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	magnetic tape, magnetic disk
		CD, DVD
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Computer hardware & software
		I/O devices, relationship between hardware and software
		types of software
SUNDAY - 16.10.2022		
7	October (17-21)	Operating system: Definition
		functions of operating system
		concept of multiprogramming, multitasking
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	concept of multithreading, multiprocessing, time-sharing, real time,
		Documentation, Techniques of Problem Solving real time
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	single-user & multi-user operating system
		Concept of problem solving, Problem definition, Flowcharting
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Algorithms, pseudo code,
		decision table, Structured programming concepts
		Programming methodologies viz. top-down and bottom-up programming
SUNDAY - 20.11.2022		
12	November (21-26)	Computer Virus, WORMS, Trojan
		Searching, Sorting, and Merging
		Linear & Binary Searching
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Merging, Design of algorithms for searching
		Selection Sorting
		Bubble sort
SUNDAY - 04.12.2022		
14	December (5-10)	Insertion Sorting
		Computer Languages: Analogy with natural language
		machine language, assembly language
SUNDAY - 11.12.2022		
15	December (12-14)	high-level language
		language translators
		characteristics of a good programming language

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- PHYSICAL CHEMISTRY

Class: BSC I

Name of the Teachers (Section Wise) : DR. VIKRAM KUMAR

WEEK	DATE	TOPICS
1	September (6-10)	Gaseous States Kinetic Molecular Theory of Gases, Maxwell's distribution of velocities and energies (derivation excluded) Calculation of root mean square velocity
SUNDAY - 11.09.2022		
2	September (12-17)	Average velocity and most probable velocity. Collision diameter, collision number, collision frequency and mean free path (Derivations excluded)
SUNDAY - 18.09.2022		
3	September (19-24)	Deviation of Real gases from ideal behavior, Derivation of Van der Waal's Equation of State
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Derivation of Van der Waal's Equation of State(II), its application in the calculation of Boyle's temperature (compression factor)
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Critical Phenomenon Critical temperature, critical pressure, critical volume and their determination. PV isotherms of real gases, continuity of states
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	The isotherms of Van der Waal's equation, relationship between critical constants and Van der Waal's constants.
SUNDAY - 16.10.2022		
7	October (17-21)	Critical compressibility factor. The Law of corresponding states.
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Liquid States Structure of liquids, Properties of liquids – surface tension, refractive index
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Properties of liquids – viscosity, vapour pressure and optical rotation.
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Properties of liquids – optical rotation, CLASS TEST
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Solid State Classification of solids, Law of constancy of interfacial angles, law of rational indices,
SUNDAY - 20.11.2022		
12	November (21-26)	Miller indices, elementary ideas of symmetry and symmetry elements
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Seven crystal systems and fourteen Bravais lattices; X-ray diffraction, Bragg's law
SUNDAY - 04.12.2022		
14	December (5-10)	A simple account of Laue method, rotating crystal method and powder pattern method
SUNDAY - 11.12.2022		
15	December (12-14)	RIVISION

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LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- INORGANIC CHEMISTRY

Class: BSC I

Name of the Teachers (Section Wise) : PROF. ERA GARG

WEEK	DATE	TOPICS
1	September (6-10)	Atomic Structure Idea of de Broglie matter waves, Heisenberg's uncertainty principle, atomic orbitals, quantum numbers, radial and angular wave functions, normal
SUNDAY - 11.09.2022		
2	September (12-17)	Orthogonal wave functions, significance of Ψ and Ψ^2 , probability distribution curves, shapes of s, p, d, f orbitals
SUNDAY - 18.09.2022		
3	September (19-24)	Aufbau and Pauli exclusion principles, Hund's multiplicity rules, Electronic configuration of elements
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Effective nuclear charge, Slater's rules.
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Periodic table and atomic properties Classification of periodic table into s, p, d, f blocks, atomic and ionic radii, ionisation energy, electron affinity and electronegativity definition
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Methods of determination or evaluation, trend in periodic table (in s and p-block elements), Pauling , Mulliken electronegativity scale,
SUNDAY - 16.10.2022		
7	October (17-21)	Allred Rachow and Mulliken Jaffe's electronegativity scale, Sanderson's electron density ratio.
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Covalent Bond Valence bond theory (Heitler-London and Pauling approach) and its limitation,
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	shapes of simple inorganic molecules and ions (BeF ₂ , BF ₃ , CH ₄ , PF ₅ , SF ₆ , IF ₇ , SO ₄ ²⁻ , ClO ₄ ⁻ , NO ₃ ⁻) valence shell electron pair repulsion (VSEPR) theory to NH ₃ , H ₃ O ⁺ , SF ₄ , ClF ₃ , H ₂ O, SnCl ₂ , ClO ₃ ⁻ and ICl ₂ ⁻
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Molecular orbital theory of homonuclear (N ₂ , O ₂) heteronuclear (CO and NO) diatomic molecules and ions,
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Bond energy, bond angle, bond length and dipole moments, percentage ionic character from dipole moment and electronegativity difference
SUNDAY - 20.11.2022		
12	November (21-26)	Ionic Solids Ionic structures (NaCl, CsCl, ZnS (Zinc blende), CaF ₂)
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Size effects, radius ratio rule and its limitations, Madelung constant, Stoichiometric and Non stoichiometric ,Defects in crystals
SUNDAY - 04.12.2022		
14	December (5-10)	Lattice energy (mathematical derivation excluded) and Born Haber cycle, Solvation energy and its relation with solubility of Ionic solids,
SUNDAY - 11.12.2022		
15	December (12-14)	Polarizing power and Polarisability of ions, Fajan's rule.

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- ORGANIC CHEMISTRY

Class: BSC I

Name of the Teachers (Section Wise) : PROF RANJANA SHARMA

WEEK	DATE	TOPICS
1	September (6-10)	Structure and Bonding Localized and delocalized chemical bond, Van der Waal's interactions, resonance: conditions
SUNDAY - 11.09.2022		
2	September (12-17)	Resonance effect and its applications, hyperconjugation, inductive effect, Electromeric effect & their comparison.
SUNDAY - 18.09.2022		
3	September (19-24)	Stereochemistry of Organic Compounds Concept of isomerism. Types of isomerism. Optical isomerism • elements of symmetry, molecular chirality, enantiomers, stereogenic centre, optical activity
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Properties of enantiomers, chiral and achiral molecules with two stereogenic centres, diastereomers, threo and erythro diastereomers, meso compounds, resolution of enantiomers
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Inversion, retention and racemization. Relative and absolute configuration, sequence rules, R & S systems of nomenclature.
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Geometric isomerism determination of configuration of geometric isomers. E & Z system of nomenclature, Conformational isomerism, Conformational analysis of ethane and n-butane
SUNDAY - 16.10.2022		
7	October (17-21)	Conformations of cyclohexane, axial and equatorial bonds. Newman projection and Sawhorse formulae, Difference between configuration and conformation.
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Mechanism of Organic Reactions Curved arrow notation, drawing electron movements with arrows, half-headed and
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Types of reagents – electrophiles and nucleophiles. Types of organic reactions.
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Reactive intermediates: carbocations, carbanions, free radicals, carbenes, (formation, structure & stability)
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Alkanes and Cycloalkanes IUPAC nomenclature of branched and unbranched alkanes, classification of carbon atoms in alkanes. Isomerism in alkanes, sources
SUNDAY - 20.11.2022		
12	November (21-26)	Methods of formation: Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids, physical properties.
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Mechanism of free radical halogenation of alkanes: reactivity and selectivity. Cycloalkanes nomenclature, synthesis of cycloalkanes and their derivatives – photochemical (2+2) cycloaddition reactions
SUNDAY - 04.12.2022		
14	December (5-10)	Dehalogenation of dihalides, , pyrolysis of calcium or barium salts of dicarboxylic acids,
SUNDAY - 11.12.2022		
15	December (12-14)	Baeyer's strain theory and its limitations., theory of strainless rings.

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Cell Biology (Paper -2)

Class: B.Sc. Medical

Name of the Teachers (Section Wise) : KIRAN BHATIA

WEEK	DATE	TOPICS
1	September (6-10)	
		The Cell Envelopes: Structure and functions of Cell Wall
		The Cell Envelopes: Structure and functions of Cell Wall
SUNDAY - 11.09.2022		
2	September (12-17)	
		Plasma Membrane
		Plasma Membrane
SUNDAY - 18.09.2022		
3	September (19-24)	
		Ultrastructure and function of nucleus
		Ultrastructure and function of nucleus
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	
		Ultrastructure and function of nucleus
		Ultrastructure and function of nucleus
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	
		Golgi Apparatus
		Golgi Apparatus
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	
		Endoplasmic Reticulum
		Endoplasmic Reticulum
SUNDAY - 16.10.2022		
7	October (17-21)	
		ASSIGNMENT
		Golgi Apparatus
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	TEST
		Chloroplast
		Chloroplast
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	
		Chloroplast
		Mitochondria
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	
		Lysosomes
		Peroxisomes
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	
		Cell Division: Mitosis and Meiosis.
		Cell Division: Mitosis and Meiosis.
SUNDAY - 20.11.2022		
12	November (21-26)	
		Chromosome: Morphology, organization, ultrastructure of Centromere and Telomere
		Chromosome: Morphology, organization, ultrastructure of Centromere and Telomere
SUNDAY - 27.11.2022		

13	November	
	(28-30)	Chromosomal alterations- deletions, duplications, translocations, inversions
	December	Chromosomal alterations- deletions, duplications, translocations, inversions
	(1-3)	Chromosomal alterations- deletions, duplications, translocations, inversions
SUNDAY - 04.12.2022		
14	December (5-10)	Variations in chromosome number aneuploidy and polyploidy
		Variations in chromosome number aneuploidy and polyploidy
		Sex chromosomes and sex determination
SUNDAY - 11.12.2022		
15	December (12-14)	

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Diversity of Microbes

Class: B.Sc.

Name of the Teachers (Section Wise) : Rajni

WEEK	DATE	TOPICS
1	September (6-10)	Introduction to algae
		Introduction to algae
SUNDAY - 11.09.2022		
2	September (12-17)	Economic importance of algae
		Classification of Algae
		Classification of Algae
SUNDAY - 18.09.2022		
3	September (19-24)	<i>Volvox</i> structure and Reproduction
		<i>Volvox</i> structure and Reproduction
		<i>Oedogonium</i> structure and Reproduction
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	<i>Oedogonium</i> structure and Reproduction
		<i>Oedogonium</i> structure and Reproduction
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	<i>Vaucheria</i> structure and Reproduction
		<i>Vaucheria</i> structure and Reproduction
		<i>Ectocarpus</i> structure and Reproduction
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	<i>Ectocarpus</i> structure and Reproduction
		<i>Polysiphonia</i> structure and Reproduction
		<i>Polysiphonia</i> structure and Reproduction
SUNDAY - 16.10.2022		
7	October (17-21)	<i>Polysiphonia</i> structure and Reproduction
		Bacteria structure and Reproduction
		Bacteria structure and Reproduction
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	<i>Cyanobacteria</i> structure and Reproduction
		<i>Cyanobacteria</i> structure and Reproduction
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Introduction to virus
		Class test, assignment
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Introduction to fungi
		Introduction to fungi
		<i>Phytophthora</i> structure and Reproduction
SUNDAY - 20.11.2022		
12	November (21-26)	<i>Mucor</i> structure and Reproduction
		<i>Penicillium</i> structure and Reproduction
		<i>Penicillium</i> structure and Reproduction
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	<i>Colletotrichum</i> structure and reproduction
		<i>Agaricus</i> structure and Reproduction
		<i>Agaricus</i> structure and Reproduction
SUNDAY - 04.12.2022		
14	December (5-10)	<i>Puccinia</i> structure and Reproduction
		<i>Puccinia</i> structure and Reproduction
		<i>Puccinia</i> structure and Reproduction
SUNDAY - 11.12.2022		
15	December (12-14)	Lichens Structure And Reproduction
		Lichens Structure And Reproduction
		Revision

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper: Introduction to Biotechnology Paper: I

Class: B.Sc.

Name of the Teachers (Section Wise) : Anjushree Sarawal

WEEK	DATE	TOPICS
1	September (6-10)	
		Definition and scope of Biotechnology
		Definition and scope of Biotechnology
SUNDAY - 11.09.2022		
2	September (12-17)	Definition and scope of Biotechnology
		Definition and scope of Biotechnology Introduction of Genetic Engineering
SUNDAY - 18.09.2022		
3	September (19-24)	Plant tissue Culture
		Plant tissue Culture
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	
		Plant tissue Culture
		Plant tissue Culture
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Biotechnology in context of Developing world
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Animal tissue Culture
		Animal tissue Culture
		Animal tissue Culture
SUNDAY - 16.10.2022		
7	October (17-21)	Animal tissue Culture
		Fermentation Technology
		Fermentation Technology
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	Fermentation Technology
		Fermentation Technology
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Immobilized enzymes
		Immobilized enzymes
		Immobilized enzymes
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Monoclonal antibodies
		Embryo transfer technology
		Introduction to gene& genomes
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Introduction to gene& genomes
		Proteins and proteome
		Intellectual Property rights
SUNDAY - 20.11.2022		
12	November (21-26)	Proteins and proteome
		Genetic manipulations
		Genetic manipulations
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Genetic manipulations
		Biotechnology research in India
		Assignments
SUNDAY - 04.12.2022		
14	December (5-10)	DNA Fingerprinting and Forensic Analysis
		Application of biotechnology
		Application of biotechnology
SUNDAY - 11.12.2022		
15	December (12-14)	Bioremediation
		Ethics in Biotechnology

I.B. (PG) COLLEGE, PANIPAT

LESSON PLAN

SESSION 2022-23 (01.09.2022 to 14.12.2022)

Weekly Lesson Plan

(Odd Semester)

UG (1st Semester)

Name of the Paper:- Biochemistry I

Class: B.Sc. Biotech.

Name of the Teachers (Section Wise) : BHAWNA MALIK

WEEK	DATE	TOPICS
1	September (6-10)	Carbohydrates intro
		Carbohydrates structure
SUNDAY - 11.09.2022		
2	September (12-17)	Carbohydrates functions
		Carbohydrates monosaccharides
		Carbohydrates monosaccharides
SUNDAY - 18.09.2022		
3	September (19-24)	Carbohydrates diasaccharides
		Carbohydrates diasaccharides
		revision test
HOLIDAY - 23.09.2022 (Shaheedi Divas/ Haryana War Heroes' Martydom Day)		
SUNDAY - 25.09.2022		
HOLIDAY - 26.09.2022 (Maharaja Agrasen Jayanti)		
4	September (27-30) October (1)	Carbohydrates polysaccharides
		Carbohydrates polysaccharides
SUNDAY - 02.10.2022 & Holiday (Mahatma Gandhi Jayanti)		
5	October (3-8)	Carbohydrates mucopolysaccharide
		Bacterial cell wall polysaccharide
		revision test
HOLIDAY - 05.10.2022 (Dussehra)		
SUNDAY - 09.10.2022 & Holiday (Maharishi Valmiki Jayanti)		

6	October (10-15)	Glycoproteins and their functions
		Glycoproteins and their functions
		revision test
SUNDAY - 16.10.2022		
7	October (17-21)	Lipids structure and functions
		Lipids classification
		Lipid nomenclature
Diwali Break - 22.10.2022 to 26.10.2022		
8	October (27-29)	
SUNDAY - 30.10.2022		
9	October (31) November (1-5)	Properties of fatty acids
		Essential fatty acids and Phospholipids
		revision test
HOLIDAY - 01.11.2022 (Haryana Day)		
SUNDAY - 06.11.2022		
10	November (7-12)	Sphingolipids, Glycolipids, Gangliosides
		Prostaglandins and cholesterol
		revision test
HOLIDAY - 08.11.2022 (Guru Nanak Dev Jayanti)		
SUNDAY - 13.11.2022		
11	November (14-19)	Amino acids and proteins structure and functions
		Properties of amino acids, Types of proteins and classification
		Forces stabilising protein structure
SUNDAY - 20.11.2022		
12	November (21-26)	Different level of structural organisation of protein
		Protein purification, denaturation and renaturation
		Fibrous and globular proteins
SUNDAY - 27.11.2022		

13	November (28-30) December (1-3)	Nucleic acid structure and function
		Properties of nucleic acids, nucleosides and nucleotides
		Purines and pyrimidines
SUNDAY - 04.12.2022		
14	December (5-10)	Biologically important nucleotides, double helical model of DNA
		Forces responsible for A,B and Z DNA
		Denaturation and renaturation of DNA
SUNDAY - 11.12.2022		
15	December (12-14)	revision test
		revision test
		class test