

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

B.Sc. 4th Semester

Name of the Paper: Recombinant DNA Technology Class: B.Sc. 2nd Year

Name of the Teachers (Section Wise): Anjushree

WEEK	DATE	TOPICS
1	January (1-6)	
		Recombinant DNA Technology and Genetic Engineering: Introduction, history, scope and applications Recombinant DNA Technology and Genetic Engineering: Introduction, history, scope and applications Tools of Recombinant DNA technology: Steps in gene cloning
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	
		Tools of Recombinant DNA technology: Steps in gene cloning Tools of Recombinant DNA technology: Steps in gene cloning Ligases, polymerases, alkaline phosphatases, kinases, transferases and other DNA engineering enzymes
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	
		Gene cloning tools - Restriction, Enzymes- class I, II and class III restriction enzymes, their features. Ligases, polymerases, alkaline phosphatases, kinases, transferases and other DNA engineering enzymes Ligases, polymerases, alkaline phosphatases, kinases, transferases and other DNA engineering enzymes
<b>HOLIDAY - 17.01.2024 - SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	
		Plasmid vectors Plasmid vectors
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	
		Bacteriophage, cosmids and phagemids. Bacteriophage, cosmids and phagemids. Properties of host.
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	
		M13 vectors
		Expression vectors, shuttle vectors Vectors for cloning in eukaryotic cells, YACs and BACs
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	
	February (15-17)	Isolation of Vector DNA
		In vitro construction of r-DNA molecules: Isolation of gene of interest Isolation of Vector DNA
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	
		cohesive and blunt ends, modification of cut ends linkers and adaptors
		Integration of DNA inserts into the vectors.
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	
	March (1-2)	Integration of DNA inserts into the vectors.
		Transformation: Techniques of introducing r-DNA into the desired host, competent cells
		Transformation: Techniques of introducing r-DNA into the desired host, competent cells
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	
	March (9)	electroporation and microinjection
		Screening and selection of transformants, immunological screening
		Colony hybridization. Marker genes- selectable and scorable markers.
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	
		Gene Libraries: Construction of Genomic and cDNA library
		Advantages and limitations, Screening of gene libraries Advantages and limitations, Screening of gene libraries
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	
		Advantages and limitations, Screening of gene libraries DNA amplification through PCR: Basic features and applications of PCR, types and modifications Site directed mutagenesis
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	
		Assignments Southern and Northern analysis, DNA finger printing. PAGE Western blotting, dot blots and slot blots. RFLP, RAPD (brief only), microarrays.
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	
	April (12-13)	
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	
	April (18-20)	DNA sequencing techniques: Maxam – Gilbert’s method, Sanger’s dideoxy chain termination method Gene expression in prokaryotes: expression cassette. Promoters- tissue specific promoters Wound inducible promoters, strong and regulated promoters
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	
		Increasing protein yield-factors affecting level of recombinant protein production Production of recombinant proteins in E. coli Translational and transcriptional fusion- advantages and disadvantages.
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	
		Applications of Recombinant DNA technology Applications of Recombinant DNA technology
<b>University Examinations w.e.f. 01.05.2024</b>		

**I.B. (PG) COLLEGE, PANIPAT**  
**LESSON PLAN**  
**SESSION 2023-24 (04.01.2024 to 30.04.2024)**

Weekly Lesson Plan (Even Semester)

UG (IV Semester)

Name of the Paper:- **Organic Chemistry** Class: **B.Sc. 4th Semester**

Name of the Teachers (Section Wise) : **Prof. Ranjana Sharma**

WEEK	DATE	TOPICS
1	January (4-6)	Mechanism of diazotisation, structure of benzene diazonium chloride,
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Replacement of diazo group by H, OH, F, Cl, Br, I, NO <sub>2</sub> and CN groups, reduction of diazonium salts to hydrazines, coupling reaction and its synthetic application.
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	Nomenclature and structure of the carbonyl group. Synthesis of aldehydes and ketones with particular reference to the synthesis of aldehydes from acid chlorides,
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	advantage of oxidation of alcohols with chromium trioxide (Sarett reagent) pyridinium chlorochromate (PCC) and pyridinium dichromate.
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	Physical properties, Comparison of reactivities of aldehydes and ketones.
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Mechanism of nucleophilic additions to carbonyl group with particular emphasis on benzoin, aldol,
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13) February (15-17)	Perkin and Knoevenagel condensations. Condensation with ammonia and its derivatives. Wittig reaction. Mannich reaction. Oxidation of aldehydes,
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Baeyer– Villiger oxidation of ketones, Cannizzaro reaction. MPV, Clemmensen, Wolff- Kishner, LiAlH <sub>4</sub> and NaBH <sub>4</sub> reductions.
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29) March (1-2)	Molecular vibrations, Hooke's law, selection rules, intensity and position of IR bands, measurement of IR spectrum,
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7) March (9)	fingerprint region, characteristic absorptions of various functional groups and interpretation of IR spectra of simple organic compounds.
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Applications of IR spectroscopy in structure elucidation of simple organic compounds.
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Structure and nomenclature of amines, physical properties.
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Separation of a mixture of primary, secondary and tertiary amines. Structural features affecting basicity of amines.
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10) April (12-13)	Preparation of alkyl and aryl amines ( reduction of nitro compounds, nitriles, reductive amination of aldehydic and ketonic compounds.
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16) April (18-20)	Gabriel- phthalimide reaction, Hofmann bromamide reaction.
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Electrophilic aromatic substitution in aryl amines, reactions of amines with nitrous acid.
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Revision and Tests
<b>University Examinations w.e.f. 01.05.2024</b>		

**I.B. (PG) COLLEGE, PANIPAT**  
**LESSON PLAN**  
**SESSION 2023-24 (01.01.2024 to 30.04.2024)**

Weekly Lesson Plan (Even Semester)

UG -IV Semester

Name of the Paper:- Physical Chemistry Clas B.Sc. 4th Sem.

Name of the Teachers (Section Wise) : Dr. Vikram Kumar

WEEK	DATE	TOPICS
1	January (4-6)	Second law of thermodynamics, need for the law, different statements of the law,
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Carnot's cycles and its efficiency, Carnot's theorem,
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	Thermodynamics scale of temperature. Concept of entropy – entropy as a state function, entropy as a function of V & T, entropy as a function of P & T,
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	entropy change in physical change, entropy as a criteria of spontaneity and equilibrium.
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	Third law of thermodynamics: Nernst heat theorem, statement of concept of residual entropy,
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	evaluation of absolute entropy from heat capacity data. Gibbs function ( $G$ ) and Helmholtz function ( $A$ ) as thermodynamic quantities,
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13) February (15-17)	$G$ as criteria for thermodynamic equilibrium and spontaneity, its advantage over entropy change. Variation of $G$ with $P$ , $V$ and $T$ .
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Electrolytic and Galvanic cells – reversible & irreversible cells,
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29) March (1-2)	conventional representation of electrochemical cells. Calculation of thermodynamic quantities of cell reaction ( $\Delta G$ , $\Delta H$ & $K$ ).
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7) March (9)	Types of reversible electrodes – metal-metal ion, gas electrode
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	metal – insoluble salt- anion and redox electrodes. Electrode reactions,
<b>SUNDAY - 17.03.2024</b>		
12	March (18-22)	Nernst equations, derivation of cell EMF and single electrode potential.
<b>HOLI VACATION - 23.03.2024 - 31.03.2024</b> <b>(SHAHEEDI DIWAS - 23.03.2024)</b>		



13	April (1-6)	Standard Hydrogen electrode, reference electrodes, standard electrode potential, sign conventions
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10) April (12-13)	Concentration cells with and without transference, liquid junction potential and its measurement.
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16) April (18-20)	Applications of EMF measurement in solubility product and potentiometric titrations using glass electrode.
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	numerical problems
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Revision and Tests
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)

Name of the Paper:- PROGRAMMING IN C++ Class: 4th SEM Section

Name of the Teachers (Section Wise) : Prof. Vinay Bharti

WEEK	DATE	TOPICS
1	January (1-6)	Inheritance: Rules of Derivations – Private, Protected and Public
		Derivations, Different Forms of Inheritance – Single, Multiple
		Inheritance
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Multilevel, Hierarchical and Multipath Inheritance
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Roles of Constructors and Destructors in Inheritance.
	January (18-20)	
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Programming Examples Of Inheritance
	January (27)	
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Dynamic Polymorphism: Function Overriding, Virtual Function and its Need, Pure Virtual Function, Abstract Class, Virtual
		Derivation, Virtual Destructor
	February (1-3)	
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Type Conversion: Basic Type Conversion, Conversion Between Objects And Basic Types, Conversion Between Objects Of Different Classes.
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Assignment 1
	February (15-17)	Revision Of Unit 1
		Conditonal Test Of Unit 1
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Programming Examples Of Polymorphism
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Genericity in C++: Template Function, Template Class, Inheritance and Templates.
	March (1-2)	
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Revision Of Unit 2
	March (9)	
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Exception Handling: try, throw and catch constructs, rethrowing an exception, catch all Handlers.
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Files I/O in C++: Class Hierarchy for Files I/O, Text versus Binary
		Files, Opening and Closing Files
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Revision Of Unit 3
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	File Pointers, Manipulators and Error Handling
	April (12-13)	
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Revision
	April (18-20)	
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Revision
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Revision
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester) : IV

Name of the Paper:- Operating System Class: BSC (CS)

Name of the Teachers (Section Wise) : Milan Sharma

WEEK	DATE	TOPICS
1	January (1-6)	
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	operating system, architecture, functions, characteristics
		historical evolution
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Serial batch, multiprogramming, time sharing
	January (18-20)	real time
<b>HOLIDAY - 17.01.2024 - SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	distributed and parallel
	January (27)	OS as resource Manager
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Computer system structures: I/O structure, storage structure,
	February (1-3)	OS as resource Manager
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	storage hierarchy, Operating system structure system components, services, system calls
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	system programs, system structures
	February (15-17)	Process management: process concepts
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	process state process control block
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	system programs, system structures
	March (1-2)	process state, process control block
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	operations, process scheduling, inter process communication
	March (9)	
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	CPU Scheduling: scheduling criteria, levels of scheduling scheduling algorithms, multiple processor scheduling.
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Deadlocks: Characterization, methods of handling scheduling criteriadeadlock detection, prevention
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Assignment I
		memory management of single-user and multiuser operating system
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	partitioning, swapping, paging and segmentation
	April (12-13)	virtual memory, Page replacement Algorithms, Thrashing
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Conditional Test
	April (18-20)	critical section problems, semaphores. Mutual exclusion
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Device and file management: Disk scheduling, Disk structure , File access and allocation methods, Assignment II
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	File Systems: Functions of the system Structured Organizations, directory and file protection mechanisms.
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)

Name of the Paper:- Optics-II Class: B.Sc. Non-Medical and Comp. Sc.IV Semester

Name of the Teachers (Section Wise) : Dr. Chetna Narula

WEEK	DATE	TOPICS
1	January (1-6)	Unit-1 Polarisation- Intoduction about Waves, Electric and magnetic field
		Introduction Continued- Discussion on Electromagnetic spectrum and wave, Maxwells Equation
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Polarization, Polarization by reflection, Malus Law
		Polarization by refraction, scattering
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Phenomenon of Double Refraction, Huygen's wave theory
	January (18-20)	Analysis of polarized light.Nicol prism
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Quarter Wave plate and half wave plate. Production and detection of plane polarized light
	January (27)	Production and detection of circularly and elliptically polarized light
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Optical Activity, Fresnel's theory of optical rotation
	February (1-3)	Specific rotation Polarimeters
<b>SUNDAY - 04.02.2024</b>		



6	February (5-10)	Unit-2, Fourier theorem and fourier series
		Evaluation of fourier coefficients, importance and limitations of Fourier theorem
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Even and Odd Functions
	February (15-17)	Fourier series of functions $f(x)$ between different limits
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Complex form of Fourier series
		Applications: Solution of triangular and rectangular waves
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Solution of Half and full wave rectifier outputs
	March (1-2)	Parseval identity for Fourier series, Fourier integrals
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Problems on Unit 1 and 2
	March (9)	Test of Unit-1 and 2
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Unit-3, Fourier transforms and properties
		Applications of fourier transforms-solving integrals
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Applications in solving ordinary differential equations
		Applications to some specific functions
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Geometrical optics I: Matrix methods in paraxial optics, effects of translation and refraction
		Derivation of thin lens formulae, unit plane, nodal planes, system of thin lenses
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Unit-IV: Geometrical Optics II: Different kinds of aberrations and remedies
	April (12-13)	Continued aberrations
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Fiber Optics: Optical fiber, Critical angle of propagation, mode of propagation, acceptance angle
	April (18-20)	Fractional refractive index change, Numerical aperture, types of optics fiber
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Normalized frequency, Pulse dispersion, Attenuation
		Applications, fiber optic communication, Advantages
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Problems on Unit 3 and 4
		Test of Unit-3 and 4
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

B.Sc. 4th Semester

Name of the Paper: BIOLOGY AND DIVERSITY OF SEED PLANTS-II Class: B.Sc. 2nd Year

Name of the Teachers (Section Wise) : DR. NIDHAN SINGH

WEEK	DATE	TOPICS
1	January (1-6)	Taxonomy and Systematics-Introduction
		Taxonomy and Systematics-Introduction
		Identification, Classification, Description, Nomenclature, Phylogeny-Introduction
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Identification, Classification, Description, Nomenclature, Phylogeny-Introduction
		Chemotaxonomy and its Role in Taxonomy
		Cytotaxonomy-Role in Taxonomy
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Taximetrics-Concept and Applications
	January (18-20)	Botanical Nomenclature
		Botanical Nomenclature- contd.
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Principle of Priority
	January (27)	Principle of Priority
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Assignment
	February (1-3)	Type Concept
		Type Concept contd., Taxonomic Ranks
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Taxonomic Keys-I
		Taxonomic Keys-II
		Taxonomic Keys-III
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Flower-Its Types and Important Terms-1
	February (15-17)	Flower-Its Types and Important Terms-2
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Inflorescence and Types-1
		Inflorescence and Types-2
		Classification of Angiosperms Introduction-Types
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Bentham and Hooker's System -1
	March (1-2)	Bentham and Hooker's System -II
		Engler & Prantl's System
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Ranunculaceae
	March (9)	Brassicaceae
		Malvaceae
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Class Test
		Euphorbiaceae
		Rutaceae
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Leguminosae-I
		Leguminosae-II, III
		Leguminosae-II, III
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Apiaceae
		Asclepiadaceae
		Lamiaceae
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Solanaceae
	April (12-13)	Solanaceae
		Asteraceae- 1
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Asteraceae- 1
	April (18-20)	Liliaceae
		Liliaceae
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Revision
		Revision
		Revision
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Test
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

B.Sc. 4th Semester

Name of the Paper:- PLANT EMBRYOLOGY

Class: B.Sc. 4th Sem

Name of the Teachers (Section Wise) : RAJNI

WEEK	DATE	TOPICS
1	January (1-6)	
		Introduction of Flower-a modified shoot
		Introduction of Flower-a modified shoot
		Functions of various floral parts.
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	
		Functions of various floral parts.
		Microsporangium Structure
		Microsporangium wall and dehiscence mechanism.
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	
	January (18-20)	Microsporangium wall and dehiscence mechanism.
		Microsporogenesis, pollen grain Structure
		Microsporogenesis, pollen grain Structure
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	
	January (27)	Microsporogenesis- structure (pollen wall).
		Microsporogenesis- structure (pollen wall).
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	
	February (1-3)	Pollen-pistil interaction.
		Pollen-pistil interaction.
		Pollen -self incompatibility.
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	
		Pollen -self incompatibility.
		Pollen germination (microgametogenesis).
Pollination Types		
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	
	February (15-17)	
		Pollination Types
		Male gametophyte.
		Male gametophyte.
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	
		Megasporangium curvatures.
		Structure of Megasporangium (ovule).
		Conditional Test
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	
	March (1-2)	
		Megasporogenesis and Megagametogenesis.
		Female gametophyte -mono-, bi and Tetrasporic
		Female gametophyte -mono-, bi and Tetrasporic
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	
	March (9)	
		Structure of Megasporangium (ovule).
		Embryogenesis in Dicot.
		Embryogenesis in monocot
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	
		Embryogenesis in monocot
		Embryogenesis in monocot
		Embryogenesis in polyembryony.
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	
		Embryogenesis in polyembryony.
		Embryogenesis in polyembryony. Structure of Dicot and Monocot seed.
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	
		Structure of Dicot and Monocot seed.
		Structure of Dicot and Monocot seed. Structure of Dicot and Monocot seed.
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	
	April (12-13)	Fruit Types And Dispersal
		Fruit Types And Dispersal Fruit Types And Dispersal
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	
	April (18-20)	Fruit Types And Dispersal
		Assigment Test
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	
		Revision
		Revision test
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	
<b>University Examinations w.e.f. 01.05.2024</b>		



# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

B.Sc. 4th Semester

Name of the Paper:- Life and Diversity of Chordates-II Class: B.Sc. 2nd Year

Name of the Teachers (Section Wise): NEELAM THAREJA

WEEK	DATE	TOPICS
1	January (1-6)	Class Amphibia: Characters Classification and Examples Amphibia: Origin and Evolutionary tree <i>Frog- Rana tigrina (Type study)</i>
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	<i>Frog- Rana tigrina (Type study)</i> <i>Frog- Rana tigrina (Type study)</i> <i>Frog- Rana tigrina (Type study)</i>
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	<i>Frog :Rana tigrina (Type study)</i> <i>Frog :Rana tigrina (Type study)</i> Parental Care in Amphibians
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	Reptilia :characters,classification,and examples Reptilia : origin and Evolutionary tree Type study; common house lizard
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	Type study; common house lizard Type study; common house lizard Type study; common house lizard
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Origin and Evolutionary Tree of Reptiles
		Extinct Reptiles
		Poisonous and Non-poisonous Snakes
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Aves : Characters classification and Examples
	February (15-17)	Aves : Characters classification and Examples
		Aves : Characters classification and Examples
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Type study - Pigeon
		Type study - Pigeon
		Type study - Pigeon
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Type study - Pigeon
	March (1-2)	Class Test
		Assignment
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Flight adaptations
	March (9)	Principles of Aerodynamics in Bird Flight
		Migration in Birds
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Mammals- Classification
		Type Study House Rat
		Type Study House Rat
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Type Study House Rat
		Type Study House Rat
		Type Study House Rat
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Class Test Assignment Revision
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Adaptive Radiations of Mammals Dentition Class Test
	April (12-13)	
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Revision
		Revision
	April (18-20)	Revision
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Class Test
		Class Seminar
		Class Seminar
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Class Seminar
		Class Seminar
		Class Test
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

B.Sc.: 4th Semester

Name of the Paper: Mammalian Physiology-II Class: B.Sc. 2nd Year

Name of the Teachers (Section Wise) : PAWAN KUMAR

WEEK	DATE	TOPICS
1	January (1-6)	
		Circulatory System
		Circulatory System
		Circulatory System
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	
		Circulatory System
		Circulatory System
		Circulatory System
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	
		Circulatory System
		Circulatory System
		Circulatory System
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	
		Circulatory System
		Circulatory System
		Circulatory System
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	
		Class Test
		Respiratory system
		Respiratory system
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Respiratory system
		Respiratory system
		Respiratory system
		<b>SUNDAY - 11.02.2024</b>
7	February (12-13)	
	February (15-17)	Assignment
		Class Test
		Excretory system
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	
		Excretory system
		Excretory system
		Excretory system
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	
	March (1-2)	Excretory system
		Excretory system
		Class Test
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	
	March (9)	
		Neural Integration
		Neural Integration
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	
		Neural Integration
		Neural Integration
		Neural Integration
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	
		Neural Integration
		Neural Integration
		Neural Integration
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	
		Class Test
		Endocrinology
		Endocrinology
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	
	April (12-13)	Endocrinology
		Endocrinology
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	
	April (18-20)	Endocrinology
		Class Test
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	
		Reproductive System
		Reproductive System
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	
		Revision
		Revision
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV - Semester)

Name of the Paper:- Sanskrit Compulsory Class: B.Sc.2nd Year

Name of the Teachers(Non Medical)- Dr. Anjali

WEEK	DATE	TOPICS
1	January (1-6)	दिक दारिद्र्यं
SUNDAY - 07.01.2024		
2	January (8-13)	दण्डः शास्ति प्रजाः सर्वाः
SUNDAY - 14.01.2024		
3	January (15-16) January (18-20)	स्थितप्रज्ञस्य का भाषा
HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI		
SUNDAY - 21.01.2024		
4	January (22-25) January (27)	नीतिसूक्तयः
HOLIDAY - 26.01.2024 - REPUBLIC DAY		
SUNDAY - 28.01.2024		
5	January (29-31) February (1-3)	मैत्री पुनस्त्वीदृशी
SUNDAY - 04.02.2024		

6	February (5-10)	नाऽशिष्यायोपदिश्यते
SUNDAY - 11.02.2024		
7	February (12-13) February (15-17)	दुर्जनसंगो भयावहः
HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI		
SUNDAY - 18.02.2024		
8	February (19-24)	पराधिकारचर्चा परिवर्जयेत्
SUNDAY - 25.02.2024		
9	February (26-29) March (1-2)	सुन्दोपसुन्दकथा
SUNDAY - 03.03.2024		
10	March (4-7) March (9)	कुञ्जरः प्रलयं गतः
HOLIDAY - 08.03.2024 - MAHA SHIVRATRI		
SUNDAY - 10.03.2024		
11	March (11-16)	धातुरूप (भू, अस्, कृ, गम्, पठ्, दृश्, स्था, स्पृश्)
SUNDAY - 17.03.2024		



12	March (18-22)	अच् सन्धि (दीर्घ सन्धि)
<b>HOLI VACATION - 23.03.2024 - 31.03.2024</b> <b>(SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	अच् सन्धि (पूर्वरूप सन्धि)
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10) April (12-13)	अच् सन्धि (पररूप सन्धि)
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16) April (18-20)	अच् सन्धि (प्रकृतिभाव सन्धि)
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	कक्षा परीक्षा
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Assignment 1 and 2
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)

Name of the Paper:- Optics-II Class: B.Sc. Non-Medical and Comp. Sc.IV Semester

Name of the Teachers (Section Wise) : Dr. Chetna Narula

WEEK	DATE	TOPICS
1	January (1-6)	Unit-1 Polarisation- Intoduction about Waves, Electric and magnetic field
		Introduction Continued- Discussion on Electromagnetic spectrum and wave, Maxwells Equation
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Polarization, Polarization by reflection, Malus Law
		Polarization by refraction, scattering
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Phenomenon of Double Refraction, Huygen's wave theory
	January (18-20)	Analysis of polarized light.Nicol prism
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Quarter Wave plate and half wave plate. Production and detection of plane polarized light
	January (27)	Production and detection of circularly and elliptically polarized light
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Optical Activity, Fresnel's theory of optical rotation
	February (1-3)	Specific rotation Polarimeters

SUNDAY - 04.02.2024

6	February (5-10)	Unit-2, Fourier theorem and fourier series
		Evaluation of fourier coefficients, importance and limitations of Fourier theorem
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Even and Odd Functions
	February (15-17)	Fourier series of functions $f(x)$ between different limits
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Complex form of Fourier series
		Applications: Solution of triangular and rectangular waves
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Solution of Half and full wave rectifier outputs
	March (1-2)	Parseval identity for Fourier series, Fourier integrals
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Problems on Unit 1 and 2
	March (9)	Test of Unit-1 and 2
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Unit-3, Fourier transforms and properties
		Applications of fourier transforms-solving integrals
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Applications in solving ordinary differential equations
		Applications to some specific functions
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Geometrical optics I: Matrix methods in paraxial optics, effects of translation and refraction
		Derivation of thin lens formulae, unit plane, nodal planes, system of thin lenses
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Unit-IV: Geometrical Optics II: Different kinds of aberrations and remedies
		Continued aberrations
	April (12-13)	
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Fiber Optics: Optical fiber, Critical angle of propagation, mode of propagation, acceptance angle
		Fractional refractive index change, Numerical aperture, types of optics fiber
	April (18-20)	
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Normalized frequency, Pulse dispersion, Attenuation
		Applications, fiber optic communication, Advantages
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Problems on Unit 3 and 4
		Test of Unit-3 and 4
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)

Name of the Paper:- Special function An integral transformation Class: B.A/B.Sc II

Name of the Teachers (Section Wise) : Dr. Poonam gupta

WEEK	DATE	TOPICS
1	January (1-6)	Laplace transformation
		basic defination and result
		exisistence theorem for laplace transformation
		linearity of linear transformation
		revision
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Shifting theorem
		laplace transformation of derivative
		laplace transformation of integrals
		Examples
		Examples
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Differentiation and integration of laplace transformation
		Examples
	January (18-20)	Examples
		Query of the examples based on above topic
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Inverse laplace transformation
		basic defination and result
	January (27)	Examples
		Convolution theorem
		Examples
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Inverse laplace transformation of derivatives
		Inverse laplace transformation of integrals
		Solution of ordinary differential equation using laplace
	February (1-3)	Examples
		Examples
	Revision of chapter	
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Fourier transformation
		basic definition and result
		Linearity properties
		Shifting theorem
		Examples
Modulation theorem		
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Convolution theorem
	February (15-17)	Fourier transform of derivatives
		Relation between fourier and laplace transform
		Examples
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Parseval identity for fourier transform
		solution of differential equations using Fourier transform
		Examples
		Examples
		Revision of chapter
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Series solution of differential equation
	March (1-2)	shifting of summation index
		Analytic function
		Regular and irregular singular point
		Examples
Examples		
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	Power series method
	March (9)	Power series method
		Examples
		Examples
		Examples
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Bessel function and their properties
		Convergence
		Recurrence relation
		Examples
		Examples
<b>SUNDAY - 17.03.2024</b>		

12	March (18-22)	Generating function
		Generating function
		Examples
		Examples
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Orthogonality of bessel function
		Orthogonality of bessel function
		Examples
		Doubts
		Class test
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Legendre and hermite differential equation
		solution of legendre hermite differential equation
	April (12-13)	Legendre and hermite differential equation
		solution of legendre hermite differential equation
		Examples
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	properties of both function
		Recurrence relation
	April (18-20)	Examples
		Revision of chapter
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Generating function
		Orthogonality of legendre and hermite polynomials
		Roderigue formula
		laplace integral representationof legendre polynomials
		examples
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Revision of chapter
		Class test
<b>University Examinations w.e.f. 01.05.2024</b>		



# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

PG ( II / IV - Semester)

Name of the Paper:- Programming in C and Numerical Methods

Class: B.Sc. II

Name of the Teachers (Section Wise) : Bhawna

WEEK	DATE	TOPICS
1	January (1-6)	Computers: A General Introduction, Programmer's Model of a computer,
		Control unit, memory, types of memory, input and output devices,
		computer terminologies.
		Algorithm, its definition, characteristics of algorithms, examples based on algorithm
		Revision Flow chart
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Flowcharts, Advantages of flowcharts, conventions of flowcharts, limitations of flowcharts, examples based on flowcharts.
		Introduction to C language, its importance, C-character set, trigraph characters, C-tokens, keywords, constants, types of constants, escape sequence
		variables, rules for naming a variable and discussion
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	examples of problems
		data types and different type of data type
		data type for integers and characters
	January (18-20)	floating point type, qualifiers,
		void type and double type numbers Revision
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	typedef declaration and enum
		declaration and programs
	January (27)	printf function and examples
		scanf function and examples Revision
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	main function and new line character
		execution of c program
		operator and epressions and special operators
		types of operators
		precedence, cast operators, library functions, illustration of these concepts

		Decision Control Structures: Sequence, Selection, Iteration, if statement
--	--	---

<b>SUNDAY - 04.02.2024</b>		
----------------------------	--	--

6	February (5-10)	if else statement, nested if else statements, illustration of these concepts
		else-if ladder and programs
		switch statement and examples goto structure and examples Programs using Decision control structure
		Loops: definition, types, while statement: syntax, flow chart, programming
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	variation of sign, location of roots, theorems and questions based on i
	February (15-17)	for loop: syntax, flow chart, programming examples, nested control Structure
		for loop: syntax, flow chart, programming examples, nested control Structure
		Revision
test		
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	Structure
		structure and its programming examples.
		Break statement: syntax, programming examples, Continue statement: syntax,
		programming examples.
		Revision
test		
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Functions: introduction, advantages, overview, Function definition, return statement: syntax, programming examples.
	March (1-2)	Accessing a function,
		Function Prototyping: syntax, flow chart, programming Problems
		Test
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	examples, local and global variables, Recursion and programming examples based on it, discussion of other C programs.
	March (9)	The C Preprocessor, file inclusion, macros, macros with arguments, macros versus function
		different types of directives, conditional compilation directives
		nesting of directives, some other directives.
	Test	
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Arrays: definition, types, examples, declaration of arrays, initialization of array
		arrays, programming examples, two dimensional arrays, multi dimensional
		arrays, illustration of these concepts using programs in C, passing arrays to function
		functions and discussion of programming examples.

		Solution of Algebraic and Transcendental Equations, continuation
		Problem Discussion

<b>SUNDAY - 17.03.2024</b>		
----------------------------	--	--

12	March (18-22)	Test
		Bisection Method and questions based on it, Regula Falsi Method, convergence and questions based on it
		Secant Method and questions based on it
		Newton-Raphson Method, its order of convergence and questions based on it.
		Revision
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Arrays: definition, types, examples, declaration of arrays, initialization of array
		arrays, programming examples, two dimensional arrays, multi dimensional
		arrays, illustration of these concepts using programs in C, passing arrays to function
		functions and discussion of programming examples.
		Solution of Algebraic and Transcendental Equations, continuation
		Test
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	variation of sign, location of roots, theorems and questions based on it,
		Bisection Method and questions based on it, Regula Falsi Method, convergence and questions based on it
	April (12-13)	Secant Method and questions based on it
		Newton-Raphson Method, its order of convergence and questions based on it.
		Test
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Simultaneous Linear Algebraic Equations, Gauss Elimination Method
		Gauss Jordan Method and questions based on it,
	April (18-20)	Triangularisation Method and questions based on it, Cholesky Decomposition
		Cholesky Decomposition Method and questions based on it and discussion of problems.
		Crout's Method and questions based on it, Jacobi's Method and
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	of Strings
		comparison of strings, programming examples based on strings,
		Structures and Unions: definition, declaration, initialization, dot and sizeof operator
		array of structures, structures and functions, illustration of concept of union
		Pointers: definition, declaration, pointers to pointers, pointer arithmetic,

		pointers and arrays, pointers as function arguments, function returning
<b>SUNDAY - 28.04.2024</b>		
<b>17</b>	<b>April (29-30)</b>	pointers, illustration of these concepts using programs in C.
		Pointers to Functions, Pointers and Structures
		Example based on Pointers and discussion of problems.
		Revision
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)

Name of the Paper:- SEQUENCE AND SERIES

Class: B.Sc.IIInd

Name of the Teachers (Section Wise) : Dr. Poonam Gupta

WEEK	DATE	TOPICS
1	January (1-6)	Sets
		Bounded and Unbounded Sets
		Least upper bound and Greatest lower bound
		Theorems
		Theorems
		Revise
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Examples
		Problem Discussion
		Neighbourhood of a Point
		Theorems
		Problems
		Test
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16)	Examples
		Interior Point of a Set
	January (18-20)	Open Set
		Theorems
		Closed Sets
		Examples
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25)	Limit Point
		Closures
	January (27)	Theorems
		Problems
		TEST
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31)	Bolzano Weierstrass Theorem
		Theorems
	February (1-3)	Examples
		Compact Set
		Cover and Open Cover
		Revision
<b>SUNDAY - 04.02.2024</b>		

6	February (5-10)	Theorems
		Examples
		Convergent Sequence and Divergent Sequence
		Oscillatory Sequence
		Examples
		Problems
<b>SUNDAY - 11.02.2024</b>		
7	February (12-13)	Basic Theorems of limits and Squeeze Principle
	February (15-17)	Cauchy First Theorem
		Cauchy Second Theorem
		Examples
		Problems
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>		
<b>SUNDAY - 18.02.2024</b>		
8	February (19-24)	MONOTONIC SEQUENCE
		Nested sequence
		Examples
		Limit Point of a Sequence
		Cauchy Sequence
		Examples
<b>SUNDAY - 25.02.2024</b>		
9	February (26-29)	Cauchy Sequence
	March (1-2)	Problem Discussion
		Test
		Infinite Series
		Examples
		PROBLEM
<b>SUNDAY - 03.03.2024</b>		
10	March (4-7)	cauchy 's general principle of convergence
	March (9)	Geometric Series
		Series of Positive terms
		Comparison Test, p-series Test
		Examples
		Revision
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>		
<b>SUNDAY - 10.03.2024</b>		
11	March (11-16)	Problems
		D'Alemberts Ratio Test and Examples
		Cauchy Root Test and Examples
		Raabes Test and Examples
		Logarithmic Test and Examples
		De Morgan's Test and Gauss Test
<b>SUNDAY - 17.03.2024</b>		



12	March (18-22)	Problem discussion
		Problem discussion
		Cauchy Integral Test and Cauchy Condensation Test
		Alternating Series, Leibnitz's Test
		Absolute and Conditional Convergence problem
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>		
13	April (1-6)	Arbitrary Series, Abels Lemma, Abels Test
		Examples
		Dirichlet's Test and Examples
		Examples
		Problem
<b>SUNDAY - 07.04.2024</b>		
14	April (8-10)	Insertion and Removal of Parenthesis
		Examples
	April (12-13)	Riemann Arrangement Theorem
		Multiplication of Series
		Revision
Test		
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>		
<b>SUNDAY - 14.04.2024</b>		
15	April (15-16)	Cauchy Theorem
		Mertin's Theorem and Examples
	April (18-20)	Cauchy Theorem
		Mertin's Theorem and Examples
		r
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>		
<b>SUNDAY - 21.04.2024</b>		
16	April (22-27)	Infinite Product
		Sequence of Partial Sum
		General Principle of Convergence
		Theorems and Examples
		More Theorems on Infinite Product
Examples and Problems		
<b>SUNDAY - 28.04.2024</b>		
17	April (29-30)	Examples and Problems
		Revision
		Revision
		Test
<b>University Examinations w.e.f. 01.05.2024</b>		

# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV - Semester)

Name of the Paper:- Sanskrit Compulsory Class: B.Sc.2nd Year

Name of the Teachers (Section Wise) : Sonia Verma

WEEK	DATE	TOPICS
1	January (1-6)	धिक् दारिद्र्यं
SUNDAY - 07.01.2024		
2	January (8-13)	दण्डः शास्ति प्रजाः सर्वाः
SUNDAY - 14.01.2024		
3	January (15-16)	स्थितप्रजस्य का भाषा
	January (18-20)	
HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI		
SUNDAY - 21.01.2024		
4	January (22-25)	नितिसूक्तयः
	January (27)	
HOLIDAY - 26.01.2024 - REPUBLIC DAY		
SUNDAY - 28.01.2024		

5	January (29-31)	मैत्री पुस्तकीदशी
	February (1-3)	
SUNDAY - 04.02.2024		

6	February (5-10)	नाऽशिष्योपदिश्यते
SUNDAY - 11.02.2024		
7	February (12-13)	दुर्जनसंगो भयावहः
	February (15-17)	
HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI		
SUNDAY - 18.02.2024		
8	February (19-24)	पराधिकारचर्चा परिवर्जयेत्
SUNDAY - 25.02.2024		
9	February (26-29)	सुन्दोपसुन्दकथा
	March (1-2)	
SUNDAY - 03.03.2024		
10	March (4-7)	कुञ्जरःप्रलयं गतः
	March (9)	
HOLIDAY - 08.03.2024 - MAHA SHIVRATRI		
SUNDAY - 10.03.2024		
11	March (11-16)	धातुरूप (भू,अस्,कृ,गम्,पठ्,दृश्,स्था,स्पृश्)

**SUNDAY - 17.03.2024**

12	March (18-22)	अच् सन्धि (दीर्घ सन्धि)
HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)		
13	April (1-6)	अच् सन्धि (पूर्वरूप सन्धि)
SUNDAY - 07.04.2024		
14	April (8-10)	अच् सन्धि (पररूप सन्धि)
	April (12-13)	
HOLIDAY - 11.04.2024 - ID-UL-FITR		
SUNDAY - 14.04.2024		
15	April (15-16)	अच् सन्धि (प्रकृतिभाव सन्धि)
	April (18-20)	
HOLIDAY - 17.04.2024 - RAM NAVMI		
SUNDAY - 21.04.2024		
16	April (22-27)	कक्षा परीक्षा
SUNDAY - 28.04.2024		
17	April (29-30)	Assignment 1 and 2



# I.B. (PG) COLLEGE, PANIPAT

## LESSON PLAN

SESSION 2023-24 (01.01.2024 to 30.04.2024)

Weekly Lesson Plan (Even Semester)

UG ( IV / VI - Semester)      IV

Name of the Paper:-              Statistical Physics

Class: B.SC

Name of the Teachers (Section Wise) : MS SONIA

WEEK	DATE	TOPICS
1	January (1-6)	Probability And Probability Theorems ,Some Probability Considerations, Combinations Possessing Maximum Probability Combinations Possessing Minimum Probability ,Tossing Of 2,3 And Any Number Of Coins ,Numerical Problems Distributions Of N(For N- 2,3,4)Distinguishable And Indistinguishable Particles In Two Box Of Equal Size
<b>SUNDAY - 07.01.2024</b>		
2	January (8-13)	Microstate And Microstate,Thermodynamical Probability,Constraints And Accessible States ,Statistical FluctuationsGeneral Distribution Of Distinguishable Particles In Compartment Of Different Sizes, Condition Of Equilibrium Between Two Systems In Thermal Contact- $\beta$ Parameter
<b>SUNDAY - 14.01.2024</b>		
3	January (15-16) January (18-20)	Entropy And Probability (Boltzmann's Relation ) ,Problem Discussion Statistical Physics -2 : Postulates Of Statistical Physics, Phase Space,Division Of Phase Space Into Cell ,Three Kinds Of Statistics Basic Approach In Three Statistics ,M.B Statistics Applied to An Ideal Gas In Equilibrium ,Energy Distribution Law
<b>HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI</b>		
<b>SUNDAY - 21.01.2024</b>		
4	January (22-25) January (27)	M.B Statistics Applied To An Ideal Gas (Evaluation Of $\alpha$ And Expression Of Most Probable ,Expression For Average Speed,
<b>HOLIDAY - 26.01.2024 - REPUBLIC DAY</b>		
<b>SUNDAY - 28.01.2024</b>		
5	January (29-31) February (1-3)	Expression For R.M.S Speed ,Expression Of Average Velocity, for r.m.s velocity, mean energy for Maxwell distribution
<b>SUNDAY - 04.02.2024</b>		



6	February	(5-10)	problem discussion ,quantum statistics ;need for quantum statistics,Bose Einstein Energy Distribution Law
			Application Of B.E Statistics Of Planck's Radiation
<b>SUNDAY - 11.02.2024</b>			
7	February	(12-13)	B.E Gas, Degeneracy, B.E Condensation
	February	(15-17)	Fermi Dirac Energy Distribution Law,
<b>HOLIDAY 14.02.2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI</b>			
<b>SUNDAY - 18.02.2024</b>			
8	February	(19-24)	Fermi Dirac Energy Distribution Law
			Fermi Dirac Gas, Degeneracy ,Fermi Energy And Fermi Temperature
<b>SUNDAY - 25.02.2024</b>			
9	February	(26-29)	Fermi Dirac Energy Distribution Law For Electron Gas In Metals
	March	(1-2)	Zero Point Energy ,Zero Point Pressure
<b>SUNDAY - 03.03.2024</b>			
10	March	(4-7)	Average Speed (At 0 K) Of Electron Gas ,Specific Heat Anomaly Of Metals And Its Solutions
			M.B Distributions as a limiting case of B.E And F.D Distributions
<b>HOLIDAY - 08.03.2024 - MAHA SHIVRATRI</b>			
<b>SUNDAY - 10.03.2024</b>			
11	March	(11-16)	Comparison Of Three Statistics ,Problem Discussion
			Conditional Test
<b>SUNDAY - 17.03.2024</b>			

12	March	(18-22)	Theory Of Specific Heat Of Solids: Dulong And Petit Law
			Derivation Of Dulong And Petit Law From Classical Physics
<b>HOLI VACATION - 23.03.2024 - 31.03.2024 (SHAHEEDI DIWAS - 23.03.2024)</b>			
13	April	(1-6)	Specific Heat At Low Temperature
			Einstein Theory Of Specific Heat
<b>SUNDAY - 07.04.2024</b>			
14	April	(8-10)	Criticism Of Einstein Theory
		(12-13)	Debye Model Of Specific Heat Of Solids
<b>HOLIDAY - 11.04.2024 - ID-UL-FITR</b>			
<b>SUNDAY - 14.04.2024</b>			
15	April	(15-16)	Success And Short Coming Of Debye Theory
	April	(18-20)	Comparison of Einstein And Debye Theories, Numerical Problems
<b>HOLIDAY - 17.04.2024 - RAM NAVMI</b>			
<b>SUNDAY - 21.04.2024</b>			
16	April	(22-27)	Revision and group discussion
			group discussion
<b>SUNDAY - 28.04.2024</b>			
17	April	(29-30)	Revision and group discussion
<b>University Examinations w.e.f. 01.05.2024</b>			