

MHARANA PRATAP P.G. COLLEGE, JUNGLE DHUSAN, GORAKHPUR

Class: B.Sc. I (Semester I)

Lesson Plan: 2025-26

Subject: Zoology

Date	Num	Teacher's	Unit	Topic	Lecture
16-07-2025	1	V.K.SINGH	1	Structure and Function of Cell Organelles I	Plasma membrane: chemical structure—lipids and proteins
17-07-2025	2	V.K.SINGH	1	Structure and Function of Cell Organelles I	Plasma membrane: chemical structure—lipids and proteins
18-07-2025	3	V.K.SINGH	1	Structure and Function of Cell Organelles I	Plasma membrane: chemical structure—lipids and proteins
19-07-2025				CLASS TEACHING	
21-07-2025	4	V.K.SINGH	1	Structure and Function of Cell Organelles I	Endomembrane system: protein targeting and sorting,
22-07-2025	5	V.K.SINGH	1	Structure and Function of Cell Organelles I	Endomembrane system: protein targeting and sorting,
23-07-2025	6	V.K.SINGH	1	Structure and Function of Cell Organelles I	Endomembrane system: protein targeting and sorting,
24-07-2025	7	V.K.SINGH	1	Structure and Function of Cell Organelles I	Endocytosis
25-07-2025	8	V.K.SINGH	1	Structure and Function of Cell Organelles I	Exocytosis
26-07-2025				CLASS TEACHING	
28-07-2025	9	V.K.SINGH	2	Structure and Function of Cell Organelles II	Cytoskeleton: microtubules,
29-07-2025	10	V.K.SINGH	2	Structure and Function of Cell Organelles II	Microfilaments, intermediate filaments
30-07-2025	11	V.K.SINGH	2	Structure and Function of Cell Organelles II	Mitochondria: Structure
31-07-2025	12	V.K.SINGH	2	Structure and Function of Cell Organelles II	Oxidative phosphorylation
01-08-2025	13	V.K.SINGH	2	Structure and Function of Cell Organelles II	Oxidative phosphorylation
02-08-2025				CLASS TEACHING	
04-08-2025	14	V.K.SINGH	2	Structure and Function of Cell Organelles II	Oxidative phosphorylation
05-08-2025	15	V.K.SINGH	2	Structure and Function of Cell Organelles II	Peroxisome and ribosome: structure and function
06-08-2025	16	V.K.SINGH	2	Structure and Function of Cell Organelles II	Peroxisome and ribosome: structure and function
07-08-2025	1	R.N.SINGH	3	Nucleus and Chromatin Structure	Structure and function of nucleus in eukaryotes
08-08-2025	2	R.N.SINGH	3	Nucleus and Chromatin Structure	Chemical structure and base composition of DNA
11-08-2025				CLASS TEACHING	
12-08-2025	3	R.N.SINGH	3	Nucleus and Chromatin Structure	Chemical structure and base composition of RNA
13-08-2025	4	R.N.SINGH	3	Nucleus and Chromatin Structure	DNA supercoiling
14-08-2025	5	R.N.SINGH	3	Nucleus and Chromatin Structure	Chromatin organization,
18-08-2025	6	R.N.SINGH	3	Nucleus and Chromatin Structure	Structure of chromosomes
19-08-2025	7	R.N.SINGH	3	Nucleus and Chromatin Structure	Types of DNA
20-08-2025				CLASS TEACHING	
21-08-2025	8	R.N.SINGH	3	Nucleus and Chromatin Structure	Types of RNA
22-08-2025	9	R.N.SINGH	4	Cell cycle, Cell Division	Cell division: mitosis and meiosis

				and Cell Signaling	
23-08-2025	10	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Cell division: mitosis and meiosis
25-08-2025	11	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Cell cycle and its regulation,
26-08-2025	12	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Cell cycle and its regulation,
27-08-2025				MONTHLY EVALUATION	
28-08-2025	13	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Apoptosis,
29-08-2025	14	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Signal transduction: intracellular signaling and cell surface receptors via G-protein linked receptors
30-08-2025	15	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	Signal transduction: intracellular signaling and cell surface receptors via G-protein linked receptors
01-09-2025	16	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	JAK- STAT pathway
02-09-2025	17	R.N.SINGH	4	Cell cycle, Cell Division and Cell Signaling	JAK- STAT pathway
03-09-2025				CLASS TEACHING	
04-09-2025	17	V.K.SINGH	5	Mendelism and Sex Determination	Basic principles of heredity: Mendel's laws
06-09-2025	18	V.K.SINGH	5	Mendelism and Sex Determination	Monohybrid and dihybrid crosses
08-09-2025	19	V.K.SINGH	5	Mendelism and Sex Determination	Complete and Incomplete Dominance,
09-09-2025	20	V.K.SINGH	5	Mendelism and Sex Determination	Penetrance and expressivity,
10-09-2025	21	V.K.SINGH	5	Mendelism and Sex Determination	Genic Sex-Determining Systems,
11-09-2025				CLASS TEACHING	
12-09-2025	22	V.K.SINGH	5	Mendelism and Sex Determination	Environmental Sex Determination,
13-09-2025	23	V.K.SINGH	5	Mendelism and Sex Determination	Sex Determination in Drosophila,
15-09-2025	24	V.K.SINGH	5	Mendelism and Sex Determination	Sex Determination in Humans,
16-09-2025	25	V.K.SINGH	5	Mendelism and Sex Determination	Sex-linked characteristics and Dosage compensation
17-09-2025	26	V.K.SINGH	5	Mendelism and Sex Determination	Sex-linked characteristics and Dosage compensation
18-09-2025				CLASS TEACHING	
19-09-2025	27	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Extensions of Mendelism: Multiple Alleles,
20-09-2025	28	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Gene Interaction,
22-09-2025	29	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Cytoplasmic Inheritance
23-09-2025	30	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Genetic Maternal Effects,
24-09-2025	31	V.K.SINGH	6	Extensions of Mendelism, Genes and	Genomic Imprinting, Anticipation,

				Environment	
25-09-2025				MONTHLY EVALUATION	
26-09-2025	32	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Interaction Between Genes and Environment:
27-09-2025	33	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Environmental Effects on Gene Expression
29-09-2025	34	V.K.SINGH	6	Extensions of Mendelism, Genes and Environment	Inheritance of Continuous Characteristics
30-09-2025	18	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Human karyotype,
03-10-2025	19	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Chromosomal anomalies: Structural and numerical aberrations with examples,
04-10-2025				CLASS TEACHING	
06-10-2025	20	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Chromosomal anomalies: Structural and numerical aberrations with examples,
07-10-2025	21	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Chromosomal anomalies: Structural and numerical aberrations with examples,
08-10-2025	22	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Pedigree analysis
09-10-2025	23	R.N.SINGH	7	Human Chromosomes and Patterns of Inheritance	Pedigree analysis
10-10-2025	35	V.K.SINGH	8	Immune System and its Components	Historical perspective of Immunology,
11-10-2025				CLASS TEACHING	
24-10-2025	36	V.K.SINGH	8	Immune System and its Components	Innate and Adaptive Immunity
25-10-2025	37	V.K.SINGH	8	Immune System and its Components	Structure and functions of different classes of immunoglobulins, Hypersensitivity,
27-10-2025	38	V.K.SINGH	8	Immune System and its Components	Structure and functions of different classes of immunoglobulins, Hypersensitivity,
29-10-2025	39	V.K.SINGH	8	Immune System and its Components	Structure and functions of different classes of immunoglobulins, Hypersensitivity,
30-10-2025	40	V.K.SINGH	8	Immune System and its Components	Clonal selection,
31-10-2025				MONTHLY EVALUATION	
01-11-2025	41	V.K.SINGH	8	Immune System and its Components	Complement system,
03-11-2025	42	V.K.SINGH	8	Immune System and its Components	Humoral immunity and cell mediated immunity,
04-11-2025	24	R.N.SINGH	8	Immune System and its Components	Humoral immunity and cell mediated immunity,
06-11-2025	25	R.N.SINGH	8	Immune System and its Components	Immunoglobulin and T-cell receptor genes: organization of Ig gene loci, molecular mechanism of generation of antibody diversity
07-11-2025	26	R.N.SINGH	8	Immune System and its Components	Immunoglobulin and T-cell receptor genes: organization of Ig gene loci, molecular mechanism of generation of antibody

					diversity
08-11-2025				CLASS TEACHING	
10-11-2025	27	R.N.SINGH	8	Immune System and its Components	Immunoglobulin and T-cell receptor genes: organization of Ig gene loci, molecular mechanism of generation of antibody
11-11-2025	28	R.N.SINGH	8	Immune System and its Components	HLA complex: organization, class I and II HLA molecules, expression of HLA genes
12-11-2025	29	R.N.SINGH	8	Immune System and its Components	HLA complex: organization, class I and II HLA molecules, expression of HLA genes
13-11-2025	30	R.N.SINGH	1	Structure and Function of Cell Organelles I	Introduction to all national Biologists (Zoologists) who have contributed/contributing to Zoological and Life Sciences as a mark of tribute to ancient and modern biology will be included as part of the Continuous Internal Evaluation (CIE)
14-11-2025	31	R.N.SINGH	1	Structure and Function of Cell Organelles I	Introduction to all national Biologists (Zoologists) who have contributed/contributing to Zoological and Life Sciences as a mark of tribute to ancient and modern biology will be included as part of the Continuous Internal Evaluation (CIE)
15-11-2025				CLASS TEACHING	