

**LESSON-PLAN (Session 2025-26) EVEN SEMESTER**

**Name of Teacher: Pooja Girotra**

**Designation: Extension Lecturer**

**Class: B.Sc./B.A. IVth Sem**

**Subject/ Paper: Analytical Geometry & Vector Calculus (B23-MAT-401)**

S. No.	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	January	General equation of second degree: Classification of conic sections; centre, asymptotes, axes, eccentricity, foci and directrices of conics. Tangent at any point to a conic, chord of contact, pole of line to a conic, director circle of a conic. Polar equation of a conic, tangent and normal to a conic, confocal conics.	<ol style="list-style-type: none"> <li>1. Learning through Problem Solving</li> <li>2. Group-Learning &amp; Teaching</li> </ol>	Gain knowledge of the concept of different conic sections, their classification and properties. Understand various terms related to conic sections and gain skills to use them in problem solving.	
2.	February	Sphere: General form, Plane section of a sphere. Sphere through a given circle. Intersection of two spheres, tangent plane and line, polar plane and line, orthogonal spheres, radical plane of two spheres and co-axial system of spheres. Cone: Equation of a cone, right circular cone, quadric cone, enveloping cone. Tangent plane and condition of tangency.	<ol style="list-style-type: none"> <li>1. Learning through Problem Solving</li> <li>2. Group-Learning &amp; Teaching</li> </ol>	Have knowledge of general form of equation of a sphere and attain procedural knowledge required for solving problems related to intersection of spheres, tangent plane and line, orthogonality, length of tangent and co-axial system of spheres. Learn about equations of cones and apply knowledge for problem solving.	
3.	March	Cylinder: Right circular cylinder and enveloping cylinder. Central conicoids: Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a conicoid, Enveloping cylinder of a conicoid,	<ol style="list-style-type: none"> <li>1. Learning through Problem Solving</li> <li>2. Group-Learning &amp; Teaching</li> </ol>	Have deeper knowledge and understanding of cylinder, enveloping cylinder, concepts of conicoids, tangent plane, director sphere, normal, envelope and to make further use thereof.	

		confocal conicoid, reduction of second degree equations.			
4.	<b>April &amp; May</b>	Scalar and Vector product of three vectors, four vectors, reciprocal vectors, vector differentiation and derivative along a curve, directional derivatives; Gradient of a scalar point function, divergence and curl of vector point functions, their geometrical meanings and vector identities. Vector integration: line integral, surface integral and volume integral. Theorem of Gauss, Green, Stoke and problems based on these.	<b>1. Learning through Problem Solving</b> <b>2. Group-Learning &amp; Teaching</b>	Understand and solve problems related to scalar and vector product of vectors, vector differentiation, directional derivatives, gradient, divergence and curl operators. Have deeper understanding of line, surface and volume integrals, their evaluation, proof of Gauss Divergence, Green's and Stoke's theorems and gain theoretical and technical knowledge in computing different surface flux integrals, volume integrals and line integrals used in other disciplines also.	

❖ **Seminar/Presentation/Assignment/Quiz/Class Test /Mid-Term Exam will be taken as per schedule.**

**Signature of Teacher**

**Principal**

# GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

## LESSON-PLAN (Session 2025-26) EVEN SEMESTER

**Name of Teacher:** Ms. Teena Aggarwal

**Designation:** Assistant Professor (Ext.)in Botany

**Class:** B.Sc. I Life Sciences 2<sup>nd</sup> Semester

**Subject/ Paper:** Plant Taxonomy and Ecology

**Type of course( major/ minor/ VAC/ AEC/SEC/ MDC):**Major (B23-BOT-201)

S. No	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	January	Unit I : Botanical nomenclature and major rules of ICBN and ICN; Keys to identification of plants. General introduction and importance of herbaria and botanical gardens. Documentation of Floristic Diversity: Brief idea about floras, monographs and journals. Brief idea of taxonomic evidences. Types of inflorescence, flower and parts of flower.	Interactive Lectures and Discussions, Visual aids (Microscopic images, charts and Diagrams). Group learning and teaching.	Students will gain knowledge about taxonomy, including the rules of nomenclature and other essential aspects.	Class Test
2.	February	Unit II : Artificial, natural and phylogenetic classifications. Bentham and Hooker system of classification (upto series), Angiosperm Phylogeny Group-general account. Diagnostic features and economic importance of the following families: Ranunculaceae, Brassicaceae, Malvaceae, Euphorbiaceae, Rutaceae, Leguminosae, Apocynaceae, Lamiaceae, Solanaceae, Asteraceae, Poaceae and Orchidaceae.	Interactive Lectures and Discussions, Visual aids (Microscopic images, charts and Diagrams). Group learning and teaching.	Students will acquire a conceptual understanding of angiosperm classification systems and the diversity of families within them.	Unit Test-1/Submission of Assignment 1

3.	<b>March</b>	<p>Unit III          Ecology: Definition; scope and importance; levels of organization. Environmental factors- climatic factors, edaphic factors, topographic; and Biotic factors.          Population Ecology: Basic concept; characteristics; biotic potential, growth curves; ecotypes and coads.          Community Ecology: Concepts; characteristics (qualitative and quantitative-analytical and synthetic); methods of analysis; ecological succession.</p>	Interactive Lectures and Discussions, Visual aids (Microscopic images, charts and Diagrams). Group learning and teaching.	Students will gain knowledge about Ecology and Environmental interactions.	Class Test/ Power Point Presentations (Mid-term Exams as per Schedule )
4.	<b>April</b>	<p>Unit IV          Ecosystem: Structure and functions (trophic levels, food chains, food webs, ecological pyramids and energy flow).          Phyto-geography: Phyto-geographical regions of India; vegetation types of India (forests).          Environmental Pollution: Sources, types and control of air and water pollution.          Global Change: Greenhouse effect and greenhouse gases; impacts of global warming; carbon trading.          Biodiversity: levels, types, significance, threats and conservation.</p>	Interactive Lectures and Discussions, Visual aids (Microscopic images, charts and Diagrams). Group learning and teaching.	Students will acquire a conceptual understanding of ecosystem structure, environmental pollution and biodiversity conservation.	Unit Test-2/ Submission of Assignment 2
5.	<b>May</b>	Revision			

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**Signature of Teacher**

**Principal**



**Govt. P.G. College For Women, Sec-14, Panchkula**

**Lesson Plan (2025-26) Even Semester**

**Name Of The lecturer:** Ms. Teena Aggarwal

**Designation:** Assistant Professor (Ext.) in Botany

**Class :** B.Sc. III Life Sciences 6<sup>th</sup> sem

**Subject:** Genetics

**Course:** Agricultural Genetics

**Course code:** B23-GEN-601

<b>Sr. No</b>	<b>Months</b>	<b>Topics To Be Covered</b>	<b>Teaching Learning Stratedy</b>	<b>Learning Outcomes of Students</b>	<b>Remarks</b>
<b>1</b>	<b>January</b>	<b>Unit I : Advanced Concepts in Classical Genetics</b> * Evolution of genetic theory: From Mendel to molecular genetics * Complex gene interactions: Polygenic inheritance, epistasis networks, gene modifiers * Molecular basis of dominance and overdominance * Quantitative Trait Loci (QTL): Concept, detection and significance.	Group learning and teaching, Research learning, Power Point Presentations	Students will acquire an understanding of the Advanced Concepts in Classical Genetics.	Revision of class work on daily basis.
<b>2</b>	<b>February</b>	<b>Unit II Cytogenetics and Chromosomal Study</b> * Structural and numerical chromosomal variations in crop species * Cytogenetic basis of hybrid sterility and wide crosses * Alien gene introgression: Monosomics, nullisomics, trisomics * Aneuploidy and euploidy in crop improvement (wheat, cotton, banana case studies)	Research learning, Presentation methodology	Students will develop comprehensive knowledge about Cytogenetics and Chromosomal Study.	Revision of the topic. Assignment-I

3	March	<p><b>Unit III Functional Genomics and Regulatory Networks</b></p> <p>* Functional genomics in crop plants: Gene knockout, RNAi, TILLING, CRISPR/Cas systems</p> <p>* Transcriptome profiling and analysis of gene expression under stress</p> <p>* Small RNAs (miRNA, siRNA) and their role in trait regulation</p> <p>* Epigenetic mechanisms: DNA methylation, histone modification, chromatin remodeling.</p>	Group learning and teaching, Presentation methodology	Students will gain a deep understanding of Functional Genomics and Regulatory Networks.	Assignment-II Class-Test
4	April	<p><b>Unit IV Biotechnology in Crop Improvement</b></p> <p>* Brief account of Plant Tissue culture technique, Embryo culture, meristem culture and anther culture.</p> <p>* Brief account of research centres; International Rice Research Institute (IRRI), Sugarcane Breeding Institute (SBI), Central Potato Research Institute(CPRI), Central Institute of Cotton Research (CICR), International Center for Improvement of Maize and Wheat (CIMMYT).</p>	Interactive learning Presentation methodology	Students will be able to gain knowledge about Biotechnology in Crop Improvement and research centres.	Class-Test

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Signature of Teacher

Principal

**GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA**

**LESSON-PLAN (Session 2025-26) EVEN SEMESTER**

**Name of Teacher:** Dr. Neetu

**Designation:** Assistant Professor in Botany

**Class:** B.Sc. II (Life Science) 4<sup>th</sup> Sem

**Subject/ Paper:** Botany (Cytology and Genetics)

<b>S. No.</b>	<b>Month</b>	<b>Topics to be covered</b>	<b>Teaching Learning Strategy</b>	<b>Learning Outcomes of Students</b>	<b>Remarks</b>
<b>1.</b>	<b>January</b>	Cell as a unit of Life; The Cell Theory; Prokaryotic and eukaryotic cells; Eukaryotic Cell components. Structure and functions of Cell Wall, Plasma Membrane, nucleus, Nuclear Envelope- structure of nuclear pore complex, Golgi Apparatus, Ribosome, Endoplasmic Reticulum, Chloroplast, Mitochondria, Lysosomes, Peroxisomes and Vacuoles.	Interactive Lectures and Discussions, Visual aids (Charts and Diagrams).	Students will understand the fundamental characteristics of cells and cell organelles.	Class Test
<b>2.</b>	<b>February</b>	Cell Division: Mitosis and Meiosis. Chromosome: structural organization, ultrastructure of Centromere and Telomere, lampbrush and polytene chromosomes. DNA: structure, types	Interactive Lectures and Discussions, Visual aids (Microscopic images, charts,	Students will acquire comprehensive knowledge about cell division and the central	Submission of Assignment 1+ Test

		and replication. RNA: structure and types. Genetic code.	Models and Diagrams).	dogma of molecular biology.	
<b>3.</b>	<b>March</b>	Mendel's laws of Inheritance. Lethal Genes; Codominance, incomplete dominance; Gene interaction (inter- and intra-allelic); Multiple allelism; Pleiotropism. Chi Square test; Pedigree Analysis. Cytoplasmic Inheritance: Kappa particles in Paramecium, leaf variegation in <i>Mirabilis jalapa</i> , Shell coiling. Complete & incomplete linkage, recombination frequency, crossing over.	Interactive Lectures and Discussions, Problem Solving, Group learning and teaching.	Students will learn about the principles of inheritance in biology.	Submission of Assignment 2+ Test
<b>4.</b>	<b>April</b>	Chromosomal aberrations- deletions, duplications, translocations, inversions; Variations in chromosome number-aneuploidy, polyploidy; sex chromosomes and sex determination.	Interactive Lectures and Discussions.	Students will develop a thorough understanding of chromosomal aberrations, and the concept of linkage.	Mid Term Exams as per Schedule
<b>5.</b>	<b>May</b>	Types of mutations, effects of physical & chemical mutagens.	Interactive Lectures and Discussions.	Students will develop a thorough understanding of mutations.	Revision

❖ **Semi  
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**GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA**

**LESSON-PLAN (Session 2025-26) EVEN SEMESTER**

**Name of Teacher:** Dr. Neetu

**Designation:** Assistant Professor in Botany

**Class:** B.Sc. III (Life Science) 6<sup>th</sup> Sem

**Subject/ Paper:** Botany (Plant Anatomy and Embryology)

<b>S. No.</b>	<b>Month</b>	<b>Topics to be covered</b>	<b>Teaching Learning Strategy</b>	<b>Learning Outcomes of Students</b>	<b>Remarks</b>
1.	January	Introduction, objective and scope of plant anatomy, meristematic and permanent tissues, complex tissues, plant secretory tissues, mechanical tissues and their distribution. Tissue systems (epidermal, ground and vascular), cambium, types of vascular bundles, vascular skeleton at nodes and internodes.	Interactive Lectures and Discussions, Practical based learning, Visual aids (Microscopic images, Charts, plant specimens and Diagrams).	Students will be able to learn about the functions and anatomical features of plant parts and their applications in various branches of botany, mechanism of secondary growth in plants.	Class Test
2.	February	SAM anatomy, theories of histological organization of shoot apex, anatomy of monocot and dicot stem, secondary growth, anomalous secondary growth ( <i>Dracaena</i> , <i>Boerhaavia</i> and <i>Mirabilis</i> ). Phyllotaxy, anatomy of dicot and monocot leaf, Kranz anatomy. RAM anatomy, types of roots in	Interactive Lectures and Discussions, Practical based learning, Visual aids (Microscopic images, charts and Diagrams).	Students will acquire comprehensive knowledge about the anatomy of shoot and root apices, stem and leaf structure, and primary and secondary growth in	Submission of Assignment 1+ Test

		monocots and dicots, quiescent centre, root–stem transition, secondary growth in dicot root, structural modifications in respiratory ( <i>Rhizophora</i> ), storage (Beta) and epiphytic ( <i>Vanda</i> ) roots.		plants.	
<b>3.</b>	<b>March</b>	History and scope of plant embryology, flower – a modified shoot, floral organs. Microsporangium, its wall and dehiscence mechanism, microsporogenesis, pollen grains and its structure (pollen wall), scope of palynology. Pollen–pistil interaction, self-incompatibility. Pollination – types and agencies, pollen germination and development.	Interactive Lectures and Discussions, Practical based learning, Visual aids (Microscopic images, charts and Diagrams).	Students will learn about embryology with emphasis on floral organs, pollen development, pollination, and pollen–pistil interactions.	Submission of Assignment 2+ Test
<b>4.</b>	<b>April</b>	Structure of megasporangium, megasporogenesis and megagametogenesis, types of female gametophyte. Double fertilization, endosperm types, embryogenesis in dicots and monocots; polyembryony, apomixis. Structure of dicot and monocot seed.	Interactive Lectures and Discussions, Practical based learning, Visual aids (Microscopic images, charts and Diagrams).	Students will develop a thorough understanding of female gametophyte development, fertilization, embryogenesis, seed structure, and dispersal mechanism in plants.	Mid Term Exams as per Schedule

5.	May	Dispersal mechanisms in fruits and seeds.	Interactive Lectures and Discussions.	Students will develop a thorough understanding of dispersal mechanism in plants.	Revision
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**schedule.**

**Signature of Teacher**

**Principal**

**GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA**

**LESSON-PLAN (Session 2025-26) EVEN SEMESTER**

**Name of Teacher:** Dr. Neetu

**Designation:** Assistant Professor in Botany

**Class:** B.Sc. II (Life Science) 4<sup>th</sup> Sem

**Subject/ Paper:** Botany-VOC (Nursery and Gardening)

<b>S. No.</b>	<b>Month</b>	<b>Topics to be covered</b>	<b>Teaching Learning Strategy</b>	<b>Learning Outcomes of Students</b>	<b>Remarks</b>
<b>1.</b>	<b>January</b>	Nursery: Definition, objectives and scope and building up of infrastructure for nursery, planning and seasonal activities – planting, direct seeding and transplants. Seed: Structure and types – Seed dormancy; causes and methods of breaking dormancy. Seed storage: Seed banks, factors affecting seed viability, genetic erosion. Seed production technology: Seed testing and certification.	Interactive Lectures and Discussions, Practical based learning.	Students will understand nursery management, seed structure, dormancy, storage, and seed production, testing and certification techniques.	Class Test
<b>2.</b>	<b>February</b>	Gardening: Definition, objectives and scope – different types of gardening – landscape and home gardening – parks and its components – plant materials	Interactive Lectures and Discussions, Practical based	Students will learn the principles, types and operations of gardening	Submission of Assignment 1+ Class

		and design. Gardening operations: Soil laying, manuring, watering, management of pests and diseases and harvesting, sowing/raising of seeds and seedlings, transplanting of seedlings. Computer applications in landscaping.	learning.	along with basic computer applications in landscaping.	Test
<b>3.</b>	<b>March</b>	Vegetative propagation: Air-layering, cutting, selection of cutting, collecting season, treatment of cutting, rooting medium and planting of cuttings. Hardening of plants: Greenhouse – mist chamber, shed root, shade house and glass house.	Interactive Lectures and Discussions, Practical based learning.	Students will acquire knowledge of vegetative propagation methods and plant hardening techniques under protected structures.	Submission of Assignment 2 + Class Test
<b>4.</b>	<b>April</b>	Cultivation of different vegetables: Cabbage, Brinjal, Lady's finger, Onion, Tomatoes and Carrots. Cultivation of different flowers: Marigold, Lilium, Rose, Gerbera, Gladiolus, Chrysanthemum and Carnation. Storage and marketing procedures-General note.	Interactive Lectures and Discussions, Practical based learning.	Students will understand cultivation practices, storage and marketing of major vegetable and ornamental crops.	Mid term exams as per Schedule
<b>5.</b>	<b>May</b>	Storage and marketing procedures. Revision.	Interactive Lectures and Discussions.	Students will understand storage and marketing of major vegetable and ornamental crops.	Revision

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**Signature of Teacher  
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# GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

## LESSON-PLAN (Session 2025-2026) Even Semester

Name of Professor: Ms. Balwinder Kaur

Designation: Assistant Professor

Subject: Chemistry

Class: B.Sc.(Major with Chemistry)2nd Sem

Name of the Course: Chemistry Skill-I

Course Code: B23-CHE-202

Months	Topics to be covered	Learning outcomes of the student	Teaching learning Strategy	Remarks if any
January	Familiarization with chemical labeling, Handling of hazardous chemicals, Handling of glassware. Sodium metal disposal, Familiarization with chemical concepts related to solution preparation and standardization: Equivalent mass, molar mass, specific gravity, concentration (Normality, Molarity, Molality, %w/v, %w/w, %v/v, ppm, ppb solutions), Basicity, acidity, solutions of oxidizing and reducing agents.	The learner will be able to Aware about lab handling and handling of hazardous chemicals.	Learning by doing method, Group learning & Problem based learning, Interactive learning	
February	Determination of concentration and percentage purity. Standardization of solutions, Knowledge about primary and secondary standards. Knowledge about indicators and preparation of indicator solutions, Knowledge about buffers and preparation of buffer solutions.	The students will be able to determine percentage purity and knowledge to prepare buffer solutions.	Learning by doing method, Power Point Presentation	Assignment & Class Test
March	Preparation of complexometric solutions (e.g. EDTA solutions) and titrations, Management of chemical waste. Purification of chemicals through distillation, crystallization, sublimation etc. Operating knowledge including calibration, handling and maintenance of Potentiometers and conductometer.	The students will be able to Know preparation of complexometric titration and purification techniques.	Learning by doing method, Power Point Presentation	Assignment & Class Test
April	Knowledge about different electrodes (e.g., Ag, Pt, SCE, Ag/AgCl) and their upkeep, Operating knowledge including calibration and maintenance of pH-meters and glass electrode, Operating knowledge including calibration and maintenance of refractometer, polarimeter, Flame-photometer, Spectrophotometer, Interferometer and Dipole meter	The learner will be able to get operating knowledge of different instruments	Learning by doing method, Problem based learning	Revision & Tests

# GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

## LESSON-PLAN (Session 2025-2026) Even Semester

Name of Professor: Ms. Balwinder Kaur

Designation: Assistant professor

Subject: Chemistry

Class: B.A IInd Sem/ B.A Eco Hons. IInd Sem

Name of the Course: Introductory Chemistry-II

Course Code: B23-CHE-204

Months	Topics to be covered	Learning outcomes of the student	Teaching learning Strategy	Remarks if any
January	<b>Renowned Indian Scientists</b> Brief Biography of Renowned Indian Scientists (Hargobind Khurana, Dr. P.C. Ray, Sir C.V. Raman, Dr. A.P.J. Abdul Kalam, C. N. R. Rao, Dr. Vikram Sara Bhai, Dr. Homi Jahangir Bhabha, Dr. J.C. Bose, Dr. S. N. Bose)	To learn about role of Indian scientists in the upliftment of research	Group learning & Problem based learning, Interactive learning	
February	<b>Metal and Non-Metals</b> Periodic table, classification of elements, physical and chemical aspects of metals and non-metals, Ore and Minerals of Iron, Copper, Aluminum, alloys	To learn about classification of elements with their properties.	Power Point Presentation	Assignment & Class Test
March	<b>Physical Properties of Matter</b> Classification of matter, properties, uses, ideal gas equation, real gas equation, some important compounds (baking soda, washing soda, plaster of Paris, gypsum,, glass)	To learn about three states of matter .	Power Point Presentation	Assignment & Class Test
April	<b>Soil and fertilizers Green revolution, soil:</b> types of soil and their components for fertility, grow condition, pH, irrigation, biofertilizers, chemical fertilizers and their uses, acid rain.		Problem based learning	Revision & Tests

# GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

## LESSON-PLAN (Session 2025-26) EVEN SEMESTER

**Name of Teacher:** Tara Jayant

**Designation:** Associate Professor

**Class:** B.Sc. II Life Sciences (4<sup>th</sup> Semester)

**Subject/ Paper:** Zoology (Paper: Biomolecules and Mammalian Physiology)

**Type of Course:** Zoology Major (B23-ZOO-401)

S. No.	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	<b>January 2026</b>	Introduction to syllabus, books and examination pattern for theory and practical. Introduction, classification, structure, function and general properties of proteins, carbohydrates and lipids. Nomenclature, classification and mechanisms of enzyme action; Enzyme Kinetics, factors affecting enzyme activity, inhibition of enzymes Transport through bio membranes (Active and Passive), osmotic pressure, hydrogen ion concentration and buffers.	Power Point Presentation and Video Demonstration	Students will be able to understand the nature and composition of biomolecules and mechanisms of transport across cell membrane.	
2.	<b>February 2026</b>	Nutrition: Nutritional components: Carbohydrates, fats, lipids, Vitamins and Minerals; Types of nutrition & feeding, Digestion of lipids, proteins, carbohydrates & nucleic acids; symbiotic digestion, lactose intolerance, Physico-chemical mechanism of Absorption of nutrients & assimilation; control of secretion of digestive juices. Muscles: Types of muscles, ultra-structure of skeletal muscle, neuromuscular junction. Bio-chemical and physical events during muscle contraction, single muscle twitch, tetanus, muscle fatigue,	Power Point Presentation, Video Demonstration and individual learning	Students will be able to understand the mechanism of nutrition and muscle contraction.	<b>Class test will be taken</b>

		muscle tone, oxygen debt., Cori's cycle, single unit smooth muscles, their physical and functional properties.			
3.	<b>March 2026</b>	<p>Circulation: Origin, conduction and regulation of heart beat; cardiac cycle, electrocardiogram, cardiac output, fluid pressure and flow pressure in closed and open circulatory system; Composition and functions of blood &amp; lymph; Mechanism of coagulation of blood, coagulation factors; anticoagulants, haemopoiesis. Respiration: Exchange of respiratory gases, transport of gases, lung air volumes, oxygen dissociation curve of haemoglobin, Bohr's effect, Hamburger's phenomenon (Chloride shift), control / regulation of respiration (peripheral reflexes, chemical control and Higher centres), Myoglobin. Excretion: Patterns of excretory products viz. Amonotelic, ureotelic uricotelic, ornithine cycle (Kreb's – Henseleit cycle) for urea formation in liver; Urine formation, composition of Urine, counter-current mechanism of urine formation, osmoregulation, micturition.</p>	Power Point Presentation by teacher and students.	Students will be able to explain the mechanism of circulation, respiration and excretion in animals.	<b>Assignment will be given</b>
4.	<b>April 2026</b>	<p>Neural Integration: Nature, origin and propagation of nerve impulse along with medullated &amp; non-medullated nerve fibre, conduction of nerve impulse across synapse, synaptic delay and synaptic fatigue, Neurotransmitter. Chemical integration of Endocrinology: Structure, chemical nature and mechanism of peptide and steroid hormone action; physiology of hypothalamus, pituitary, thyroid, parathyroid,</p>	Power Point Presentation by teacher and students.	Students will be able to explain the role of hormones in control and coordination.	<b>Mid Term Exam &amp; Revision of complete syllabus</b>

		adrenal, pancreas and gonads, Hormonal disorders.			
<b>5.</b>	<b>May 2026</b>	Reproduction: Spermatogenesis, Capacitation of spermatozoa, oogenesis, ovulation, formation of corpus luteum, oestrous- anoestrous cycle, Menstrual cycle in human, fertilization, implantation and gestation, parturition.  <b>UNIVERSITY EXAMS</b>	Power Point Presentation by teacher and students.	Students will be able to explain the role of hormones in physiology of animal reproduction.	

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**Signature of Teacher**

**Principal**