

CURRICULUM PLAN
(Semester I, III, V & VII 2026-27)

Name– Dr. Manisha Arora Pandit

Subject- DSC 9: Human Physiology: Life Sustaining Systems

(02 Theory + 04 Practical); Sem III

Practical Shared with- Dr Varsha Singh

Days	Units Covered/ To be covered	Topics
01/08/2026-12/08/2026	Unit 2: Blood	Structure and functions of haemoglobin; Blood clotting system, Fibrinolytic system.
20/08/2026-10/09/2026	Unit 1: Physiology of Digestion	Overview of gastrointestinal tract and its associated glands; digestion; Absorption of carbohydrates, lipids, proteins; Hormonal control of secretion of enzymes in gastrointestinal tract.
12/09/2026-30/09/2026	Unit 4: Physiology of Respiration	Overview of respiratory system; Mechanism of respiration, Respiratory volumes and capacities; Transport of oxygen and carbon dioxide in blood; Dissociation curves and the factors influencing it; regulation of respiration.
03/10/2026-17/10/2026	Unit 3: Physiology of Heart	Structure of heart; Coronary circulation; Origin and conduction of cardiac impulses; Cardiac cycle; Cardiac output and its regulation; nervous and chemical regulation of heart rate.
01/08/2026-12/09/2026	Practical:	1. Preparation of haemin and haemochromogen crystals. 2. Measurement and statistical analysis of variations observed in the student population in the class for the following parameters: a) Red blood cells using haemocytometer b) White blood cells using haemocytometer

05/11/2026- 25/11/2026	Unit- 5: Renal Physiology	Structure of kidney and its functional unit; Mechanism of urine formation; Regulation of water balance; Regulation of acid-base balance.
19/09/2026-2 4/10/2026	Practical:	1. Measurement and statistical analysis of variations observed in the student population in the class for the following parameters: a) Hemoglobin b) Blood pressure 2. Examination of histological sections of mammalian oesophagus, stomach, duodenum, ileum, rectum, liver, trachea, lung, kidney. 3. To study whole blood hemolysis with ammonium chloride solution. 4. To understand the components of blood, their functions and Hematopoiesis. 5. Study of Electrocardiogram; Analysis of ECG records and calculation of heart rate.
05/11/2026- 27/11/2026	Practical:	1. Detection of abnormal constituents in urine and their physiological significance. 2. Revision and Mock Practical

Name– Dr. Manisha Arora Pandit

Subject- DSC-7; Diversity of Chordates (04 Practical); Sem III

Shared with- Dr. Kanchan Batra

Days	Units Covered/ To be covered	Topics
04/08/2026- 18/08/2026	Practical:	1. Protochordata: <i>Balanoglossus</i> , <i>Herdmania</i> , <i>Branchiostoma</i> , Colonial Urochordata. Sections of <i>Amphioxus</i> through pharyngeal, intestinal and

		caudal regions. Permanent slide of <i>Herdmania</i> spicules. 2. Agnatha: <i>Petromyzon</i> , <i>Myxine</i> . 3. Pisces: <i>Scoliodon</i> , <i>Sphyrna</i> , <i>Pristis</i> , <i>Torpedo</i> , <i>Chimaera</i> , <i>Mystus</i> , <i>Heteropneustes</i> , <i>Labeo</i> , <i>Exocoetus</i> , <i>Echeneis</i> , <i>Anguilla</i> , <i>Hippocampus</i> , <i>Tetrodon/Diodon</i> , <i>Anabas</i> , Flatfish. Permanent slides of Placoid and Cycloid Scales.
25/08/2026-08/09/2026	Practical:	4. Amphibia: <i>Ichthyophis/Ureotyphlus</i> , <i>Necturus</i> , <i>Bufo</i> , <i>Hyla</i> , <i>Alytes</i> , <i>Salamandra</i> . 5.Reptilia: <i>Chelone</i> , <i>Trionyx</i> , <i>Hemidactylus</i> , <i>Varanus</i> , <i>Uromastix</i> , <i>Chamaeleon</i> , <i>Ophiosaurus</i> , <i>Draco</i> , <i>Bungarus</i> , <i>Vipera</i> , <i>Naja</i> , <i>Hydrophis</i> , <i>Zamenis</i> , <i>Crocodylus</i> ; Key for Identification of poisonous and non-poisonous snakes.
15/09/2026-29/09/2026	Practical:	6. Aves: Study of six common birds from different orders. Types of beaks and claws. 7. Mammalia: <i>Sorex</i> , Bat (Insectivorous and Frugivorous), <i>Funambulus</i> , <i>Loris</i> , <i>Herpestes</i> , <i>Erinaceous</i> .
06/10/2026-13/10/2026	Practical	Student Presentations
27/10/2026-17/11/2026	Practical	Student Presentations & Mock Practical

Name– Dr. Manisha Arora Pandit

Subject- GE-1 Human Physiology (04 Practical); Sem III

Shared with- Mr. Vikash Yadav

Days	Units Covered/ To be covered	Topics

12/08/2026- 27/08/2026	Practical:	1. Preparation of haemin and haemochromogen crystals. 2. Haemoglobin estimation using Sahli's haemoglobinometer.
02/09/2026- 01/10/2026	Practical:	3. Examination and detailed study of permanent histological sections of mammalian Lung, Testis and Ovary. 4. Preparation of temporary mount of neurons and blood cells (blood film preparation).
07/10/2026- 15/10/2026	Practical:	5. Recording of blood pressure using a Sphygmomanometer. 6. Examination and detailed study of permanent histological sections of mammalian Stomach, Duodenum, Liver, Kidney, Pancreas,
04/11/2026-1 9/11/2026		Revision of Practicals, Presentations and Mock Practical

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