

Government P.G College, Ambala Cantt.
Subject: Zoology Name of Teacher : Dr. Ratesh Kumar
Lesson Plan Session 2023-24 Class: B.Sc. 2nd sem.

Month	Details
January 2024	1. Fishes 2. Amphibia: Origin, Evolutionary tree. Type study of frog (<i>Rana tigrina</i>), Parental Care in Amphibia
February 2024	2. Reptilia: Type study of Lizard (<i>Hemidactylus</i>), Origin, Evolutionary tree. Extinct reptiles; Poisonous and non-poisonous snakes; Poison apparatus in snakes.
March 2024	3. Aves: Type study of Pigeon (<i>Columba livia</i>); Flight adaptation, Principles of aerodynamics in Bird flight, migration in birds.
April 2024	4. Mammals: Classification, type study of Rat Class Test
May 2024	Adaptive radiations of mammals dentition.

Ratesh Kumar

Government PG College, Ambala Cantt.
Subject: Zoology Name of Teacher : Dr. Ratesh Kumar
Lesson Plan Session 2023-24 Class: B.Sc. 4th sem.

Month	Deatils
January 2024	<p>1. 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 & lymph; Mechanism of coagulation of blood, coagulation factors; anticoagulants, haemopoiesis.</p> <p>1. Amphibia: Origin, Evolutionary tree. Type study of frog (<i>Rana tigrina</i>), Parental Care in Amphibia</p>
February 2024	<p>2. Respiration: Exchange of respiratory gases, transport of gases, lung air volumes, oxygen dissociation curve of hemoglobin, Bohr's effect, Haburger's phenomenon (Chloride shift), control / regulation of respiration. 2. Reptilia: Type study of Lizard (<i>Hemidactylus</i>), Origin, Evolutionary tree. Extinct reptiles; Poisonous and non-poisonous snakes; Poison apparatus in snakes.</p>
March 2024	<p>3. Excretion: Patterns of excretory products viz. Amonotelic, ureotlic uricotelic, ornithine cycle (Kreb's - Henseleit cycle) for urea formation in liver. Urine formation, counter-current mechanism of urine concentration, osmoregulation, micturition. 3. Aves: Type study of Pigeon (<i>Columba livia</i>); Flight adaptation, Principles of aerodynamics in Bird flight, migration in birds.</p>
April 2024	<p>4. Neural Integration: Nature, origin and propagation of nerve impulse alongwith meddullated & non-medullated nerve fibre, conduction of nerve impulse across synapse.</p> <p>5. Chemical integration of Endocrinology: Structure and mechanism of hormone action; physiology of hypothalamus, pituitary, thyroid, parathyroid, adrenal, pancreas and gonads.</p> <p>Class Test4. Mammals: Classification, type study of Rat Class Test</p>

R. K. R.

May 2024

6. Reproduction: Spermatogenesis, Capacitation of spermatozoa, ovulation, formation of corpus luteum, oestrous-anoestrous cycle, Menstrual cycle in human; fertilization, implantation and gestation. Adaptive radiations of mammals dentition

Geetika

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Government PG College, Ambala Cantt.

Subject: Zoology Name of Teacher : Dr. Ratesh Kumar

Lesson Plan Session 2023-24 Class: B.Sc. 6th sem.

Month	Details
January 2024	1. Seed production: Natural seed resources – its assessment, collection, Hatchery production 2. Nutrition: Sources of food (Natural, Artificial) and feed composition (Calorie and Chemical ingredients).
February 2024	3. Field Culture: Ponds-running water, recycled water, cage, culture; poly culture. 4. Culture technology: Biotechnology, gene manipulation and cryopreservation of gametes.
March 2024	5. Stored grains: (a) Pulse beetle (<i>Callosobruchus maculatus</i>) (b) Rice weevil (<i>Sitophilus oryzae</i>) (c) Wheat weevil (<i>Trogoderma granarium</i>) (d) Rust Red Flour beetles (<i>Tribolium castaneum</i>) (e) Lesser grain borer (<i>Rhizopertha dominica</i>) (f) Grain & Flour moth (<i>Sitotroga cerealella</i>) 6. Insect control: Biological control, its history, requirement and precautions and feasibility of biological agents for control. Class test
April 2024	7. Chemical control: History, Categories of pesticides. Important pesticides from each category to pests against which they can be used. Insect repellants and attractants. 8. Integrated pest management.
May 2024	9. Important bird and rodent pests of agriculture & their management.

Ratesh Kumar