

Zoology Dept

Lesson Plan (Even Semester) 2021-22

B.Sc Ist yr

Paper I

April → - Phylum Annelida - characters & Classification, Biodiversity & Eco. Grp.

- Type study - Pheretima
- Metamerism in Annelida
- Trochophore Larva

Phylum Arthropoda: - characters & Classification, Biodiversity & Eco. Grp.

- Type study - Periplaneta

Phylum Mollusca - characters & Classification, Biodiversity and Eco. Grp.

- Type study - Pila, Torsion & detorsion, Respiration & feet

May → Phylum Echinodermata - Classification & characters, Biodiversity & economic Grp.

- Type Study - Asterias
- Echinoderm Larvae & Aristotle's lantern
- Phylum Hemichordata - Type study - Balanoglossus

Paper II

May → Heredity & variations, varieties of gene interaction, linkage & recombination, Sex determinator systems

- Sex linked & sex influenced inheritance, Extra-chromosomal and cytoplasmic inheritance

June → - multiple Allelism, Human genetics, inborn errors of metabolism in man.

- Nucleic Acids, gene mutations
- Chromosomal Aberrations
- Numeric chromosomal mutations
- Applied Genetics

Pov

Zoology Dept (2021-22)

Lesson Plan (B.Sc IIIrd yr) Even Semester

Paper I

- April - Class - Amphibia - origin & evolutionary tree, Parental care
- type study of Frog
- Class Reptilia - Origin & Evolutionary tree, Extinct Reptiles
- Poisonous & non-poisonous snakes, Poison apparatus
Type study - Lizard
- May - Class Aves - Pigeon. Flight Adaptation,
Principles of aerodynamics in bird flight. Bird migration
- Class mammals - Classification, Adaptive radiations of mammals, Dentition
Type Study: Rat

Paper II

- May - Circulation - Origin, conduction & regulation of heart beat.
cardiac cycle, E.C.G., Cardiac output, Blood & lymph compo.
Blood coagulation, Haemopoiesis
- Respiration - Exchange and transport of respiratory gases, lung
air volumes, Oxygen dissociatⁿ curve, chloride shift, Control of respiration
- June - Excretion - Urea formatⁿ, Urin formation, Counter-current
mechanism of urine concentration, Osmoregulation, micrurivition.
- Neural integration - Nature, origin & propagation of nerve impulse,
Conduction of nerve impulse across synapse
- Endocrinology → Hormone action, Physiology of various endocrine glands
- Reproduction → Gametogenesis, Capacitation of spermatozoa,
menstrual cycle, oestrus-anestrus cycle, fertilization,
implantation and gestation

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Zoology Deptt (2021-22)
Lesson Plan (B.Sc IIyr) Even Semester

Paper I

April - Study of insect pests of Sugarcane, Cotton, Wheat, Paddy, Vegetables, stored grains

May - Insect Control, Chemical control, integrated pest management
Imp. Redend and Bird pests of agriculture

Paper II

May - Structure of sperm and ova, gametogenesis
Fertilization, parthenogenesis, cleavage, Blastulation
Fate-map construction in frog and chick

June - Gastrulation process and formation of three germ layers in Frog & Chick
Primary organizers, Extra-embryonic membranes, competence, determination & differentiation, Regeneration

Poon