

Zoology Dept.

Lesson Plan (Even Semester) 2022-23

B. Sc Ist yr.

Paper I.

- ⇒ January → - Phylum Annelida : Type study - *Pharetrisima*  
- Metamorphism in Annelida  
- Trochophore Larva
- Phylum Arthropoda : - Type study - *Periplaneta*
- Phylum Mollusca : - Type Study - *Pila*  
- Torsion & detorsion  
- Respiration & Feet
- ⇒ February → Phylum Echinodermata : Type Study - *Asterias*  
- Echinoderm Larvae & Aristotle's lantern
- Phylum Hemichordata : Type study - *Balanoglossus*

Paper II

- ⇒ March → Heredity & Variations, Varieties of gene interactions, Linkage & Recombination, Sex determinants, systems, Sex linked & sex influenced inheritance, Extra-chromosomal & cytoplasmic inheritance
- ⇒ April → Multiple Allelism, Human Genetics, Emborn errors of metabolism in man, Nucleic acids, Gene mutations, chromosomal Abnormalities, Numerical chromosomal mutations, Applied Genetics

Ram  
Dr. Ramas  
A. P. of Zoology

Paper I -

- ⇒ January → Class Amphibia → Type study of frog  
Class Reptilia → origin & evolutionary tree, Extinct  
Reptiles, poisonous & non-poisonous snakes, poison apparatus  
Type study of lizard
- ⇒ February → Class Aves → Type study of Pigeon  
Flight Adaptation, Principles of aerodynamics in bird  
flight. Bird migration
- Class Mammals → Adaptive radiations of mammals,  
Dentition. Type study of Rat.

Paper II

- ⇒ March → Circulation → Origin conduction & regulation of  
heart beat. Cardiac cycle, ECG, Cardiac Output, Blood &  
lymph components, Blood coagulation, Haemopoiesis
- Respiration → Exchange & transport of respiratory gases,  
lung air volumes, O<sub>2</sub> dissociation curve, Cardiac Output, Control of respiration
- ⇒ April → Excretion → Urea formation, Urin formation, Counter  
current mechanism of urine concentration, Osmoregulation, micturition
- Neural integration → Nature, origin & propagation of Nerve impulse  
Conduct of Nerve impulse
- Endocrinology → Hormone action, various endocrine glands
- Reproduction → Gametogenesis, Capacitation of Spermatozoa,  
menstrual cycle, oestrous-anovulatory cycle, Fertilization,  
implantation & gestation

P.C.  
De Poorter  
A.P. J. Salley

Zoology Deptt (2022-23)  
Lesson Plan - B.Sc IIIrd yr

Even Sem.

Paper - I

- ⇒ January → sugar cane insect pests, cotton insect pests, wheat insect pests, paddy insect pests
- ⇒ February → vegetable insect pests, stored grains insect pests, insect control, chemical control, integrated pest management, important bird and rodent pests & their management

Paper - II

- ⇒ March → Aims & scope of developmental biology, structure of sperm & ova, gametogenesis, fertilization, furtherogenesis, different types of eggs & pattern of cleavage, gastrulation, fate-map construction in frog and chick
- ⇒ April → Gastrulation & formation of 3 germ layers in frog & chick. Elementary knowledge of organisms extra-embryonic membranes :- Structure & significance, competence, determination & differentiation, Regeneration

Loc  
Dr. Rooram  
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