

M.Sc.(Previous) DEGREE EXAMINATION, DECEMBER – 2015

First Year

ZOOLOGY

Paper - I : Systematics And Anatomy of Invertebrates

Time : 3 Hours

Maximum Marks: 70

Answer all questions

All questions carry equal marks

- 1) a) Give detailed notes on classification of the Phylum Protozoa up to orders.

OR

- b) Write short notes on:

- i) Development in sponges
- ii) General organization of Porifera

- 2) a) Write an account of classification of phylum Coelenterata up to orders

OR

- b) Write short notes on:

- i) General organization of Nematelminthes
- ii) Parasitic adaption in Platyhelminthes.

- 3) a) Describe advanced blood circulatory system in Annelida.

OR

- b) Write short notes on:

- i) General organization of Arthropoda.
- ii) Evolutionary significance of Trochophore larva.

- 4) a) Describe classification of Phylum Echinodermata.

OR

- b) Write short notes on:
- i) General organization of Mollusca
 - ii) Sea urchin

- 5) a) Give an account on General organization of Ectoprocta.

OR

- b) Write short notes on:
- i) Rotifera
 - ii) Sipuncula



M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER – 2015

(Examination at the end of First Year)

ZOOLOGY

Paper - II : Systematics And Anatomy of Chordates and Gamete Biology

Time : 3 Hours

Maximum Marks: 70

Answer all question

All questions carry equal marks

- 1) a) Give detailed notes on specialized characters of Hemichordate and Cephalochordata.

OR

- b) Write short notes on:

- i) General characters of the phylum chordates.
- ii) Urochordata.

- 2) a) Give an account of classification of fishes up to class

OR

- b) Write short notes on:

- i) General characters of Amphibia.
- ii) Non-poisonous snakes.

- 3) a) Describe classification of Birds up to class

OR

- b) Write short notes on:

- i) Common birds of India.
- ii) Flightless birds.

- 4) a) Give an account of general characters of Mammals.

OR

- b) Write short notes on:

- i) Adaptative radiation in mammals.
- ii) Patterns of Cleavage.

- 5) a) Give detailed notes on Oogenesis

OR

- b) Write short notes on:

- i) South Indian Mammals.
- ii) Oestrous cycle.



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(Examination at the end of First Year)

ZOOLOGY

Paper - III : Cell Biology, Genetics and Evolution

Time : 3 Hours

Maximum Marks: 70

Answer all questions

All questions carry equal marks

1) a) Describe the structure of Plasma membrane.

OR

b) Write short notes on:

i) Endoplasmic Reticulum.

ii) Golgi complex.

2) a) Discuss the DNA Structure.

OR

b) Write short notes on:

i) Ribosomal RNA.

ii) Transfer RNA.

3) a) Write in detail the abnormalities of the Chromosomes.

OR

b) Write short notes on:

i) Significance of meiosis.

ii) Giant chromosomes.

- 4) a) Write an essay on sex linked inheritance.

OR

- b) Write short notes on:

- i) Di hybrid cross.
- ii) Epistasis.

- 5) a) Give an account on modern synthetic theory.

OR

- b) Write short notes on:

- i) Hardyweinberg law of equilibrium.
- ii) Isolation.



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First Year

ZOOLOGY

Paper - IV : Animal Ecology And Wildlife

Time : 3 Hours

Maximum Marks: 70

Answer all questions

All questions carry equal marks

1) a) Explain Thermal stratification of natural water bodies.

OR

b) Write short notes on:

i) Light penetration.

ii) Ecology its relevance to civilization.

2) a) Describe Biogeochemical cycle of Carbon.

OR

b) Write short notes on:

i) Shelford's law of tolerance.

ii) Food web

3) a) Give an account on different positive interactions.

OR

b) Write short notes on:

i) Parasitism and allelopathy.

ii) Biotic interactions

- 4) a) Describe population growth form with suitable examples.

OR

- b) Write short notes on:

- i) Properties of the population group
- ii) Energy partitioning and optimization

- 5) a) Explain wild life trade and management strategies.

OR

- b) Write short notes on:

- i) Rare and threatened species
- ii) Positive and negative values of wild life.

