

**(DZOO01)**

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2018**

**First Year**

**ZOOLOGY**

**Systematics and Anatomy of Invertebrates**

**Time : 3 Hours**

**Maximum Marks : 70**

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*Answer all questions*

*All questions carry equal marks.*

**Q1)** a) Give a detailed account on the development of sponges.

OR

b) Write short notes on

- i) Reproduction in protozoa.
- ii) General characters of Porifera.

**Q2)** a) Give an account on general organization of nemathelminths.

OR

b) Write short notes on

- i) Parasitic adaptations of cestodes.
- ii) Polymorphism in coelenterates.

**Q3)** a) Give an account on general organization of annelida.

OR

b) Write short notes on

- i) Significance of trochophore larva.
- ii) General characters of arthropoda.

**Q4)** a) Give an account on larval forms in echinoderms.

OR

b) Write short notes on

i) Classification of mollusca.

ii) General characters of echinodermata.

**Q5)** a) Give an account on general organization of Rotifera.

OR

b) Write short notes on

i) Chaetognatha

ii) Ectoprocta.



**(DZOO02)**

Total No. of Questions : 5]

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2018**

**First Year**

**ZOOLOGY**

**Systematics & Anatomy of Chordates & Gamete Biology**

**Time : 3 Hours**

**Maximum Marks : 70**

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*All questions are compulsory.*

*All questions carry equal marks.*

**Q1)** a) Give an account on specialized characters of Cephalochordata.

OR

b) Write short notes on :

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

**Q2)** a) Give an account on migration of fishes.

OR

b) Write short notes on :

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

**Q3)** a) Give an account on adaptation of birds to flight.

OR

b) Write short notes on :

- i) Classification of birds.
- ii) Archaeopteryx.

**Q4)** a) Give an account on aquatic adaptations of mammals.

OR

- b) Write short notes on :
- i) General characters of mammals.
  - ii) South Indian mammals.

**Q5)** a) Give an account on fertilization.

OR

- b) Write short notes on :
- i) Sperm.
  - ii) Vitelogenesis.



**(DZOO03)**

Total No. of Questions : 5]

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2018**

**First Year**

**ZOOLOGY**

**Cell Biology, Genetics and Evolution**

**Time : 3 Hours**

**Maximum Marks : 70**

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**Answer all questions**

**All questions carry equal marks.**

**Q1) a)** Give an account on golgi complex.

OR

b) Write notes on

- i) Mitochondria
- ii) Cell membrane

**Q2) a)** Give a detailed account on DNA structure.

OR

b) Write short notes on

- i) Messenger RNA
- ii) t - RNA

**Q3) a)** Give an account on gaint chromosomes.

OR

b) Write short notes on

- i) Meiosis
- ii) Abnormalities in Chromosomes.

**Q4) a)** Give an account on sex determination.

OR

- b) Write short notes on
  - i) Interaction of genes
  - ii) Multiple alleles

**Q5)** a) Give a detailed account on various species concepts.

OR

- b) Write short notes on
  - i) Modern synthetic theory.
  - ii) Hardyweinberg law.



**(DZOO04)**

Total No. of Questions : 5]

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2018**

**ZOOLOGY**

**First Year**

**Animal Ecology and Wildlife**

**Time : 3 Hours**

**Maximum Marks : 70**

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*Answer all questions.*

*All questions carry equal marks.*

**Q1)** a) Give an account on thermal stratification of natural water bodies.

OR

b) Write short notes on

i) Life supporting properties of water

ii) Classification of ecosystems

**Q2)** a) Give an account on biogeochemical cycle of nitrogen.

OR

b) Write short notes on

i) Concept of productivity

ii) Shelford's law of tolerance

**Q3)** a) Give an account on competition and coexistence.

OR

b) Write short notes on

i) Commensalism

ii) Predation

**Q4)** a) Give an account on properties of population group.

OR

- b) Write short notes on
  - i) Population control.
  - ii) r and k selection

**Q5)** a) Give an account on wild life projects in India.

OR

- b) Write short notes on
  - i) Wildlife trade
  - ii) WWF

