

**(DZOO01)**

**Total No. of Questions : 05]**

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**M.Sc. DEGREE EXAMINATION, MAY – 2017**

**(First Year)**

**ZOOLOGY**

**Systematics and Anatomy of Invertebrates**

**Time : 3 Hours**

**Maximum Marks : 70**

**Answer all questions**

**All questions carry equal marks**

**Q1) a) Give an account on development in sponges.**

**OR**

**b) Write short notes on :**

- i) General characters of protozoa.
- ii) General characters of porifera

**Q2) a) Give an account on the general organization of phylum Nemathelminthes.**

**OR**

**b) Write short notes on :**

- i) Polymorphism
- ii) Parasitic adaptations of Trematodes.

**Q3) a) Give an account on the evolutionary significance of Trochophore larve.**

**OR**

**b) Write short notes on :**

- i) Polychaeta.
- ii) General characters of arthropoda.

**Q4) a) Give a detailed account on the general organization of mollusca.**

**OR**

**b) Write short notes on :**

- i) Bipinnaria larva.
- ii) Ophiopluteus larva.

**Q5) a) Give a detailed account on the general organization of chaetognatha.**

**OR**

**b) Write short notes on :**

- i) Ectoprocta.
- ii) Rotifera.



**(DZOO02)**

**Total No. of Questions : 05]**

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2017**

**First Year**

**ZOOLOGY**

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

**Time : 3 Hours**

**Maximum Marks : 70**

**Q1) a) Give an account on the general characters and classification of hemichordata.**

**OR**

- b) Write short notes on  
i) Urochordata  
ii) General characters of chordates

**Q2) a) Describe the general characters and classification of amphibia.**

**OR**

- b) Write short notes on  
i) Parental care in fishes.  
ii) Non – poisonous snakes

**Q3) a) Give a detailed account on the significance of Archaeopteryx.**

**OR**

- b) Write short notes on  
i) Common birds of India.  
ii) Flightless birds

**Q4) a) Give a detailed account on south Indian mammals.**

**OR**

- b) Write short notes on  
i) Aquatic adaptations of mammals.  
ii) General characters of mammals.

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

**OR**

- b) Write short notes on  
i) Telolecithal egg  
ii) Fertilization



**(DZOO03)**

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2017**

**First Year**

**ZOOLOGY**

**Cell Biology, Genetics and Evolution**

**Time : 3 Hours**

**Maximum Marks : 70**

**Answer all questions**

**All questions carry equal marks.**

**Q1) a) Give an account on plasma membrane.**

**OR**

- b) Write short notes on  
i) Cell membrane  
ii) Golgi complex

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

**OR**

- b) Write short notes on  
i) Protein synthesis  
ii) Ribosomal RNA

**Q3) a) Give an account on Abnormalities of the Chromosomes.**

**OR**

- b) Write short notes on  
i) Chromosome structure  
ii) Mitosis

**Q4) a) Write an essay on interaction of genes.**

**OR**

- b) Write short notes on  
i) Sex determination  
ii) Multiple alleles

**Q5) a) Give a detailed account on modern synthetic theory.**

**OR**

- b) Write short notes on  
i) Species concept  
ii) Hardyweinberg law

**(DZOO04)**

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**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2017**

**First Year**

**ZOOLOGY**

**Animal Ecology and Wildlife**

**Time : 3 Hours**

**Maximum Marks : 70**

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

**OR**

- b) Write short notes on  
i) Feed back loop  
ii) Properties of water

**Q2) a) Give an account on the anthropogenic stress and toxic waste as limiting factors.**

**OR**

- b) Write short notes on  
i) Liebig's law of minimum  
ii) Ecological pyramids

**Q3) a) Give a detailed account on biotic interactions**

**OR**

- b) Write short notes on  
i) Ecological niche  
ii) Mutualism

**Q4) a) What is population? Give an account on population growth form.**

**OR**

- b) Write short notes on  
i) Energy partitioning  
ii) Basic concepts of rates

**Q5) a) Give an account on the characteristics and objectives of biosphere reserves.**

**OR**

- b) Write short notes on  
i) Threatened species  
ii) Hot spots

