

**(DZOO01)**

**Total No. of Questions : 5]**

**[Total No. of Pages :02**

**M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016**

**First Year**

**ZOOLOGY**

**Systematics and Anatomy of Invertebrates**

**Time : 3 Hours**

**Maximum Marks : 70**

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**Q1) a) Describe various types of reproductive processes in Protozoa.**

**OR**

- b) Write short notes on
- i) General Organization of porifera
  - ii) Sponges

**Q2) a) Give an account on parasitic adaptations in platy helminthes.**

**OR**

- b) Write short notes on
- i) Anthozoa
  - ii) Polymorphism

**Q3) a) Describe the evolutionary significance of trochophore larva.**

**OR**

- b) Write short notes on
- i) Polychaeta
  - ii) Crustacea

**Q4) a) Describe the general organization of mollusca.**

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b) Write short notes on

- i) Holothuroidea
- ii) Sea urchin

**Q5)** a) Describe the general organization of chaetognatha.

OR

b) Write short notes on

- i) Sipuncula
- ii) Rotifera



**(DZOO02)**

**Total No. of Questions : 5]**

**[Total No. of Pages :02**

**M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016**

**First Year**

**ZOOLOGY**

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

**Time : 3 Hours**

**Maximum Marks : 70**

*Answer all questions.*

*All questions carry equal marks.*

**Q1)** a) Give an account on Urochordata.

OR

b) Write short notes on

- i) General characters of chordates
- ii) Specierlized characters of Proto chordates

**Q2)** a) Write an essay on the migration of fishes

OR

b) Write short notes on

- i) Characters of amphibia
- ii) Non – Poisonous snakes

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

OR

b) Write short notes on

- i) Flight less birds
- ii) Feathers in birds

**Q4)** a) Give an account on general characters of mammals

OR

b) Write short notes on

- i) Adaptative radiation in Mammals
- ii) Aquatic mammals

**Q5)** a) Give an account on parental care in fishes

OR

- b) Write short notes on
- i) Patterns of cleavage
  - ii) Marsupials



**(DZOO03)**

**Total No. of Questions : 5]**

**[Total No. of Pages :02**

**M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016**

**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 the structure of Endoplasmic reticulum  
OR

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

**Q2)** a) Write an essay on the protein synthesis  
OR

- b) Write short notes on  
i) m - RNA  
ii) DNA

**Q3)** a) Give a detailed account on abnormalities of the chromosomes.  
OR

- b) Write short notes on  
i) Mitosis  
ii) Giant chromosomes

**Q4)** a) Give an account on Sex linked inheritance  
OR

- b) Write short notes on  
i) Mendelian laws  
ii) Interaction of genes

**Q5)** a) Give an account on species concept.

OR

b) Write short notes on

- i) Isolation
- ii) Hardyweinberg law



**(DZOO04)**

**Total No. of Questions : 5]**

**[Total No. of Pages :02**

**M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016**

**First Year**

**ZOOLOGY**

**Animal Ecology and Wildlife**

**Time : 3 Hours**

**Maximum Marks : 70**

*Answer all questions.*

*All questions carry equal marks.*

**Q1)** a) Describe thermal stratification of natural water bodies.

OR

b) Write short notes on

- i) Feed back loop
- ii) Ecosystem

**Q2)** a) Describe the anthropogenic stress and toxic waste as limiting factor.

OR

b) Write short notes on

- i) Food chain
- ii) Shelford's law of tolerance

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

OR

b) Write short notes on

- i) Ecological niche
- ii) Predation

**Q4)** a) Describe the properties of the population group

OR

b) Write short notes on

- i) Population control
- ii) r - selection

**Q5)** a) Give an account on IUCN classification of rare animals.

OR

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

