

*This question paper contains 4 printed pages.*

4611

Your Roll No. ....

**B.Sc. Prog. / II**

**AS**

**LS-202 : BIODIVERSITY – II (ANIMALS)**

**Time : 3 hours**

**Maximum Marks : 75**

*(Write your Roll No. on the top immediately  
on receipt of this question paper.)*

*There are two Sections, Section A and Section B, which  
are to be answered on separate answer-books.*

*Draw labelled diagrams wherever necessary.*

**SECTION A**

**Marks : 37**

*Answer three questions in all, including  
Q. No. 1, which is compulsory.*

1. (a) Define the following terms:

(i) Polymorphism

(ii) Metamerism.

2

(b) Differentiate between:

(i) Holophyti and Holozoic Nutrition

(ii) Facultative and Obligate Parasites

(iii) Enterocoelous and Schizocoelous Coelom

(iv) Stomodaeum and Proctodaeum.

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(c) Give the scientific names of the following:

(i) Portuguese man-of-war

(ii) Dead man's finger

(iii) Sea mouse

(iv) Elephant's tusk shell.

4

(d) Give the location and function of the following:

(i) Parapodia

(ii) Radula

(iii) Ambulacral Groove.

3

2. (a) What are coral reefs? Explain different types of coral reefs.

8

(b) Define metagenesis. Explain the process with the help of an example.

4

3. (a) Define coelom. Briefly explain coelom in Polychaeta, Oligochaeta and Hiradinea.

6

(b) Give a brief account of water vascular system in Echinodermata.

6

4. Write short notes on any *two* of the following:

(a) Parasitic adaptation in Ascaris

(b) Vision in arthropoda

- (c) Process of conjugation in *Paramecium* and significance of the process. 6,6

SECTION B Marks : 38

*Attempt three questions in all, including  
Q. No. 5, which is compulsory.*

5. (a) Define:
- (i) Stenohaline
  - (ii) Limnodromous
  - (iii) Retrogressive metamorphosis
  - (iv) Osmoregulation. 4
- (b) Distinguish between the following:
- (i) Pronz Horn and Hollow Horn
  - (ii) Chordata and Vertebrata
  - (iii) Syrinx and Larynx. 6
- (c) Classify the following:
- (i) *Bufo*
  - (ii) *Catla*
  - (iii) *Hemidactylus*
  - (iv) *Balanoglossus*. 4
6. (a) Discuss the role of various physical and biological factors in Migration of fishes.

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- (b) Describe migratory movements in *Anguilla*. 12
7. (a) Discuss terrestrial adaptations in Reptiles.
- (b) Describe various derivatives of integument in mammals. 6,6
8. Write short notes on any *two* of the following:
- (i) Flight adaptations in Birds
- (ii) Accessory breathing organs in fishes
- (iii) Parental care in amphibia. 6,6