

✓ Lib 11/12/18 Morning

[This question paper contains 4 printed pages]

Your Roll No. :

Sl. No. of Q. Paper : 204 I

Unique Paper Code : 42231102

Name of the Course : **B.Sc.(Prog.)**

Name of the Paper : Animal Diversity

Semester : I

Time : 3 Hours **Maximum Marks : 75**

Instructions for Candidates :

- Write your Roll No. on the top immediately on receipt of this question paper.
- There are **two** sections, **Section-A** and **Section-B** to be answered on separate answer-sheets.
- Answer **three** questions from each section, including Question No. 1 which is compulsory.
- Draw labelled diagrams wherever necessary.

P.T.O.

Section - A NONCHORDATE

1. (a) Define the following terms : 4
 - (i) Enterocoel
 - (ii) Vector
 - (iii) Cephalization
 - (iv) Bilateral Symmetry
- (b) Give the scientific names of the following : 2
 - (i) Cuttle fish
 - (ii) Sea mouse
 - (iii) Glass rope sponge
 - (iv) Feather star
- (c) Classify the following upto class : 4
 - (i) *Limulus*
 - (ii) *Octopus*
 - (iii) *Nereis*
 - (iv) *Tubipora*
- (d) Differentiate between the following terms : 4
 - (i) Ostium and osculum
 - (ii) Gravid and mature proglottid
 - (iii) Protogyny and protandry
 - (iv) Monogenetic and digenetic life history

2. (a) Discuss in detail the general features of kingdom Protista. 6
- (b) Explain Sol-Gel theory of locomotion in Protozoa. 6
3. (a) Draw a labelled sketch and explain the structure of water vascular system in Starfish. 8
- (b) Explain the mechanism of locomotion in Starfish. 4
4. Write short notes on any **two** of the following : 6+6
 - (a) Mosaic vision
 - (b) Metamorphosis in Insects
 - (c) Polymorphism in Hydrozoa
 - (d) General features of phylum Mollusca

Section - B CHORDATA

1. (a) Define the following terms : 4
 - (i) Perching
 - (ii) Endothermy
 - (iii) Osmoconformers
 - (iv) Holobranch

(b) Give location and function of the following : 3

- (i) Patagia
- (ii) Wheel organ
- (iii) Pygostyle

(c) Differentiate between the following terms : 6

- (i) Anapsida and diapsida
- (ii) Euryhaline and stenohaline
- (iii) Ratitae and carinatae
- (iv) Lemuroidea and tarsioidea

2. (a) Give an account of salient features of Protochordata. 7

(b) Discuss phylogeny of Hemichordates. 5

3. Explain in detail the various ways of parental care in Amphibians. 12

4. Write short notes on any **two** of the following : 6+6

- (a) Flight adaptations in birds
- (b) Osmoregulation in fishes
- (c) Evolution of Primates
- (d) General features of Agnatha