

[This question paper contains 6 printed pages.]

11/12/19 M  
Life Sci ✓

Your Roll No.....

Sr. No. of Question Paper : 7329

J

Unique Paper Code : 42231102 – OC

Name of the Paper : Animal Diversity

Name of the Course : **B.Sc. (Life Science)**

Semester : I

Duration : 3 Hours

Maximum Marks : 75

**Instructions for Candidates**

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

**SECTION A**  
**(NON CHORDATA)**

1. (a) Define the following terms : (4)

(i) Pseudocoelom

P.T.O.

(ii) Metamorphosis

(iii) Torsion

(iv) Metamerism

(b) Distinguish between the following : (4)

(i) Polyp and Medusa

(ii) Polychaetae and Oligochaetae

(iii) Protostome and Deuterostome

(iv) Holometabolous and Heterometabolous

(c) State the following as True/False (2)

(i) Zoological name of earthworm is *Fasciola hepatica*.

(ii) Leucon is the simplest type of canal system.

(iii) Arthropods have open circulatory system.

(iv) Water canal system is a feature of phylum Echinodermata.

(d) State the location and function of the following : (4)

(i) Flame cell

(ii) Contractile vacuole

(iii) Typhlosole

(iv) Radula

2. (a) Explain the life cycle of *Taenia solium* with the help of well labeled diagram. (6)

(b) Describe in detail the vision in Arthropoda. (6)

3. (a) Describe Polymorphism in Hydrozoa. (5)

(b) With the help of diagram describe the canal system in *Sycon*. (7)

4. Write short notes on any **three** of the following : (3×4=12)

(i) Parasitic adaptations in Helminthes

(ii) Water vascular system in Asteroidea

(iii) Locomotory organelles in Protozoa



- (iv) Characteristic features of phylum Mollusca

**SECTION B**  
**(CHORDATA)**

1. (a) Define the following terms : (4)

- (i) Retrogressive metamorphosis
- (ii) Neoteny
- (iii) Pneumatic bone
- (iv) Ecdysis

- (b) Distinguish between the following : (4)

- (i) Osmoconformers and Osmoregulators
- (ii) Apoda and urodela
- (iii) Protostome and Deuterostome
- (iv) Homodont and Heterodont

- (c) State the following as True/False : (2)

- (i) Common name of *Exocoetus* is Flying frog.

- (ii) All Aves are amniotes.

- (iii) Osteichythes have a cartilagenous endoskeleton.

- (iv) Poison gland of snake is a modified salivary gland.

- (d) Write the Zoological name of the following : (3)

- (i) Tongue worm
- (ii) Flying lizard
- (iii) Squirrel

2. (a) Draw a well labeled diagram of the poison apparatus. Discuss briefly the biting mechanism in snakes. (8)

- (b) Enumerate the general features of Agnatha. (4)

3. (a) What is Osmoregulation? Explain osmoregulation in Teleost. (8)

- (b) Classify Mammals up to orders with examples. (4)

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

(3×4=12)

- (i) Parental care in Amphibians
- (ii) Flight adaptation in Aves
- (iii) Protochordata
- (iv) Origin of Mammals

munotes.in