11/12/19 M

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 8575 **J**

Unique Paper Code : 42231102

Name of the Paper : Animal Diversity

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

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. Attempt **five** Questions in all.
3. Q. No. **1** is compulsory.

1. (a) Define any **five** of the following terms : (5)

   (i) Digenetic

   (ii) Torsion

   (iii) Madreporite

   (iv) Operculum

   (v) Metagenesis

P.T.O.

(vi) Ecdysis

(vii) Autogamy

(b) Differentiate between the following terms : (12)

(i) Polyp and medusae

(ii) Catadromous and Anadromous

(iii) Gastrozooids and Dactylozooids

(iv) Anapsid and Diapsid skull

(v) Osteichthyes and Chondrichthyes

(vi) Osmoconformers and osmoregulators

(c) Give the name of the animal in which the following structure is found : (5)

(i) Tubefeet

(ii) Nematocysts

(iii) Mantle

(iv) Proglottids

(v) Placoid scales

(d) Give the scientific name and classify the following animals upto class : (5)

(i) Squirrel

(ii) Toad

(iii) Cuttle fish

(iv) Devil fish

(v) Centipede

2. Describe the life history of *Toenia solium* with the help of labelled diagrams. (12)

3. (a) Describe general characters and classification of Amphibia upto orders with suitable example.

(b) With the help of suitable diagram explain biting mechanism in snakes. (7,5)

4. (a) Define polymorphism with suitable examples and its significance.

(b) Describe canal system in *Sycon.* (6,6)

P.T.O.

5. (a) What do you understand by osmoregulation? Give an account of osmoregulatory mechanisms adapted by fishes in varying salinity.

(b) Describe briefly migration in Birds. (7,5)

6. (a) Discuss briefly torsion in gastropods.

(b) Briefly explain metamerism in Annelida. (6,6)

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

(i) Vision in Arthropoda

(ii) Locomotion in Protozoa

(iii) Parental care in fishes

(iv) Water vascular system in Asteroidea

(4 marks each)