

This question paper contains 3 printed pages.]

Your Roll No. ....

1342

A

**B.Sc. (Hons.)/I**

**ZOOLOGY—Paper I**

**(Animal Diversity I) =**

**NON-CHORDATA**

**(Admissions of 2004 and onwards)**

*Time : 3 Hours*

*Maximum Marks : 55*

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

*Attempt five questions in all, including*

*Q. No. 1 which is compulsory.*

1. (a) Name the animals that possess the following :

(i) Rhopalia.

(ii) Laurer's Canal

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(b) Write zoological names for the following animals and  
classify each up to its order :

(i) Venus flower basket.

(ii) Organ pipe coral.

(iii) Sea mouse.

(iv) King crab.

6

[P.T.O.]

(c) Distinguish between the following :

- (i) Ommatidium and ocelli
- (ii) Ephyra and scyphistoma
- (iii) Porocyte and choanocyte
- (iv) Filopodia and reticulopodia
- (v) Hemimetabola and Holometabola 5

(d) Match the following in Column A with the appropriate one in Column B :

Column A	Column B	
(i) Green Gland	Sycon	
(ii) Botryoidal Tissue	Trypanosoma	
(iii) Prosopyle	Paramecium	
(iv) Trichocyst	Arthropoda	
(v) Rhabdite	Leech	
(vi) Tsetse fly	Planaria	6

2. (a) Explain different modes of nutrition in various groups of protozoans. 5

(b) Describe the process of conjugation in Paramecium. Add a note on its significance. 4

3 (a) Write an essay on Polymorphism in Hydrozoa. 6

(b) Explain the phenomenon of Metagenesis with the help of one example. 3

4. Give an account of Metamorphosis in insects. Add a note on its endocrine control. 9
5. Write an essay on coelom in phylum Annelida. 9
6. (a) Enumerate various parasitic adaptations in platyhelminthes. 5
- (b) Explain Water vascular system in *Asterias*. 4
7. Write short notes on any *two* of the following :
  - (i) Leuconoid Canal system.
  - (ii) Coral Reefs
  - (iii) Torsion in Gastropods
  - (iv) Social insects. 3, 3, 3