

2017

M.Sc.

1st Semester Examination

ZOOLOGY

PAPER—ZOO-101

Subject Code—35

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Use separate Answer-scripts for Group-A & Group-B

Group—A

(Non-Chordates)

1. Answer any two questions of the following : 2×2

- (a) Mention the characters which appeared in course of metazoan evolution.

(Turn Over)

- (b) Differentiate protostomia from deuterostomia.
- (c) Comment on Flagship Species.
- (d) Highlight the differences between Entrocoelous coelom from schizocoelous one.

2. Answer any *two* questions of the following : 4×2

- (a) Briefly explain the 'Bennet-Clasks' Model of nematode feeding.
- (b) Significance of cyclomorphosis in rotiferra.
- (c) Mention the significance of foreaminiferra in eco-monitoring of marine ecosystem.
- (d) With labelled diagram point out the structural excellence of rotiferra.

3. Answer any *one* question of the following : 1×8

- (a) Define larva. Briefly elaborate the concept of resource utilisation in larval study. With labelled diagram differentiate protostome larva from deuterostome ones.
1+3+4
- (b) Enlist different Lophophoporeate phyla and draw relationships among them. Briefly discuss the feeding mechanism of ectoprocta. 3+5

Group—B**(Chordates)**

4. Answer any *two* questions : 2×2
- (a) Define Echolocation.
 - (b) State the function of endostyle.
 - (c) State the significance of accessory respiratory organs in teleost fishes.
 - (d) Why does hilsa migrate ?
5. Write any *two* of the following : 2×4
- (a) State the structures and functions of endostyle in Amphioxus.
 - (b) What do you mean by osmoregulation in fish ? State its significance.
 - (c) Write a note on the iodine cycle in Amphioxus.
 - (d) Define osmoconformer and state its significance in lower group of restebtratos.

6. Write any *one* question :

1×8

- (a) Give an account of distribution of primates in India.
- (b) Discuss the migratory behaviour of birds.
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