

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014

(UG-CCSS)

Core Course

Zoology

ZO 5B 09—ANIMAL DIVERSITY (Part 1 Non-Chordata)

Time : Three Hours

Maximum : 30 Weightage

I. Answer all *twelve* questions. Each question carries $\frac{1}{4}$ weightage :

A. Objective type questions :

1 Which of the following animal is known as bell animalcule ?

- (a) Noctiluca. (b) Trichonympha.
(c) Vorticella. (d) Paramecium.

2 Phylum Mesozoa includes :

- (a) Orthonectida and Dicyemida. (b) Orthonectida and Calcarea.
(c) Orthonectida and Hydrozoa. (d) Dicyemida and Hydrozoa.

3 Cidippid is the larva of :

- (a) Mollusca. (b) Echinodermata.
(c) Phoronida. (d) Ctenophora.

4 Aristotle's lantern is present in :

- (a) Antedon. (b) Echinus.
(c) Ophiothrix. (d) Cucumaria.

B. Name the following :

5 Name the mode of sexual reproduction in *Paramecium*.

6 Name the genus of dog tape worm.

7 Name the larva of *Balanoglossus*.8 Name the excretory organs of *Penaeus*.

C. Fill up the blanks :

9 _____ is the anticoagulant present in the saliva of leech.

10 *Rhizostoma* belongs to Order _____,

Turn over

11 Generic name of horn coral is _____.

12 _____ are the locomotory organs of Nereis.

(12 × ¼ = 3 weightage)

II. Answer all *nine* questions :—

13 Describe the structural peculiarities of *Noctiluca*.

14 What is a digenetic parasite? Give an example.

15 What is evisceration ?

16 Explain parasitic castration with a suitable example.

17 Enlist the salient features of Phylum Phoronida.

18 What is ink sac ? Mention its function.

19 Distinguish between connectives and commissures.

20 Explain sexual dimorphism in *Penaeus*.

21 What is a connecting link? Give an example.

(9 × 1 = 9 weightage)

III. Answer any *five* questions :

22 Describe feeding and nutrition in *Paramecium*.

23 Discuss the mode of infection and pathogenicity of any two parasitic nematodes.

24 Describe canal system in sponges.

25 Enlist the salient features of *Hemichordata*.

26 Explain the zoological significance and affinities of *Peripatus*.

27 With a neat labelled sketch, describe the structure of trochophore larva.

28 Name *two* polymorphic hydrozoans and describe their structural

(5 × 2 = 10 weightage)

IV. Answer any *two* questions :

29 Describe the respiratory system and mode of respiration in *Pila*.

30 With neat labelled sketches, describe the thoracic appendages of *Penaeus*.

31 Describe the structure of *Obelia* medusa and add a note on metagenesis in *Obelia*.

(2 × 4 = 8 weightage)