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(Pages 2)

Name...

Reg. No...................................

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2013

(UG – CCSS)

Zoology (Core Course)

Z05 B09—ANIMAL DIVERSITY I—NON-CHORDATA

Time : Three Hours   Maximum : 30 Weightage

*Answer may be written **either** in English **or** in Malayalam.*
Give illustrations wherever necessary.

I. Answer *all* twelve questions. Each question carries ¼ weightage :

A. Objective type question :

   1 Which of the following is a Wingless insect ?

      (a) *Mantis.*   (b) *Tabanus.*

      (c) Moth.   (d) Lepisma.

   2 The function of Flame cells is :

      (a) Sensory.   (b) Excretory.

      (c) Respiratory.   (d) Digestive.

   3 Which of the following is not an Arachnid ?

      (a) Scorption.   (b) Ticks.

      (c) Spider.   (d) King crab.

   4 Red tide is caused by :

      (a) *Noctiluca.*   (b) *Vorticella.*

      (c) *Paramecium.*   (d) *Plasmodium.*

B. Match the following :—

   5 *Chiton*   (a) Cephalopoda.

   6 *Perna*   (b) Gastropoda.

   7 *Dentalium*   (c) Placophora.

   8 *Pila*   (d) Asteroidea.

                             (e) Scaphopoda.

                             (f) Bivalvia.

Turn over

C. Fill up the blanks :

    9 Genus of common Dog Tapeworm is ————.

   10 ———— is a Tubicolus polychaete.

   11 ———— are the locomotory organs of *Astropecten*.

   12 *Brachionus* belongs to Phylum ————.

                                                              (12 × ¼ = 3 weightage)

II. Short answer questions. Answer *all* nine questions :

   13 What is Cyclosis ? Explain.

   14 Enlist the salient features of Phylum Mesozoa.

   15 Explain Parasitic castration in *Sacculina*.

   16 What is Polymorphism ? Explain.

   17 Mention the function of Corona and Cement gland in Rotifers.

   18 Name the larva of (a) Nereis ; (b) Balanoglossus ; (c) Sponges ; (d) Star fish.

   19 Distinguish between Polyp and Medusa.

   20 What are Gemmules ? Explain.

   21 Name the cephalic appendages of *Penaeus* and mention the function of each.

                                                              (9 × 1 = 9 weightage)

III. Short answer questions. Answer any *five* questions :

   22 Describe the structure of *Obelia* colony.

   23 Discuss the peculiarities and affinities of Ctenophora.

   24 Describe the Nervous system of *Penaeus*.

   25 Describe Water vascular system of Star fish.

   26 Enlist the salient features of Phylum Echiuridea with a typical example.

   27 Describe the Ecological and Adaptive features and Economic importance of *Sepia*.

   28 Discuss the Zoological importance of Onychophora.

                                                           (5 × 2 = 10 weightage)

IV. Essay questions. Answer any *two* questions :

   29 Describe the structure of *Paramecium* and explain Conjugation in *Paramecium*.

   30 Describe the structure of Ommatidium and mechanism of vision in *Penaeus*.

   31 With a neat labelled sketch, describe the Pallial complex of *Pila*.

                                                              (2 × 4 = 8 weightage)