#### 2018

#### ZOOLOGY

(Major)

Paper: 1.2

## [ Animal Diversity (Invertebrates) ]

Full Marks: 60

Time: 3 hours

The figures in the margin indicate full marks for the questions

### [ Animal Diversity (Non-chordates) ]

1. Answer the following questions:

 $1 \times 7 = 7$ 

- (a) Name a parasitic Protozoa.
- (b) Which sponge is commonly known as glass-rope sponge?
- (c) Name the reproductive zooids of obelia.
- (d) What is hermaphroditism?
- (e) How many segments are present in walking legs of a typical insect?
- (f) Write the scientific name of a monogenetic parasite.
- (g) Name the larval forms of Asterias.

(Turn Over)

# 2. Answer any four of the following questions:

 $2 \times 4 = 8$ 

- (a) What are the different types of spicules found in sponge?
- (b) What is the significance of polymorphism in Siphonophora?
- (c) Describe the salient features of miracidium larva.
- (d) Mention the function and structural peculiarities of hexacanth larva.
- (e) Describe the significance of trochophore larva.
- (f) Write the significance of tube feet in Echinodermata.

## 3. Answer any three of the following questions:

5×3=15

- (a) Describe pre-erythrocytic schizogony of sporozoite in liver of infected animal.
- (b) Write a short note on spongocoel.
- (c) Discuss alternation of generation in Coelenterata with examples.
- (d) Why is peripatus known as connecting link between Annelida and Arthropoda?
- (e) Give an account of the structure and function of compound eyes.

- **4.** Answer any *three* of the following questions:  $10 \times 3 = 30$ 
  - (a) What is locomotion? Describe the mode of locomotion in Protozoa with examples. 2+8=10
  - (b) Write the general characters of phylum Porifera and classify it up to order with examples. 4+6=10
  - (c) What do you understand by primary and intermediate host? Describe the life history and parasitic adaptation of Fasciola hepatica. 2+8=10
  - (d) Give details of the life cycle and pathogenicity of Wuchereria bancrofti. 6+4=10
  - (e) Give an account of torsion and detorsion in Gastropoda. 5+5=10
  - (f) Write the distinctive features of phylum
    Echinodermata. Write a note on the
    larval forms of Echinodermata. 5+5=10

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