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 : 1×7=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.

2. Answer any *four* of the following questions : 2×4=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 : 10×3=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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