

**2 0 1 8**

**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 )

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.

( 3 )

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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