. .

2017

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

- 1. Answer the following questions:
- $1\times7=7$
- (a) Name a multinucleate protozoa.
- (b) Name any one type of spicules found in Porifera.
- (c) What is the function of statocyst in prawn?
- (d) What is a hexacanth?
- (e) What is hermaphroditism?
- (f) Which larva of Mollusca is an ectoparasite of fishes?
- (g) Name the larval forms of Asterias.

8A/396

(Turn Over)

2. Answer the following questions: $2\times4=8$

- (a) What is hepatopanoreas? How does it help in digestion in prawn?
- (b) Write the significance of polymorphism in Siphonophora.
- (c) Describe the salient features of Miracidium larva.
- (d) Describe the structure and function of compound eye.

3. Answer any three questions:

5×3=15

- (a) Describe the locomotion in protozoa.
- (b) What are endoparasites? Describe the parasitic adaptation of Ascaris lumbricoides.
- (c) Write a note on the larval forms of Echinodermata.
- (d) Why is *Peripatus* known as connecting link between Annelida and Arthropoda?
- (e) Define pre-erythrocytic schizogony of sporozoite in liver of infected animal.
- 4. Answer the following questions: 10×3=30
 - (a) What is nutrition? Describe the mode of nutrition in protozoa with suitable examples. 2+8=10

Or

- (b) What is canal system? Describe the canal system found in sponge with diagram. 3+7=10
- (c) Give details of the life cycle, pathogenecity and prophylaxes measure of Ancylostoma duodenale. 6+2+2=10

Or

- (d) Describe the life-history and parasitic adaptation of Fasciola hepatica. 8+2=10
- (e) Describe the salient characters of phylum Mollusca and classify the class Gastropoda up to order with suitable examples. 4+6=10

Or

(f) Write a note on water vascular system in Echinodermata with its significance.

8+2=10

* * *