

B.Sc. (Part-I) Semester-I Examination

ZOOLOGY

(Life and Diversity of Non-Chordata)

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Question No. 1 carries 8 marks and remaining questions carry 12 marks each.

(3) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) Plasmodium belongs to the class _____.

(ii) The skeleton structure in scypha is in the form of _____.

(iii) The blood sucking habit of Leech is called as _____.

(iv) Tongue worm is the name of _____.

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(B) Choose the correct alternatives for the following statements :

(v) Free swimming larva of scypha is :

(a) Planula

(b) Amphiblastula

(c) Bipinnaria

(d) Trochophore

(vi) The cause of Liver rot in sheep is :

(a) Dugesia

(b) Fasciola

(c) Taenia

(d) Schistoma

(vii) Mouth parts of cockroach are :

(a) Cutting and chewing

(b) Sucking

(c) Piercing

(d) Biting

(viii) Bipinnaria is the larva of :

(a) Pila

(b) Limulus

(c) Sepia

(d) Star fish

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(C) Write answer in **one** sentence :

(ix) Name the vector for Leishmaniasis.

(x) What is hirudin ?

(xi) What are the functions of water vascular system ?

(xii) What is the common name of Pila ?

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2. Describe the following :

(a) Types of Malaria.

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(b) Amoebiasis.

4

(c) Trapanosomiasis.

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OR

- (d) Control of Malaria. 4
- (e) Leishmaniasis. 4
- (f) Sporogony in Plasmodium. 4
3. Attempt the following :
- (g) Describe types of cells found in sycon. 4
- (h) General characters of phylum Coelentrata. 4
- (i) Draw well labelled diagram of L.S. of Metridium. 4
- OR**
- (j) Spicules in sycon. 4
- (k) Canal system in sycon (diagram only). 4
- (l) Sexual reproduction in Metridium. 4
4. Describe the following :
- (m) Male reproductive system of Ascaris. 4
- (n) Cercaria larva. 4
- (o) Life cycle of Ascaris (diagram only). 4
- OR**
- (p) Female reproductive system of Ascaris. 4
- (q) Meracidium larva. 4
- (r) Flame cell in Fasciola hepatica. 4
5. Give an account of the digestive system of Leech. 12
- OR**
- Describe respiratory system of Cockroach. 12
6. Attempt the following :
- (s) Buccal mass of Pila. 4
- (t) Ctenidium of Pila. 4
- (u) Aboral surface of Star fish. 4
- OR**
- (v) Madriporite of Star fish. 4
- (w) Aerial respiration in Pila. 4
- (x) Stone canal of Star fish. 4
7. Describe the structure of Brachiolaria larva and Trochophore larva and its significance. 12
- OR**
- Describe the affinities of Balanoglossus with Chordata and Non-Chordata. 12