

AT - 277

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

IS : ZOOLOGY

(Life and Diversity of Non-Chordata)

P. Pages : 4

Time : Three Hours }

[Max. Marks : 80

- Note :** (1) All questions are compulsory.
(2) Question No. **One** carries **Eight** marks and remaining questions carry **Twelve** marks each.
(3) Draw well labelled diagrams wherever necessary.

I. (A) Fill in the blanks :—

- (i) Kala-azar is caused by _____ .
(ii) The first larval form of Liver fluke is — _____ .
(iii) _____ in leech perform. The function of storage food.
(iv) The number of lips surrounding the mouth of Ascaris are — — — — . 2

(B) Choose the correct alternative for the following statements :—

- (v) In sycon, water current is produced by—

(a) Choanocytes. (b) Pinacocytes.

AT - 277

P.T.O.

- (v) Archaeocytes. (d) Thesocytes.
- (vi) The foot of mollusca is used for— —.
- (a) Burrowing. (b) Swimming.
- (c) Creeping. (d) All the above.
- (vii) Madreporite is present in— — —.
- (a) Asterias. (b) Ascaris.
- (c) Metridium. (d) Madreria.
- (viii) The larva of Balanoglossus is— — —.
- (a) Brachiotaria. (b) Tornaria.
- (c) Miracidium. (d) Balanararia. 2

(C) Write answer in **One** sentence :—

- (ix) What type of appendages are **present in Arthropoda** ?
- (x) How many pairs of Testicular nephridia are found in Leech ?
- (xi) What is **bivium** ?
- (xii) What is Ascaris commonly called ? 4

2. Give an account of Life cycle of :
Plasmodium vivax in man

OR

Describe Amoebiasis and Leishmaniasis. 12

3. Explain the following :--

- (a) External features of metridium.
- (b) General characters of phylum porifera.
- (c) Significance of canal system in **Scypha**.

OR

- (d) Gastrovascular cavity of metridium
(Diagram only).
- (e) External features of scypha.
- (f) Sexual Reproduction in metridium. 12

4. Describe the following :—

- (g) Flame cell of *Fasciola hepatica*.
- (h) T.S. of Female *Ascaris* (Diagram only).
- (i) External features of ***Fasciola hepatica***.

OR

- (j) Excretory system of *Ascaris*.
- (k) Digestive system of ***Fasciola hepatica***.
- (l) General characters of phylum Aschelminates. 12

5. Attempt the following :--

- (m) Gizzard of Cockroach.

- (n) Suckers of Leech.
- (o) Female reproductive system of cockroach (Diagram only).

OR

- (p) Spiracle of **Cockroach**.
 - (q) General characters of phylum Arthropoda.
 - (r) Testicular nephridia of Leech (Diagram only).
- 12

6. Give an account of respiratory organs of pila.

OR

Give an account of water vascular system of star fish (**Asterias**).

12

7. Describe the following :--

- (s) Brachiolaria larva.
- (t) Affinities of **Balanoglossus with Echinodermata**.
- (u) General characters of Hemichordata.

OR

- (v) Bipinnaria Larva.
 - (w) Affinities of **Balanoglossus with chordata**.
 - (x) Coral reefs--**Atoll type**.
- 12

