

B.Sc. Part-I Semester-I Examination
ZOOLOGY
LIFE AND DIVERSITY OF NON-CHORDATA

Time : Three Hours]

[Maximum Marks : 80

N.B.:— (1) All questions are compulsory.

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

(3) Draw well labelled diagram wherever necessary.

1. (A) Fill in the blanks :

(i) The vector of Trypanosoma is _____.

(ii) Liver fluke lives in the large _____ of liver in sheep & goat.

(iii) In Cockroach teeth are present in _____ in foregut.

(iv) Common name of Asterias is _____ .

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(B) Choose the correct alternative for the following statement :

(v) Free swimming larva of scypha is _____.

(a) Planula

(b) Trochophore

(c) Tornaria

(d) Amphiblastula

(vi) Primary host of Fasciola hepatica is _____.

(a) Man

(b) Pig

(c) Sheep

(d) Dog

(vii) The total no. of segments in leech are :

(a) 109

(b) 33

(c) 15

(d) 27

(viii) The respiratory organs in pila are :

(a) Gills

(b) Pulmonary sac & gills

(c) Both (a) & (b)

(d) Shell

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(C) Answer in **one** sentence :

(ix) What are flame cells ?

(x) What is corallite ?

(xi) How many pairs of testis are present in leech ?

(xii) What is Ascariasis ?

4

2. Attempt the following :

(a) Structure of sporozoite of plasmodium vivax

4

(b) Leishmaniasis

4

(c) Sporogony

4

OR

(d) Liver Schizogony (Exoerythrocytic)	4
(e) Amoebiasis	4
(f) Types of Malaria	4
3. Describe the following :	
(g) Spicules in sycon	4
(h) Life cycle of metridium (diagram only)	4
(i) General characters of phylum porifera	4
OR	
(j) Structure of choanocyte	4
(k) Significance of canal system	4
(l) Well labelled diagram of canal system.	4
4. Give an account of excretory system of <i>Fasciola hepatica</i> and <i>physiology of excretion</i> .	12
OR	
Describe female reproductive system of <i>Ascaris Lumbricoides</i> .	12
5. Attempt the following :	
(m) Alimentary canal of leech (diagram only)	4
(n) Testicular nephridium of leech.	4
(o) Salivary glands of cockroach.	4
OR	
(p) Food and feeding in cockroach	4
(q) Spiracle in cockroach	4
(r) External features of leech.	4
6. Describe <i>reproductive system in male and female pila</i> .	12
OR	
Give an account of habits, <i>habitat and external features of starfish</i> .	12
7. Describe the following :	
(s) Morphological adaptations in helminthes	4
(t) Barrier reef	4
(u) External structure of Balanoglossus	4
OR	
(v) General characters of hemichordata	4
(w) Tornaria larva of Balanoglossus	4
(x) <i>Atoll</i> .	4