

AS-1356

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) 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 :

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(i) Tongue worm is the common name of _____ .

(ii) _____ cells are found in radial canal in sycon.

(iii) Salivary secretion of Leech contains an anti-coagulant substance called _____.

(iv) Body cavity in Ascaris is _____.

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

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(v) The vector of Malaria is :

(a) Man

(b) Female Anopheles

(c) Culex

(d) Tse-tse fly

(vi) _____ is the larval form of scypha.

(a) Amphiblastula

(b) Parenchymula

(c) Bipinnaria

(d) Tornaria

(vii) Primary host of fasciola is _____.

- (a) Man
- (b) Pig
- (c) Sheep
- (d) Dog

(viii) Right handed shell coiling in pila is known as _____.

- (a) Dextral
- (b) Sinistral
- (c) Anticlockwise
- (d) All the above

(C) Write answer in one sentence :-

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(ix) What is the function of pedicellariae ?

(x) How many teeth are present in the gizzard of cockroach ?

(xi) What is the function of pulmonary sac in pila ?

(xii) What is the common name of scypha ?

2. Describe the following :

- (a) Exo-erythrocytic phase of *P. vivax*.
- (b) General characters of phylum protozoa.
- (c) Leishmaniasis.

OR

- (d) Amoebiasis.
- (e) Types of malaria.
- (f) Sporogony of *P. vivax* (diagram only).

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3. Explain the following :

- (g) Spicules in scypha.
- (h) Myocyte and porocyte in sycon.
- (i) T.S. of Gastrovascular cavity of metridium (Diagram only).

OR

- (j) External features of scypha.
- (k) General characters of phylum coelenterata.
- (l) Sexual reproduction in Metridium.

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4. Give an account on life cycle of *Fasciola hepatica*.

OR

Describe the reproductive organs in *Ascaris*.

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5. Explain the following :

(m) Testicular nephridium of Leech (Diagram only).

(n) Crop pockets of Leech.

(o) Spiracles of cockroach

OR

(p) Male reproductive system of cockroach.

(q) Trachea and tracheoles of cockroach.

(r) Suckers of Leech.

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6. Describe the male and female reproductive system in *Pila*.

OR

Describe the digestive system of *Asterias*.

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7. Describe the following :

(s) General characters of *Hemichordata*.

(t) Trochophore larva.

(u) Affinities of *Balanoglossus* with chordata.

OR

(v) Brachiolaria larva.

(w) Barrier reef.

(x) Affinities of *Balanoglossus* with non-chordata.

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