

Tribhuvan University

2071

Bachelor Level (4 Yrs.)/Ist Year/Science & Tech.

Full Marks: 100

Zoology (Non-Chordata & Protochordata) (Zool.101)

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Illustrate your answers with suitable diagrams wherever necessary.

GROUP "A"

[2×10=20]

Attempt any TWO questions.

1. Write an account on the life cycle, pathogenicity and lab. diagnosis of *Leishmania donovani*.
2. Describe the habit, habitat and structure of *Scypha*.
3. Give an account on the life history of *Wuchereria bancrofti* and discuss its pathogenic effects.

GROUP "B"

[2×10=20]

Attempt any TWO questions.

4. Give an account of the life cycle, economic importance and control measures of *Culex quinquefasciatus*.
5. Give an account of the alimentary canal of *Pila globosa*.
6. Discuss the affinities of *Balanoglossus* with other animal groups and comment on its systematic position.

GROUP "C"

[8×5=40]

Attempt any EIGHT questions.

7. Mention drawbacks and significance of biological species concept.
8. Write on pathogenicity and lab. diagnosis of *Entamoeba histolytica*.
9. Discuss formation of cocoon in *Hirudinaria*.
10. Write an account of economic values of Coelentrates.

P.T.O.

1. Give an account of the habitat, structure and pathogenicity of *Schistosoma haematobium*.
12. Illustrate the life cycle of *Ascaris lumbricoides*.
13. Describe the alimentary canal of leech and mention its food and feeding mechanism.
14. List out the class characteristics of Asterozoa and Ophiurozoa of Echinodermata.
15. Write an account of economic importance and control measures of *Sitophilus oryzae*.
16. Discuss briefly the habits, habitat and external morphology of *Amphioxus*.

GROUP "D"

[8×2.5=20]

17. Give very short answers of any EIGHT of the followings:
 - a. Distinguish between Protozoa and Metazoa
 - b. Micro- and Macro-conjugants in *Vorticella*
 - c. Five important characteristics of Porifera
 - d. Vermicomposting
 - e. Endoskeleton of *Asterias*
 - f. Prelarval development of *Herdmania*
 - g. Corals
 - h. Parasitism
 - i. Phytonematodes
 - j. Chelate legs of *Palaemon*