



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 1st Semester Examination, 2020

**GE1-ZOOLOGY**

Full Marks: 40

**ASSIGNMENT**

*The figures in the margin indicate full marks.*

**The question paper contains GE-1A, GE-1B, and GE-1C. Candidates are required to answer any *one* from the *three* GROUPS and they should mention it clearly on the Answer Book.**

**GE-1A**

**GROUP-A**

**ANIMAL DIVERSITY**

**Answer any *four* questions from the following**

10×4 = 40

1. Mention the general characteristics of the Phylum Porifera with special reference to canal system.
2. Give the characteristic features of the Phylum Platyhelminthes with suitable examples.
3. Write briefly the general characters of the Phylum Arthropoda with proper examples.
4. Describe in detail the water vascular system in Starfish (*Asterias* sp.).
5. Give salient features of Cephalochordata with examples.
6. Describe the characteristic features of Pisces with proper examples.
7. Write briefly the general characters of class Aves with suitable examples.
8. Distinguish elaborately poisonous and non-poisonous snakes with proper examples and illustrations.

**GE-1B**

**GROUP-B**

**INSECT VECTORS AND DISEASES**

**Answer any *four* questions from the following**

10×4 = 40

1. Briefly describe different types of mouth parts and antennae of insects.
2. Discuss how order Hemiptera act as insect vector.
3. Describe the role of head louse as an insect vector and mention its control measure.
4. Mention the causative agent and symptoms of dengue and discuss life cycle of dengue parasite.
5. Discuss about various control measures of mosquito.
6. Give a comparative account of a host, a vector and a pathogen, elucidating their evolutionary relationship.
7. Write a note on Chagas disease, its symptoms, curative measures and the vector responsible for that disease.
8. Describe different pathogenic stages of *Plasmodium vivax* infection in different hosts?

**GE-1C**

**GROUP-C**

**AQUATIC BIOLOGY**

**Answer any *four* questions from the following**

10×4 = 40

1. Write a note on the classification of an ecosystem. Explain the pond ecosystem.
2. What are the autotrophic and heterotrophic components of an ecosystem? Write the functions of an ecosystem.
3. Write a brief account on the intertidal zone. What are the different types of organisms observed in this zone?

4. What is a nutrient cycle? Add a note on Nitrogen cycle and its importance.
5. Describe the coral and coral reefs.
6. Differentiate between pollution and contamination. Discuss the nature of water pollutants in India and suggest the methods of control.
7. Differentiate between primary and secondary pollutant. Write the preliminary treatment methodology of sewage.
8. What are the important adaptations of aquatic animals? Describe in details the bioluminescence phenomenon and feeding adaptations of the deep sea organisms.

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