

UNIVERSITY OF NORTH BENGAL B.Sc. Honours 3rd Semester Examination, 2020

GE-ZOOLOGY

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.

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

GROUP-A

ANIMAL DIVERSITY

Answer any *four* questions from the following

 $10 \times 4 = 40$

- 1. Write the general characteristics of the Subkingdom Protozoa with two examples.
- 2. Give the general characteristic features of the Phylum Cnidaria with suitable examples.
- 3. Mention the general characteristic features of the Phylum Annelida with suitable examples.
- 4. Give the general characteristic features of the Phylum Mollusca with suitable examples.
- 5. Write the general characteristic features of Urochordates with suitable example.
- 6. Discuss different types of migration strategies in fishes with suitable example.
- 7. Write the general characters of class Amphibia with suitable examples.
- 8. Give an account on poison apparatus of snakes and biting mechanism with proper illustrations.

GROUP-B

INSECT VECTORS AND DISEASES

Answer any *four* questions from the following $10 \times 4 = 40$

- 1. Discuss briefly with schematic diagram the different types of mouth parts found in insects with examples.
- 2. Briefly explain how insects act as mechanical and biological vector.
- 3. Write different types of malaria-parasite and discuss the life cycle of one malariaparasite with suitable diagram.
- 4. Write down causative agent, disease transmission and symptoms of plague.
- 5. Elaborately discuss the different diseases caused by *Pediculus humanus humanus*. Write about the control measures for *Pediculus*.
- 6. Briefly describe and differentiate between *Culex* and *Anopheles* mosquitoes with a proper schematic diagram.
- 7. Give a detailed account of Japanese Encephalitis (JE) explaining disease symptoms, diagnosis and curative measures with schematic diagram representing its pathogenic cycle.
- 8. "Compound eyes have multiple small eyes, each of which perceives their own image" explain the statement by elaborating different parts of compound eyes with a suitable diagram.

GROUP-C

AQUATIC BIOLOGY

Answer any *four* questions from the following

 $10 \times 4 = 40$

- 1. What are producers, consumers and decomposers? Discuss the significance of decomposers in the ecosystem.
- 2. Write a brief account on the origin of lakes. Give an account of the classification of lakes.
- 3. Discuss in details on biogeochemical cycle.

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- 4. Write a brief account on the estuaries and its types. Name some of the major estuaries in India.
- 5. Define water reuse and conservation and explain the methods adopted to conserve water in industries.
- 6. Write down the chief ecological features of marine environment. Add a note on the zonation of the sea and the communities of the marine ecosystem.
- 7. Explain in brief the theories of coral reef formation.
- 8. Describe in details the various deep sea adaptations of the organisms.

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