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NEPNY—18—2023

FACULTY OF SCIENCE & TECHNOLOGY

M.Sc. (NEP) (First Year) (First Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

ZOOLOGY

Paper SZOOC-401

(Invertebrates Structure and Function)

(Wednesday, 20-12-2023)

Time : 10.00 a.m. to 1.00 p.m.

Time—Three Hours

Maximum Marks—80

N.B. :— (i) Question number **1** is compulsory.

(ii) Out of remaining **5** questions (Q. No. **2** to Q. No. **6**) answer any **3** questions.

(iii) *All* questions carry equal marks.

(iv) Illustrate your answers with suitable labelled diagrams, wherever necessary.

1. Answer each of the following ;

20

(a) Describe the structure and functions of Flagella in Protozoa.

P.T.O.

- (b) Describe the structure and functions of Gills in invertebrates.
- (c) Describe the structure and functions of excretory organ in invertebrates.
- (d) Write a note on Affinities and economic importance of Hemichordata.
2. (a) Describe the organization of Coelom in different invertebrates groups. 10
- (b) Explain the Hydrostatic movement in Annelida. 10
3. (a) Describe the filter feeding in Mollusca with suitable examples. 10
- (b) Give an account of the respiratory pigments in invertebrates. 10
4. (a) Give an account of the process of osmoregulation in invertebrates. 10
- (b) Describe the advanced nervous system of Arthropoda. 10
5. (a) Describe the different larval forms in Echinodermata. 10
- (b) Describe in brief the concept and significance of minor phyla. 10
6. Answer each of the following : 20
- (a) Write a note on structure and function of Cilia.
- (b) Write a note on Trachea as an organ of Respiration.
- (c) Describe advanced nervous system in Annelida.
- (d) Describe trochopore larvae in Annelida.