



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 2nd Semester Examination, 2022

**GE1-P2-ZOOLOGY (INSTRUCTION)**

Time Allotted: 2 Hours

Full Marks: 20

**INSTRUCTIONS TO EXAMINERS**

1. The question paper contains four groups: A, B, C and D. The candidates are supposed to answer any one from the four groups.
2. All examiners are requested to follow the instructions given below and submit a 'Key to Questions' along with answer scripts.

**GROUP-A**

**HUMAN PHYSIOLOGY**

Q1: Estimation of Haemoglobin

Principle: 2

Work out: 4

**OR**

Blood grouping:

Work out: 3

Principle: 3

Q2: Identification of Histological Section (Any three from the syllabus)

**GROUP-B**

**FOOD, NUTRITION AND HEALTH**

Q1: Detection of adulteration:

Work out: 5

Comment: 1

**OR**

Gram Staining:

Principle: 2

Work out: 4

Q2: Identification: Any three stored grain pests from the syllabus.

### GROUP-C

#### ENVIRONMENT AND PUBLIC HEALTH

Q1: Determination of pH.

Fundamentals:  $1\frac{1}{2}$

Work out: 2

Comment:  $1\frac{1}{2}$

Q2: Estimation of Chlorinity.

Work out:  $3\frac{1}{2}$

Principle:  $1\frac{1}{2}$

**OR**

Estimations of total hardness

Work out:  $3\frac{1}{2}$

Principle:  $1\frac{1}{2}$

Q3. Report on pollution testing centre

Report 3

Viva 2

### GROUP-D

#### ANIMAL CELL BIOTECHNOLOGY

Q1: GEL Electrophoresis of DNA

Principle: 3

Procedure: 4

Q2: Biotechnological techniques

Provide photograph of any two from the syllabus

Principle: 2

Application: 2

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