



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 1st Semester Examination, 2022

**GE1-P1-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

**GROUP-A**

1. Answer any **five** of the following questions: 1×5 = 5
- (a) Mention two important functions of microtubules.
  - (b) What is Cytoplasmic Inclusion?
  - (c) What do you mean by metal Activator?
  - (d) What are chromophores?
  - (e) Define Osmotic pressure.
  - (f) Define Isoelectric Point.
  - (g) What is Mutarotation?
  - (h) What do you mean by Recommended Dietary Allowances?
  - (i) Define Amino Acid Pool.
  - (j) What are zymogen granules?

**GROUP-B**

**Answer any three questions from the following**

5×3 = 15

- 2. Write short notes on the molecular structure of Golgi Apparatus.
- 3. What are Goblet Cells? Where are they found? Write down its functions. 1+1+3
- 4. What is Surface Tension? What are its physiological importances? Define pH. 1+3+1
- 5. Write down the chemical name, sources and physiological functions of vitamin A. 1+2+2
- 6. What is BMR? Write down the factors and how they control BMR? 1+4

**GROUP-C**

**Answer any two questions from the following**

10×2 = 20

- 7. Write down the chemical name, sources, physiological functions and deficiency symptoms of vitamin B<sub>2</sub>. 1+2+3+4
- 8. What is Krebs Cycle? Describe the pathway of Krebs Cycle with reactions. How energy is produced in Krebs Cycle? 2+6+2
- 9. Write short notes on De-amination, Transamination and decarboxylation with proper example. Write down the importances of urea cycle. 2+2+2+4
- 10. Define Connective Tissue. Write down the characteristics of Connective Tissue. Differentiate between SER and RER. 2+4+4

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