



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 1st Semester Examination, 2023

CC1-PHYSIOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

1. Answer any **five** from the following: 1×5 = 5
- (a) What is pinocytosis?
 - (b) What is secondary active transport?
 - (c) What is cell theory?
 - (d) What is spanning protein?
 - (e) What is calmodulin?
 - (f) Differentiate nuclear and mitochondrial DNA.
 - (g) What is neoplasia?
 - (h) Name two enzymes of mitochondrial matrix.
 - (i) What is antiport?
 - (j) What is facilitated diffusion?

GROUP-B

Answer any three from the following 5×3 = 15

- 2. Discuss the mechanism of protein processing in endoplasmic reticulum. 5
- 3. Describe the electron microscopic structure of inner membrane of mitochondria. 5
- 4. Explain glands with example according to mode of secretion. 5
- 5. Describe the mechanism of active transport and vesicular transport. 5
- 6. Explain the structure and functions of cuboidal epithelium. 5

GROUP-C

Answer any two from the following 10×2 = 20

- 7. Describe the cAMP mediate cell signalling. 10
- 8. Describe the positive and negative feedback mechanism of homeostasis. 5+5
- 9. Write short notes on: 5+5
 - (a) Desmosome
 - (b) Intercellular Communication.
- 10. Describe the phases of mitosis. 10

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