



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**

B.Sc. Honours 1st Semester Examination, 2022

**CC1-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

1. Attempt any **five**: 1×5 = 5
  - (a) Name the immune component of Lymph.
  - (b) What is  $\text{Na}^+ - \text{K}^+$  ATPase?
  - (c) Mention the role of ER in mitosis.
  - (d) Define Antiport with example.
  - (e) Mention the features of Apoptotic body.
  - (f) Cellular aging is directly related to mitochondria—Explain.
  - (g) Define secondary active transport.
  - (h) Mention the importance of glycoprotein in cell membrane.
  - (i) What is  $f_1$  particle?
  - (j) Mention one enzyme of outer membrane of mitochondria.
  
2. Attempt any **three**: 5×3 = 15
  - (a) What is holocrine secretion?
  - (b) Mention the features of Necrosis.
  - (c) Describe the mechanism of transport of ions through membrane.
  - (d) What is cGMP system of signal transduction?
  - (e) Classify cartilage with histology and functions.
  
3. Attempt any **two**: 10×2 = 20
  - (a) Describe the histology of nucleus and its role in apoptosis. 10
  - (b) Discuss the histology of different glands along with their functions. 10
  - (c) Explain different types of intracellular and intercellular communication. 10
  - (d) Describe the functions of Golgi apparatus along with mechanism in transport of excretory material and secretion. Discuss the mechanism of action of lysosomal enzymes. 5+5

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