



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 3rd Semester Examination, 2023

**GE2-P1-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

**GROUP-A**

1. Answer any **five** questions from the following: 1×5 = 5
- (a) Hunger and thirst are under direct control of
    - (i) Hypothalamus      (ii) Cerebrum      (iii) Cerebellum      (iv) Epithalamus
  - (b) What is troponin?
  - (c) What is M-line?
  - (d) Which part of the central nervous system controls "Reflex Actions"?
  - (e) Give two examples of proteins of low biological value.
  - (f) Name the good sources of dietary fibre.
  - (g) Distinguish between A-band and I-band.
  - (h) What is the main function of myosin?
  - (i) What are the sources of Vitamin A?
  - (j) Which blood clotting factor synthesis is regulated by Vitamin K?

**GROUP-B**

Answer any **three** questions from the following

5×3 = 15

2. (a) What is the role of Vitamin-D in human body? 2  
(b) What are the effects of its deficiency? 3
3. Describe the various factors affecting Smooth-muscle Contraction. 5
4. State briefly the Sliding theory of Skeletal muscle Contraction. 5
5. (a) Give an example of excitatory neurotransmitter. 1  
(b) Differentiate between ionotropic and metabotropic receptors. 4
6. What is Classical Conditioning? Explain with examples. 5

**GROUP-C**

Answer any **two** questions from the following

10×2 = 20

7. Discuss the role of hippocampus on the Consolidation of memory. 10

8. (a) Name the receptors responsible for touch sensation. 2  
(b) Describe with diagram the neural pathway carrying touch impulses from peripheral parts of the body to higher centre. 8
9. (a) What is repolarization? 2  
(b) How does repolarization occur? 8
10. Write notes on: 5+5  
(a) Nitrogen balance  
(b) RDA.

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