



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 2nd Semester Examination, 2023

CC3-PHYSIOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks..

GROUP-A

1. Attempt any **five**: 1×5 = 5
- (a) What is summation?
 - (b) What is the action of ATP-ase in muscle?
 - (c) What is myofibril?
 - (d) What is white muscle?
 - (e) Write down the functions of myoglobin.
 - (f) Mention the role of Tropomyosin.
 - (g) What is microglia?
 - (h) Mention the role of GABA.
 - (i) What is multiple sclerosis?
 - (j) What do you mean by the term “Coding of Sensory System”?

GROUP-B

Attempt any **three**

5×3 = 15

2. Write short notes on: 2+3
- (i) Power stroke
 - (ii) Action
3. Describe sarcothubular system. 5
4. Briefly describe the electrical events at synapse. 5
5. What is biological transducer? Write a note on pacemaker tissue. 2+3
6. Write down the structural and histological peculiarities of neuromuscular junction. 5

GROUP-C

Attempt any two

10×2 = 20

7. Write short notes on — 2½ × 4 = 10
- (a) Renshaw cell inhibition
 - (b) Multiunit Smooth Muscle
 - (c) Ratchet action
 - (d) Ionic flux.
8. Describe the actin based contraction of muscle. Mention the biochemical changes in muscle during contraction. 5+5
9. Write short notes on: 2½ × 4 = 10
- (a) Walk Along Theory
 - (b) Fenn effect
 - (c) EPP
 - (d) Neurotrophins.
- 10.(a) Describe the mechanism of action of dopamine on muscles. 6+2+2
- (b) What do you mean by “Synaptic delay”?
 - (c) What is dense body?

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