



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 2nd Semester Examination, 2022

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 Facilitation?
 - (b) What is Serotonin?
 - (c) What do you mean by the term “Coding of sensory information”?
 - (d) What is MEPP?
 - (e) What is Graded Potential?
 - (f) What is the relation between diameter of nerve fibre and excitability?
 - (g) Name the receptor subtypes of Dopamine.
 - (h) What is Fascia Adherens?
 - (i) What do you mean by “Athlete’s Heart”?
 - (j) Define isometric contraction with example.

GROUP-B

Attempt any *three*

5×3 = 15

2. Write short notes on: 2½×2 = 5
- (a) After load and Pre load
 - (b) Electromyography.
3. What is Lohmann reaction? Discuss its significance. What is Fenn effect? 1+2+2=5
4. Write a note on “SERCA”. Write down the structural peculiarities of neuro effector junction. 2+3=5
5. What is “Generator Potential”? Give two examples of tactile receptor. What is Weber Fechner’s Law? 2+2+1=5
6. Briefly describe sarco tubular system with diagram. 5

GROUP-C

Attempt any two

10×2 = 20

7. Discuss the functional anatomy of synapse. Describe the mechanism of regulation of neurotransmitter secretion in synapse. 4+6=10
8. Discuss the following: 10
- (a) Presynaptic Inhibition
 - (b) Renshaw Cell Inhibition
 - (c) Reciprocal Innervation
 - (d) GABA.
9. Write short notes on: 5+5=10
- (a) Excitation contraction coupling
 - (b) Ratchet action.
10. Discuss the electron microscopic structure of muscle. Briefly discuss the histology of myosin filament. 5+5=10

—×—