



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2023

CC7-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) What are Superficial Reflexes?
 - (b) What are Autonomic Drugs? Give examples.
 - (c) Write down two important functions of the Red Nucleus.
 - (d) Define Synaptic Fatigue.
 - (e) What are Proprioceptive Sensations?
 - (f) What is Cataplexy?
 - (g) What is Golgi-tendon Organ?
 - (h) Explain "alpha-block".
 - (i) What is meant by the term "Consolidation of Memory"?
 - (j) What is "Bell-Magendie Law"?

GROUP-B

Answer any three questions from the following 5×3 = 15

2. (a) Write down short note on Neuromodulators. 3+2
- (b) What are Co-transmitters? Give examples.
3. Describe the role of the Papez-Circuit in regulation of Emotions. 5
4. (a) Describe the histological structure of the Cerebellar Cortex. 4+1
- (b) What is Corona Radiata?
5. Explain the neurophysiological basis of EEG. 5

6. Write down short notes on the following: $2 \frac{1}{2} \times 2 = 5$
- (i) Biogenic Amines
 - (ii) Blood-CSF Barrier.

GROUP-C

Answer any *two* questions from the following $10 \times 2 = 20$

7. (a) Explain the Gate Control hypothesis of pain suppression with diagrammatic representation. 5+5
- (b) Describe the formation, circulation and functions of CSF.
8. (a) Discuss the role of hypothalamus in regulation of Hunger and Food Intake. 7+3
- (b) Write down short note on Non-associative learning.
9. (a) Describe the molecular basis of memory. 5+5
- (b) Define Muscle tone. Describe the mechanism of regulation of muscle tone.
- 10.(a) Write down the causes, symptoms and treatment of Parkinson's Disease. 6+4
- (b) Discuss the different stages of NREM Sleep.

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