



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2021

CC6-ZOOLOGY

ANIMAL PHYSIOLOGY: CONTROLLING AND COORDINATING SYSTEMS

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 is Haversian canal?
 - (b) What is muscle twitch?
 - (c) Name two neurotransmitters.
 - (d) Name the hormone secreted by parafollicular cells.
 - (e) Name the two hormones secreted by pancreas.
 - (f) What is meant by LH surge?
 - (g) Give the full form of ADH and ACTH.
 - (h) What is saltatory conduction of nerve impulse?

GROUP-B

2. Answer any *three* questions from the following: 5×3 = 15
- (a) Describe the different protein fibres present in the extracellular matrix of connective tissue.
 - (b) Classify different types of neurons with appropriate diagrams.
 - (c) Differentiate between bone and cartilage.
 - (d) Describe the histo-architecture of mammalian thyroid gland with suitable diagram. 3½ + 1½
 - (e) Classify hormones briefly.

GROUP-C

3. Answer any *two* questions from the following: 10×2 = 20
- (a) Define synapse. Describe the mechanism of synaptic transmission in a chemical synapse. 2+8
 - (b) Describe the molecular mechanism of skeletal muscle contraction.
 - (c) Describe the events of steroid hormone action through signal transduction pathway.
 - (d) Describe the histological structure of ovary. Mention the hormones secreted by the gland. 8+2

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