



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 2nd Semester Examination, 2021

FNTACOR04T-FOOD AND NUTRITION (CC4)

HUMAN PHYSIOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

Candidates should answer in their own words and adhere to the word limit as practicable.

Answer any four questions from the following

10×4 = 40

All parts of a question should preferably be written together

1. Define the term synapse. Briefly explain the process of synaptic transmission. Explain the structural specialties of skeletal and cardiac muscles. 2+4+4
2. What is nerve? What do you mean by excitatory and inhibitory neurotransmitters? Name four proteins present in skeletal muscle. 2+4+4
3. What is action potential? Describe how is nerve impulse propagated in non myelinated and myelinated nerve fibre? 2+3+5
4. Name the hormones secreted by kidney, liver and heart. Explain the role of Hypothalamus as an endocrine gland. What are releasing hormones? Explain with examples. 3+4+3
5. Briefly explain muscle energetics. Explain the process of skeletal muscle contraction and relaxation. 2+5+3
6. State the location and micro anatomical features of pituitary gland. Name the hormones secreted by gland. How does pituitary regulate the activity of other endocrine glands? 3+4+3
7. Explain the features of Neuromuscular junctions. Explain how does ADH help in maintaining water balance? 5+5
8. Describe the structure of adrenal gland. Name the hormones released by the gland. State the functions of two hormones released by this gland. 2+2+6
9. Briefly discuss the location and structural features of Pancreas. Name the hormones secreted from Pancreas. Discuss the role of insulin in human system. 3+2+5

N.B. : Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.

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