

**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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