



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 3rd Semester Examination, 2021-22

**PHYACOR07T-PHYSIOLOGY (CC7)**

**FUNCTIONS OF NERVOUS SYSTEM**

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.  
All symbols are of usual significance.*

**Answer any five questions from the following**

8×5 = 40

1. (a) Define gyri, sulci and fissure. 3  
(b) What is Lissauer's tract? 2  
(c) Distinguish between sympathetic and parasympathetic division of autonomic nervous system. 3
2. (a) What do you mean by fusimotor system? 2  
(b) What are ataxia and cog-wheel rigidity? 3  
(c) Briefly explain the role of cerebellum in control of equilibrium. 3
3. (a) Why prefrontal cortex is called "organ of mind"? 2  
(b) What do you mean by circumventricular organs? 2  
(c) Describe the role of hypothalamus in body temperature regulation. 4
4. (a) Write the formation and functions of cerebro-spinal fluid. 3+3  
(b) What do you mean by upper and lower motor neuron? 2
5. (a) Describe the frequency, voltage, location and characteristics of different EEG waves. 4  
(b) Describe the EEG pattern in different stages from wakefulness to sleep. 4
6. (a) Write the difference between short-term and long-term memory. 3  
(b) What do you mean by habituation and sensitization? 2+3

7. (a) What are explicit and implicit memory? 2+2  
(b) Describe with a suitable diagram the histological structure of blood brain barrier. 4
8. (a) Describe with the diagram the neural pathways carrying pain sensation from spinal cord up to thalamus. 5  
(b) What is referred pain and why does it occur? 1+2

**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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