

Saitechinfo NEET-JEE Academy



Nervous System - Question Paper

Class 10 Tamil Nadu State Board Science

Part A: Objective Type Questions (10 x 1 = 10 Marks)

Answer the following questions by choosing the correct option:

1. Which part of the brain controls balance and coordination?

- a) Cerebrum
- b) Cerebellum
- c) Medulla
- d) Hypothalamus

2. What is the functional unit of the nervous system?

- a) Axon
- b) Neuron
- c) Synapse
- d) Dendrite

3. Identify the longest nerve in the human body.

- a) Spinal nerve
- b) Sciatic nerve
- c) Cranial nerve
- d) Femoral nerve

4. The junction between two neurons is called a:

- a) Myelin
- b) Synapse
- c) Axon
- d) Dendrite

5. Which of the following is NOT a part of the central nervous system?

- a) Brain
- b) Spinal cord
- c) Cranial nerves
- d) Neurons

6. What is the role of myelin sheath in neurons?

- a) Insulates axons
- b) Protects dendrites
- c) Transmits signals slowly
- d) Provides nutrients

7. Which of the following controls involuntary actions?

- a) Cerebrum
- b) Cerebellum

- c) Medulla oblongata
- d) Hypothalamus

8. The reflex action is controlled by:

- a) Brain
- b) Spinal cord
- c) Sensory nerves
- d) Motor nerves

9. Which of these is a sensory organ?

- a) Heart
- b) Kidney
- c) Eye
- d) Stomach

10. What part of the nervous system regulates heartbeat?

- a) Medulla
- b) Cerebrum
- c) Spinal cord
- d) Hypothalamus

Part B: Short Answer Questions (5 x 3 = 15 Marks)

Answer any five of the following questions briefly:

1. Explain the structure and function of a neuron.
2. Differentiate between central nervous system (CNS) and peripheral nervous system (PNS).
3. Describe the role of the cerebellum in the nervous system.
4. What are reflex actions? Give an example.
5. Define synapse and explain its importance in the nervous system.
6. How does the autonomic nervous system differ from the somatic nervous system?

Part C: Long Answer Questions (4 x 5 = 20 Marks)

Answer any four in detail:

1. Draw a neat and labeled diagram of the human brain and explain its main parts.
2. Discuss the functions of the sympathetic and parasympathetic nervous systems.
3. What are the disorders of the nervous system? Explain any two.
4. Describe the transmission of nerve impulses in detail.
5. Compare and contrast voluntary and involuntary actions.



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