What is the main function of a neuron

- A. To transmit electrical signals
- B. To produce hormones
- C. To store memories
- D. To regulate blood flow

Answer: A. To transmit electrical signals

What is the role of Schwann cells in the nervous system

- A. Schwann cells produce myelin sheath around axons
- B. Schwann cells produce hormones in the nervous system
- C. Schwann cells regulate blood flow in the nervous system
- D. Schwann cells help with neurotransmission

Answer: A. Schwann cells produce myelin sheath around axons

What are the two main types of nervous system cells

- A. Muscles and bones
- B. Red blood cells and white blood cells
- C. Neurons and glial cells
- D. Heart cells and lung cells

Answer: C. Neurons and glial cells

What is the purpose of myelin sheath in neurons

- A. Provides nutrients to neurons

• B. Insulates and speeds up nerve impulses

• C. Regulates hormone production

• D. Helps with muscle contraction

Answer: B. Insulates and speeds up nerve impulses

What is the function of dendrites in a neuron

• A. Receive incoming signals

• B. Store energy

• C. Initiate action potential

• D. Release neurotransmitters

Answer: A. Receive incoming signals

Which type of nervous system cell is responsible for producing myelin in the central

• A. Astrocytes

• B. Microglia

• C. Oligodendrocytes

• D. Neurons

Answer: C. Oligodendrocytes

What is the function of the axon terminal in a neuron

• A. Store genetic information

• B. Regulate cell metabolism

• C. Release neurotransmitters

• D. Receive sensory input

Answer: C. Release neurotransmitters

What is the purpose of neurotransmitters in the nervous system

- A. To regulate heart rate
- B. To store memories
- C. To digest food
- D. To transmit signals between neurons

Answer: D. To transmit signals between neurons

What is the function of microglial cells in the nervous system

- A. Supporting neuron communication
- B. Regulating blood flow
- C. Producing myelin
- D. Immune response in the brain

Answer: D. Immune response in the brain

What is the main function of oligodendrocytes in the nervous system

- A. To store memories
- B. To transmit electrical signals
- C. To regulate blood flow in the brain
- D. To produce myelin

Answer: D. To produce myelin

What is the role of astrocytes in the nervous system

- A. Generate electrical impulses
- B. Produce myelin sheath around neurons
- C. Provide structural support and regulate neurotransmitter levels
- D. Transport oxygen to the brain

Answer: C. Provide structural support and regulate neurotransmitter levels

What is the function of satellite cells in the peripheral nervous system

- A. Regulate neurotransmitter release
- B. Support and protect neurons
- C. Produce myelin sheath
- D. Transmit nerve impulses

Answer: B. Support and protect neurons

What is the main function of ependymal cells in the nervous system

- A. Produce cerebrospinal fluid
- B. Produce myelin
- C. Conduct nerve impulses
- D. Maintain blood-brain barrier

Answer: A. Produce cerebrospinal fluid

What is the purpose of the blood-brain barrier in the nervous system

- A. To produce red blood cells in the brain

• B. To transmit electrical signals in the brain

• C. To protect the brain from harmful substances

• D. To regulate blood pressure in the brain

Answer: C. To protect the brain from harmful substances

What is the function of interneurons in the nervous system

• A. To control muscle movement

• B. To regulate hormone production

• C. To relay signals between sensory and motor neurons

• D. To store long-term memories

Answer: C. To relay signals between sensory and motor neurons

What is the role of neuroglia in the nervous system

• A. Regulate blood flow

• B. Produce myelin sheath

• C. Support and protect neurons

• D. Transmit nerve impulses

Answer: C. Support and protect neurons

What is the main function of neurovascular cells in the nervous system

• A. To transmit nerve impulses

• B. To support and maintain the blood-brain barrier

• C. To produce myelin sheath

• D. To regulate neurotransmitter release

Answer: B. To support and maintain the blood-brain barrier

What is the purpose of the sodium-potassium pump in neurons

- A. Control body temperature
- B. Maintain resting membrane potential
- C. Facilitate muscle contraction
- D. Regulate blood pressure

Answer: B. Maintain resting membrane potential

What is the function of the nodes of Ranvier in a myelinated neuron

- A. Nodes of Ranvier are involved in cell division.
- B. Nodes of Ranvier allow for the rapid conduction of action potentials.
- C. Nodes of Ranvier produce myelin.
- D. Nodes of Ranvier store neurotransmitters.

Answer: B. Nodes of Ranvier allow for the rapid conduction of action potentials.

What is the main function of the cell body in a neuron

- A. Production of neurotransmitters
- B. Conduction of electrical impulses
- C. Protection of the nucleus
- D. Integration of incoming signals

Answer: D. Integration of incoming signals