

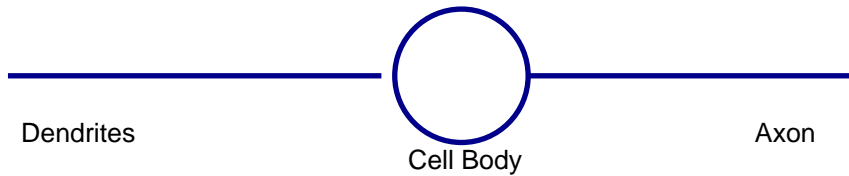
## 5.1.1 Types of the Nervous System

The nervous system is the body's communication network. It controls body functions, receives information from the environment, and helps the body respond quickly and correctly.

### 1. Central Nervous System (CNS)

The Central Nervous System consists of the brain and spinal cord. It is the control center of the body. The brain processes information, while the spinal cord carries messages between the brain and other body parts.

**Figure 1: Structure of a Neuron**



### 2. Peripheral Nervous System (PNS)

The Peripheral Nervous System includes all nerves outside the brain and spinal cord. It connects the CNS to muscles, organs, and glands. The PNS is divided into: Somatic Nervous System and Autonomic Nervous System.

### 3. Somatic Nervous System

The somatic nervous system controls voluntary activities such as walking, writing, and speaking. It also carries sensory information from the skin and muscles to the brain.

### 4. Autonomic Nervous System

The autonomic nervous system controls involuntary activities such as heartbeat, digestion, and breathing. It works automatically without conscious control.

## Examples of Nervous System Activities

Pulling your hand away from a hot object. Blinking when dust enters the eye. Running when hearing danger. Heartbeat increasing during exercise.

## Comparison Table

Type	Main Function
Central Nervous System	Controls and coordinates body activities
Peripheral Nervous System	Connects CNS with body organs
Somatic Nervous System	Controls voluntary actions
Autonomic Nervous System	Controls involuntary actions

## Summary

The nervous system controls body activities. The CNS includes the brain and spinal cord. The PNS connects the CNS with the rest of the body. The somatic system controls voluntary actions. The autonomic system controls involuntary actions.

## Questions and Answers

Question	Answer
1. What are the two main divisions of the nervous system?	Central Nervous System and Peripheral Nervous Systems.
2. What is the function of the spinal cord?	It carries messages between the brain and body.
3. What does the somatic nervous system control?	Voluntary activities.
4. What does the autonomic nervous system control?	Involuntary activities.
5. Give one example of a reflex action.	Pulling the hand away from a hot object.