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Class 7 biology Lesson 6 The Nervous System Book work (page number 99) Fill in the blanks.

- 1. Our brain is divided into three main parts.
- 2. Cerebrum is located at the top of the brainstem.
- 3. The cerebellum controls the movements of our muscles.
- 4. Medulla oblongata controls involuntary actions such as breathing and heart beat.

Book work( page number 97).

1. Write down the main functions of the following parts of a neuron.

a) cyton : Cyton is the cell body of neuron containing nucleus and other organelles. It s mainly concerned with growth and maintenance of cell.

b) dendrite : Dendrites are specialized extensions of the cell body. They function to obtain information from other cells and carry that information to the cell body.

c)axon : Axon, also called nerve fibre, portion of a nerve cell (neuron) that carries nerve impulses away from the cell body. A neuron typically has one axon that connects it with other neurons or with muscle or gland cells.

#### Choose the correct option

- 1. a) cerebrum
- 2. b) sensory nerves
- 3. a) cerebrum
- 4. c) medulla oblongata
- 5. d) none of these

#### Fill in the blanks

- 1. Nervous system
- 2. Endocrine system
- 3. Nerves
- 4. Cerebrum
- 5. Cerebellum
- 6. Spinal cord
- 7. Dendrites
- 8. Peripheral

## True and false

- 1. True
- 2. True
- 3. False
- 4. False
- 5. True
- 6. False

## Answer the following question in short

1. Define stimuli.

Ans. The changes in the environment to which the organisms respond and react is known as stimuli.

2. How does a body usually respond to stimuli?

Ans. The response of organism to a stimulus is usually in the form of some movement of their body part.

3. What protects the brain?

Ans. Brain is protected by Bony box in the skull called cranium.

4. What is function of cerebro spinal fluid?

Ans. Cerebrospinal fluid protects the brain from mechanical shocks.

5. What kind of bodily movements are coordinated by the cerebellum?

Ans. The cerebellum coordinates smooth body movements such as walking ,dancing ,riding a bicycle and picking up with pencil etc.

6. What is the function of spinal cord?

Ans. Spinal cord is responsible for the transfer of information between the brain and the rest of the body.

# Answer the following questions in details.

1. Name the structural and functional unit of nervous system. Draw a flowchart to show the classification of nervous system into various parts.

Ans. Neurons or nerve cell are the main structural and functional unit of nervous system.



2. What are the main organs of the human nervous system? Draw a labelled diagram to show the main organs of human nervous system. How does the human nervous system work? Explain. Ans. The main organs of The Nervous system are brain spinal cord and neurons. Structure of BRAIN:



Structure Of SPINAL CORD



Structure of NEURON



The Nervous System is like a manager inside our body. Its job is to control and coordination the parts of our body so that they work together doing their job at the right time. Our nervous system coordinates muscles so that we can do things which need thinking like reading, writing ,cycling or dancing. The Nervous system also coordinates things which we don't have to think about, like Heartbeat and breathing. The human nervous system receives information from the surroundings coma processes it interprets it and then response accordingly.

3. What is a neuron? Draw a labelled diagram of neurone. What is synapse? What happens at the synapse between two neurons?

Ans. The nervous system is made up of special cells called Nerve cells or neurones. Structure of neuron



Neurones communicate with one another at junctions called synapse.

A synapse is the gap between the two neurons. At synapse the electrical signals are converted into chemicals that can easily cross over the gap and pass on to the next neurons where it again converts into electrical signals.