

15. NERVOUS SYSTEM

Learning Objectives

At the end of the lesson the students will be able to:

- Admire nervous system as the control and coordinating centre of the body.
- Learn the components of the nervous system.
- Analyse the transmission of nerve impulses.
- Understand the divisions of human nervous system.
- Interpret the different sections of brain which handle different functions.
- Know the significance of reflex action and its operative pathway

Important Notes and Results

- **Unipolar Neurons** - Found in early embryos but not in adult
- **Bipolar Neurons** - Found in retina of eye and olfactory epithelium of nasal chambers
- **Multipolar Neurons**- Found in cerebral cortex of brain
- Each neuron can transmit 1,000 nerve impulses per second and make as many as ten thousands of synaptic contacts with other neurons.
- Meningitis is an inflammation of the meninges. It can occur when fluid surrounding the meninges becomes infected. The most common causes of meningitis are viral and bacterial infections.
- The human brain constitutes nearly 60 percent of fat. The most crucial molecules that determine our brain's integrity and the ability are Essential Fatty Acids (EFAs). EFAs cannot be synthesised and must be obtained from food. Fish, green leafy vegetables, almond, walnut are rich sources of EFAs.
- Electroencephalogram (EEG) is an instrument which records the electrical impulses of brain. An EEG can detect abnormalities in the brain waves and help in diagnoses of seizures, epilepsy, brain tumors, head injuries, etc.