Control and coordination

 Module -1

 Handout

1. Control and coordination system is essential for proper functioning of the body.
2. Nervous system and endocrine system control and coordinate all activities of the body.
3. Nervous system controls and coordinates different activities with the help of nerve impulses.
4. Nerve impulse begins with a stimulus , picked up by receptors and passes through neurons to the central nervous system.
5. A nerve cell is called neuron which consists of cell body , dendrites and axon.
6. Brain is the main coordinating centre of the body .
7. Brain is divided into three parts – forebrain ,midbrain and hindbrain .
8. Forebrain consists of cerebrum , diencephalon and olfactory lobes .
9. Cerebrum is divided into different lobes which together perform different functions like hearing , smell , sight, taste, touch ,temperature etc.
10. The involuntary actions of the body are controlled by the midbrain and hindbrain together.
11. The hindbrain consists of cerebellum, pons and medulla oblongata.
12. Cerebellum maintains posture and balance of the body.
13. Pons connects the cerebrum , cerebellum and medulla oblongata.
14. Medulla oblongata controls involuntary actions like rate of breathing , heart beat ,blood pressure etc.
15. The brain is protected by the bony case called skull. It is further protected by three layers of meninges .
16. Automatic nerve mediated involuntary and spontaneous response to a stimulus is called reflex action and the path of reflex action is called reflex arc.