

Exercise

1. B Thyroxin

1. D. Cytokinin

2. B. Synapse

3. D. All of the Above.

4. The function of receptors in our body is to detect and respond to stimuli from the Environment. They transmit signals to the nervous system allowing us to perceive and respond to sensory information. When receptors do not work properly it can lead to sensory impairments such as loss of vision or hearing etc. These problems can affect our ability to interact with the environment and may lead to difficulties in daily life activities.

5. Draw a neuron and explain its function

6. Shoots respond to photosynthesis by bending towards light. That helps the plant to get enough light for photosynthesis. Roots respond by bending away from light.

7. Spinal cord is responsible for reflex actions. If it is injured, signals of reflex actions will be disrupted.

8. In plants, hormones are released by stimulator cells. Different plant hormones help to coordinate growth, development and responses to the environment. They are synthesized at places away from where they act and simply diffuse to the area of action.

9.

9. In a multicellular organisms, body organisation is complex. Different organs and tissues perform different specialised functions. It is necessary that all the organs work together in coordinating manner. Hence, it needs a system of control and coordination.

10. Involuntary Actions	Reflex Actions.
→ These are a set of muscle movements over which we don't have control → These are controlled by brain → Ex :- Heartbeat	These are the sudden and rapid responses to a stimulus These are controlled by spinal cord Ex:- Removing of hand when touching hot object.
11. Nervous mechanism	Hormonal mechanism
→ Information is in the form of electric Impulse → Here the neurons help in transmission of nerve Impulse → Flow of Information is rapid and response is quick → The effects are short lived	Information is in the form of chemical messenger Here the Information is transmitted through blood Flow of information and response is slow It has prolonged effects

12. Movement in sensitive plant

The movement in a sensitive plant is a response to stimulus

It involves changing the shape of cells by changing the amount of water in cells

Movement in our legs

Movement in our legs is a voluntary action.

It involved changing the shape of muscle cells with the help of special protein in them.