

1. Ans - Reflex action

- * Reflex action is a spontaneous immediate response to a stimulus. It happens without thinking.
- * Reflex action is controlled and coordinated by spinal cord.
- * It is an involuntary action.

Walking

- * Walking is a response to the information transmitted by nerve to muscles of the legs. In this case thinking is involved.
- * Hind brain instructs and controls leg muscles to move.
- * It is a voluntary action.

2. Ans -

Chemical coordination in multicellular organisms take place through the special chemical substances called hormones, which are produced in endocrine glands. These chemicals unlike nerve cells, reach all the cells of the body and bring about desirable changes are instructed by the brain and spinal cord. This is done by using a hormone named adrenaline. It is directly secreted into the blood and carried to different parts of the body. The heart beats faster to supply more oxygen to our muscles. The breathing rate also increases. All these responses enable the animal body to be ready to face the situation. Such hormones constitute a second way of control and coordination.

3. Ans -

Receptors detect the signals and then send them to the brain in the form of electrical signals. If receptors are damaged, they will not detect the input, leading to harm for our body in a dangerous situation.