

Chapter 7: Control and Coordination

1. The movement of a plant part in response to the force of attraction exerted by the earth is called:

- (a) Hydrotropism
- (b) Geotropism
- (c) Chemotropism
- (d) Phototropism

Answer. (b) Geotropism

2. A big tree falls in a forest, but its roots are still in contact with the soil. The branches of this fallen tree grow straight up (vertically). This happens in response to:

- (a) Water and light
- (b) Water and minerals
- (c) Gravity and water
- (d) Light and gravity

Answer. (d) Light and gravity

3. The main function of the plant hormone called abscisic acid is to:

- (a) Increase the length of cells
- (b) Promote cell division
- (c) Inhibit growth
- (d) Promote growth of stem and roots

Answer. (c) Inhibit growth

4. The growth of tendrils in pea plants is due to the:

- (a) Effect of sunlight on the tendril cells facing the sun
- (b) Effect of gravity on the part of tendril hanging down towards the earth
- (c) Rapid cell division and elongation in tendril cells that are away from the support
- (d) Rapid cell division and elongation in tendril cells in contact with the support

Answer. (c) Rapid cell division and elongation in tendril cells that are away from the support

5. The plant hormone which triggers the fall of mature leaves and fruits from the plant body is:

- (a) Auxin
- (b) Gibberellin
- (c) Absciscic acid
- (d) Cytokinin

Answer. (c) Absciscic acid

6. The stimulus in the process of thigmotropism is:

- (a) Touch
- (b) Gravity
- (c) Light
- (d) Chemical

Answer. (a) Touch

7. A growing seedling is kept in a dark room. A burning lamp is placed near to it for a few days. The top part of seedling bends towards the burning candle. This is an example of:

- (a) Chemotropism
- (b) Hydrotropism

(c) Phototropism

(d) Geotropism

Answer. (c) Phototropism

8. Dandelion flowers open the petals in bright light during the daytime but close the petals in dark at night. This response of dandelion flowers to light is called:

(a) Phototropism

(b) Thigmonasty

(c) Chemotropism

(d) Photonasty

Answer. (d) Photonasty

9. The number of pairs of nerves which arises from the spinal cord is:

(a) 21

(b) 31

(c) 41

(d) 51

Answer. (b) 31

10. Iodine is necessary for the synthesis of which of the following hormone?

(a) Adrenaline

(b) Auxin

(c) Thyroxine

(d) Insulin

Answer. (c) Thyroxine

11. Which of the following controls the involuntary actions in the body?

- (a) Medulla in forebrain
- (b) Medulla in hindbrain
- (c) Medulla in spinal cord
- (d) Medulla in midbrain

Answer. (b) Medulla in hindbrain

12. Which of the following control and regulate the life process?

- (a) Reproductive and endocrine systems
- (b) Respiratory and nervous systems
- (c) Endocrine and digestive systems
- (d) Nervous and endocrine systems

Answer. (d) Nervous and endocrine systems

13. A doctor advised a person to take injection of insulin because his:

- (a) Blood pressure was high
- (b) Heart beat was high
- (c) Blood sugar was high
- (d) Thyroxine level in blood was high

Answer. (c) Blood sugar was high

14. The dramatic changes in body features associated with puberty are mainly because of the secretions of:

- (a) Estrogen from testes and testosterone from ovary
- (b) Estrogen from adrenal gland and testosterone from pituitary gland

(c) Testosterone from testes and estrogen from ovary

(d) Testosterone from thyroid gland and estrogen from pituitary gland

Answer. (c) Testosterone from testes and estrogen from ovary

15. Electrical impulse travels in a neuron from:

(a) Dendrite → axon → axon end → cell body

(b) Cell body → dendrite → axon → axon end

(c) Dendrite → cell body → axon → axon end

(d) Axon end → axon → cell body → dendrite

Answer. (c) Dendrite → cell body → axon → axon end