Control and coordination

Module -2.3

Worksheet

I.Choose the correct answer.

1. 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

**2.** 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

**3.** 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

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

(a) Auxin

(b) Gibberellin

(c) Abscisic acid

(d) Cytokinin

**5.** The stimulus in the process of thigmotropism is:

(a) Touch

(b) Gravity

(c) Light

(d) Chemical

**6.** 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

II. Answer the following questions :

1. Write the differences between the two types of movement seen in plants .
2. Why does a tendril wind around a support ?
3. Write an activity to show phototropism in plants .
4. Explain the functions of the following plant hormones .
5. Auxin
6. Gibberllins
7. Cytokinin
8. Abscisic acid
9. Ethylene