

WORKSHEET 1

CHAPTER 7 – CHEMICAL COORDINATION IN PLANTS

A. Name the following.

1. The movement of plants in response to gravitation.
2. The non-directional movement of a plant part in response to touch.
3. A plant hormone that promotes cell division.
4. A growth inhibiting plant hormone.
5. A hormone that induces ripening of fruits.

B. Fill in the blanks.

1. _____ is the most common naturally occurring auxin.
2. _____ controls the phototropic and geotropic movement of plants.
3. Thigmonastic movement can be seen in _____
4. _____ promote cell enlargement.
5. _____ promote dormancy of seeds and buds.

C. Choose the correct option.

1. Which of the following is a plant hormone?
a. Thyroxine b. Rennin c. Insulin d. Cytokinin
2. The growth and movement of plant in response to light is
a. phototropism. b. thigmotropism. c. geotropism. d. hydrotropism.
3. Artificial ripening of fruits is carried out by
a. auxin. b. ABA. c. ethylene. d. cytokinin.
4. Auxins are synthesized in
a. xylem. b. phloem. c. meristematic tissue. d. parenchyma.
5. _____ induces parthenocarpy.
a. Auxin b. Cytokinin c. Gibberellin d. ABA

D. State whether the following statements are True or False.

1. Auxins play a central role during cell cycle.
2. ABA is a growth inhibiting hormone.
3. Gibberellin promotes cell enlargement.
4. Nastic movement is a non-directional movement.
5. Abscisic acid promotes wilting of leaves.

Name:

Teacher's signature:

Class: X

Date:

E. Study the figure given alongside and answer the following questions.

1. Name the plant movement shown in the figure.
2. Define it.
3. Name the hormone controlling this phenomenon.
4. What will happen if moisture is uniformly distributed in the soil?
5. Differentiate between tropic and nastic movements.



ANSWERS

WORKSHEET 1

A. Name the following.

1. Geotropism
2. Thigmonastic movement
3. Cytokinin
4. ABA
5. Ethylene

B. Fill in the blanks.

1. Indole-3-acetic acid
2. Auxin
3. *mimosa pudica*
4. Gibberellins
5. ABA

C. Choose the correct option.

1. d.
2. a.
3. c.
4. c.
5. a.

D. State whether the following statements are True or False.

1. False
2. True
3. True
4. True
5. True

E. Study the figure given alongside and answer the following questions.

1. Hydrotropism
2. It is the growth movement of plant parts towards water or moisture.
3. Hydrotropism is controlled by auxin hormone.
4. The roots will not bend. It will grow straight.

5.	Tropic movement	Nastic movement
	Growth dependent movement	Growth independent movement
	Directional movement	Non-directional movement
	Movement is slow	Movement is fast