

# WORKSHEET 2

## CHAPTER 7 – CHEMICAL COORDINATION IN PLANTS

### A. Name the following.

1. Opening and closing of dandelion flower in response to light intensity.
2. Growth movement of plant part away from the stimulus.
3. Chemicals produced in plant cells which regulate their growth and development.
4. Stress hormone in plants.
5. Hormone that promotes wilting of leaves.

### B. Fill in the blanks.

1. \_\_\_\_\_ is a gaseous hormone.
2. Any change in environment to which an organism reacts is called \_\_\_\_\_
3. Shoots show negative \_\_\_\_\_ and positive \_\_\_\_\_
4. The winding of grapevine around a support is \_\_\_\_\_ movement.
5. Growth of pollen tube through style towards ovule is \_\_\_\_\_ movement.

### C. Match the items in Column A with those in Column B and write down the matching pairs.

#### Column A

1. Thigmonasty
2. Photonasty
3. Phototropism
4. Ripening of fruits
5. Delaying of leaf senescence

#### Column B

- a. ethylene
- b. gibberellin
- c. *Mimosa*
- d. dandelion flower
- e. auxin

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

1. Tropic movement is a directional movement.
2. Nastic movements are temporary movement.
3. Indole-3-acetic acid is a common cytokinin.
4. Auxin induces parthenocarpy.
5. Cytokinin promotes wilting of leaves.

Name: .....

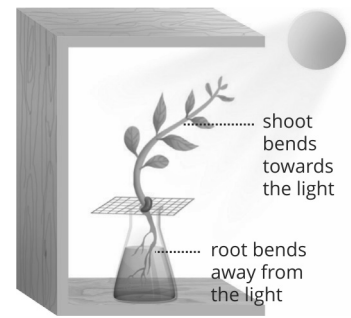
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**E. Study the given figure and answer the following questions.**

1. What is the aim of the experiment?
2. Define the phenomenon shown in the experiment.
3. Name the hormone involved in this phenomenon and explain its role.



# ANSWERS

## WORKSHEET 2

### A. Name the following.

1. Photonasty
2. Negative tropism
3. Phytohormones
4. Abscisic acid
5. Abscisic acid

### B. Fill in the blanks.

1. Ethylene
2. stimulus
3. geotropism, phototropism
4. thigmotropic
5. chemotropic

### C. Match the items in Column A with those in Column B and write down the matching pairs.

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. c. | 2. d. | 3. e. | 4. a. | 5. b. |
|-------|-------|-------|-------|-------|

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

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

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

1. To show phototropism in plants.
2. The growth movement and orientation of a plant part in response to light is called phototropism.
3. Auxin is responsible for this phenomenon. Auxins collect inside the cells away from the light. This causes the plant cells farthest from light to get elongated leading to increase in length and results in curvature of shoot towards the source of light.