

Chapter – 13 | Plant growth and Development

QUIZ
PART-05

1. Plant growth regulators are also called —

- A. Plant hormones or phytohormones
 - B. Respiratory substrates
 - C. Digestive enzymes
 - D. Minerals only
- (A)

Explanation : PGRs are also known as plant hormones, phytohormones or plant growth factors.

2. Auxins, gibberellins and cytokinins are generally —

- A. Growth promoters
 - B. Growth inhibitors only
 - C. Respiratory gases
 - D. Storage proteins
- (A)

Explanation : They promote cell division, elongation, flowering and fruit formation.

3. Absciscic acid is mainly a —

- A. Growth inhibitor
 - B. Root pigment
 - C. Photosynthetic gas
 - D. Cell wall sugar
- (A)

Explanation : ABA is responsible for dormancy and growth inhibition.

4. Discovery of plant growth regulators began with observations of —

- A. Darwin and Francis Darwin
 - B. Skoog and Miller
 - C. Kurosawa only
 - D. Cousins only
- (A)

Explanation : They studied bending of coleoptile towards light.

5. In Darwin's coleoptile experiment, bending was controlled by —

- A. Coleoptile tip
 - B. Root hair only
 - C. Leaf base only
 - D. Seed coat
- (A)

Explanation : The tip produced a substance that moved downward and caused curvature.

6. F. W. Went named the growth substance —

- A. Auxin
 - B. Kinetin
 - C. Zeatin
 - D. Ethylene
- (A)

Explanation : Went isolated the substance from coleoptile tip and named it auxin.

7. Went conducted his experiments on —

- A. Oats
 - B. Rice
 - C. Tobacco
 - D. Cotton
- (A)

Explanation : F. W. Went used oat coleoptiles in his experiments.

8. Bakanae disease of rice is caused by —

- A. Gibberella fujikuroi
 - B. Lactobacillus
 - C. Rhizobium
 - D. Penicillium
- (A)

Explanation : The fungus produces gibberellin-like substance causing foolish seedling disease.

9. Kinetin was identified by —

- A. Skoog and Miller
 - B. Darwin and Went
 - C. Kurosawa and Cousins
 - D. Sachs and Pfeffer
- (A)

Explanation : Kinetin was identified and crystallized by Skoog and Miller in 1955.

10. Ethylene is a —

- A. Gaseous plant growth regulator
 - B. Solid mineral
 - C. Photosynthetic pigment
 - D. Cell wall material
- (A)

Explanation : Ethylene is a gaseous hormone involved in ripening and many other processes.