

Time : 1 hour 15 Minute

STD 11 Science Biology
chapter Based Test

Total Marks : 40

SECTION A

* Choose The Right Answer From The Given Options.[1 Marks Each] [5]

- Which of the following hormones can replace vernalization?
(A) Auxin. (B) Cytokinin. (C) Gibberellins. (D) Ethylene.
- Which one among the following chemicals is used for causing defoliation of forest trees?
(A) Malic hydrazide. (B) Phosphon-D.
(C) 2, 4-dichlorophenoxy acetic acid. (D) None of these.
- Mowing grass lawn facilitates better maintenance because.
(A) Wounding stimulates regeneration. (B) Removal of apical dominance and stimulation of intercalary meristem.
(C) Removal of apical dominance. (D) Removal of apical dominance and promotion of lateral meristem.
- Growth of a shoot or a root involves:
(A) Cell enlargement (B) Cell division
(C) Cell differentiation (D) All the above
- Opening of floral buds into flowers, is a type of:
(A) Autonomic movement of variation.
(B) Autonomic movement of locomotion.
(C) Autonomic movement of growth.
(D) Paratonic movement of growth.

* Answer The Following Questions In One Sentence.[1 Marks Each] [6]

- Define growth rate.
- Define meristem.
- Name the plant hormone which causes internodal elongation in plants.
- Who first observed phototropic curvature in plants?
- A student cultures a callus from the tobacco pith in a sterilised minimal nutritive medium, but adds more cytokinins than auxins. What would develop first from the callus the shoot buds or the roots?
- Name two examples of meristems that cause increase in girth of plants.

SECTION B

* Given Section consists of questions of 2 marks each.

[10]

1. Describe Arithmetic growth.
2. Explain some internal causes of seed dormancy.
3. Explain what is meant by the terms auxin precursors, anti-auxins, free auxins and bound auxins.
4. Expand the following:
 - a. NAAL
 - b. IBA
 - c. 2, 4-D
 - d. ABA
5. How are gibberellins useful in agriculture to improve productivity. Give any three points in support of your answer.

SECTION C

* Given Section consists of questions of 3 marks each.

[9]

1. Auxins are growth hormones capable of promoting cell elongation. They have been used in horticulture to promote growth, flowering and rooting. Explain the meaning of the following terms related to auxins.
 - a. Auxin precursors.
 - b. Anti-auxins.
 - c. Synthetic auxins.
2. What would be expected to happen, if:
 - a. GA_3 is applied to rice seedlings.
 - b. A rotten fruit gets mixed with unripe fruits.
 - c. You forget to add cytokinin to the culture medium.
3. It has been observed that some plants need periodic exposure to light to induce flowering. This phenomenon is called photoperiodism. How does sunlight affect the human life?

SECTION E

* Given Section consists of questions of 5 marks each.

[10]

1. Why is not any one parameter good enough to demonstrate growth throughout the life of a flowering plant?
2. Which are the different phases of growth in a plant? Describe with the help of suitable diagrams.