

CHAPTER 10

Plant Growth and Development

Growth

- The process of growth is maximum during: (2020)
 - Lag phase
 - Senescence
 - Dormancy
 - Log phase
- Typical growth curve in plants is: (2015)
 - Stair-steps shaped
 - Parabolic
 - Sigmoid
 - Linear

Differentiation, Dedifferentiation, Redifferentiation and Development

- Which one of the following plants does not show plasticity? (2022)
 - Maize
 - Cotton
 - Coriander
 - Buttercup
- Plants follow different pathways in response to environment or phase of life to form different kinds of structures. This ability is called: (2021)
 - Flexibility
 - Plasticity
 - Maturity
 - Elasticity

Plant Growth Regulators

- Production of Cucumber has increased manifold in recent years. Application of which of the following phytohormones has resulted in this increased yield as the hormone is known to produce female flowers in the plants: (2022)
 - Cytokinin
 - ABA
 - Gibberellin
 - Ethylene
- The gaseous plant growth regulator is used in plants to: (2022)
 - Kill dicotyledonous weeds in the fields
 - Speed up the malting process
 - Promote root growth and root hair formation to increase the absorption surface
 - Help overcome apical dominance

- The plant hormone used to destroy weeds in a field is: (2021)
 - NAA
 - 2, 4-D
 - IBA
 - IAA

- Name the plant growth regulator which upon spraying on sugarcane crop, increases the length of stem, thus increasing the yield of sugarcane crop. (2020)
 - Gibberellin
 - Ethylene
 - Absciscic acid
 - Cytokinin

- Match the following concerning the activity/function and the phytohormone involved. (2020-Covid)

1. Fruit ripener	(i)	Absciscic acid
2. Herbicide	(ii)	GA ₃
3. Bolting agent	(iii)	2, 4-D
4. Stress hormone	(iv)	Ethephon

Select the correct option from following:

- | | | | |
|----------|-------|------|-------|
| (1) | (2) | (3) | (4) |
| a. (iii) | (iv) | (ii) | (i) |
| b. (iv) | (iii) | (ii) | (i) |
| c. (iv) | (ii) | (i) | (iii) |
| d. (ii) | (iii) | (iv) | (i) |

- Who coined the term 'Kinetin'? (2020-Covid)
 - Darwin
 - Went
 - Kurosawa
 - Skoog and Miller
- It takes very long time for pineapple plants to produce flowers. Which combination of hormones can be applied to artificially induce flowering in pineapple plants throughout the year to increase yield? (2019)
 - Auxin and Ethylene
 - Gibberellin and Cytokinin
 - Gibberellin and Absciscic acid
 - Cytokinin and Absciscic acid
- Fruit and leaf drop at early stages can be prevented by the application of: (2017-Delhi)
 - Cytokinins
 - Ethylene
 - Auxins
 - Gibberellic acid

- ## Photoperiodism, Vernalisation, Seed Dormancy

[illegible]