

Topic :- Plant Growth & Development

- Differentiation in plants is open because
 - Cells/tissue arising out of meristem regain the capacity of division under certain conditions
 - Cells/tissue arising out of different meristem have different structures at maturity
 - Cells/tissue arising out of different meristem have same structures at maturity
 - All of the above
- Growth of plant is
 - Arithmetic
 - Geometric
 - Both (a) and (b)
 - Additive
- Mobilization of stored food in germinating seed is triggered by
 - ABA
 - GA
 - Cytokinin
 - Ethylene
- The cells in the root and shoot apex
 - Are rich in protoplasm
 - Have conspicuous nuclei
 - Have their cell wall which are primary in nature, thin and cellulosic with abundant plasmodesmatal connections
 - All of the above
- Identify two physiological processes induced by two different phytohormones having a common precursor, which is formed due to the catalytic activity of pyruvic dehydrogenase complex.
 - more female flowers in cucumber.
 - a-amylase production in barley grain.
 - Acceleration of fruit ripening in tomato.
 - Delay in sprouting of potato tubers. the correct combination is
 - I and II
 - I and III
 - II and IV
 - III and IV
- Auxin originates at the tip of the stem and controls growth elsewhere. The movement of auxin is largely
 - Basipetal
 - Acropetal
 - Both (a) and (b)
 - Centripetal

7. S-shaped or sigmoid growth curve have

- I. lag phase
- II. log phase
- III. stationary phase
- IV. diminishing growth phase

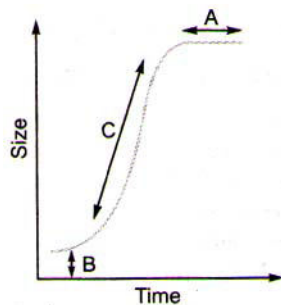
Select the correct option

- a) All except IV b) All except III c) All except II d) I, II, III and IV

8. The cells proximal (just next away from the tip) to the meristematic zone represents the phase of

- a) Division b) Maturation c) Elongation d) Meristematic division

9. Given below is a graph drawn on the parameters of growth versus time. A, B and C respectively represent



- a) Exponential phase, log phase and steady state phase
b) Steady state phase, lag phase and log phase
c) Slow growing phase, lag phase and steady state phase
d) Lag phase, steady state phase and log phase

10. When transition from juvenile to adult is gradual than this type of development is called

- a) Homoblastic development b) Heteroblastic development
c) Homoheteroblastic development d) Hetero and homoblastic development

11. Specific areas in the higher plants which takes part in the formation of new cells are called

- a) Permanent tissue b) Quicent centre c) Meristems d) Subapical part

12. which of the PGR_6 induces parthenocarp in tomatoes?

- a) Auxin b) Gibberellin c) Cytokinin d) Ethylene

13. Temperature required for vernalisation is

- a) 5°C to 10°C b) 5°C to 15°C c) 0°C to 5°C d) 3°C to 17°C

14. Which of the following pairs, is not correctly matched?

- a) Abscisic acid - Stomatal closure b) Gibberellic acid - Leaf fall
c) Cytokinin - Cell division d) IAA - Cell wall elongation

