DPP
DAILY PRACTICE PROBLEMS

Class : XIth **Subject : BIOLOGY**
Date : **DPP No. : 5**

Topic :- Plant Growth & Development

1. In some plants, sleep movement of leaves is due to
   a) Excess of photosynthesis
   b) Osmotic changes at base of leaf
   c) Excess of respiration
   d) Excess of transpiration

2. Hormone inducing fruit ripening is
   a) Ethylene
   b) Cytokinin
   c) Gibberellic acid
   d) Abscisic acid

3. The discovery of gibberellins is related with one of the following
   a) Blast disease of rice
   b) Rust disease of wheat
   c) Bakane disease of rice
   d) Early blight disease of potato

4. Phase of maturation is characterised by
   I. Cells attaining their maximal size
   II. Proper wall thickening and protoplasmic modification
   III. Rapid cell division
   Select the correct option
   a) I and II
   b) II and III
   c) I and III
   d) I, II and III

5. The following statements are given about plant growth hormones:
   I.Cytokinins suppress the synthesis of chlorophyll.
   II.Auxins control apical dominance.
   III.Gibberellins promote shoot elongation.
   IV.Abscisic acid enabling seeds to withstand desiccation.
   Which of the above statements are correct?
   a) I and II
   b) II and III
   c) I and III
   d) II, III and IV

6. Growing season is the season of plants in which there is
   a) Maximum vegetative growth
   b) Minimum vegetative growth
   c) Moderate vegetative growth
   d) Maximum reproduction occurs

7. I. On plotting the length of an organ against time, a linear curve is obtained
II. $L_t = L_0 + rt$
III. Following mitotic division, one daughter cell continues to divide while the other differentiate and mature
Above are the properties of
a) Arithmetic growth rate
b) Geometric growth rate
c) Both (a) and (b)
d) Elongation growth rate

8. The problem of necrosis and gradual senescence, while performing tissue culture can be overcome by
a) Spraying auxins
b) Spraying cytokinins
c) Suspension culture
d) Subculture

9. The ability of plants to follow different pathway to form different structures in response to environment is called
a) Plasticity
b) Elasticity
c) Growth
d) Development

10. Opening and closing of flowers represent a kind of
a) Nastic movement
b) Tropic movement
c) Mutation
d) Autonomic movement

11. During differentiation of tracheary elements,
a) The cells lose its protoplasm
b) Cells develop very strong elastic lignocellulosic secondary cell walls
c) Both (a) and (b)
d) The cell increases its protoplasm

12. Leaf abscission, fruit fall, and bud dormancy occurs by which phytohormone?
a) Auxin
b) Cytokinin
c) Gibberellins
d) Abscisic acid

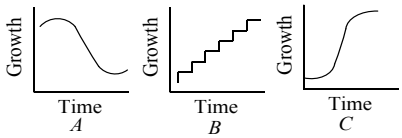
13. The response of different organisms to environment rhythms of light and darkness, is called
a) Phototropism
b) Phototaxis
c) Photoperiodism
d) Vernalization

14. An example of short day plant is
a) Wheat
b) Maize
c) *Chrysanthemum*
d) Radish

15. The plant hormone produced by *Rhizobium* for nodulation is
a) IBA
b) NAA
c) 2,4-D
d) IAA

16. Growth of the plant is
a) Determinate
b) Indeterminate
c) Both (a) and (b)
d) None of the above

17. Plant growth Regulators (PGR) or plant hormones are generally
a) Produced from many parts of plant
b) Produced from shoot apices and stem apices
c) Produce single effect
d) Are basic in nature

18. 

Which of the following graph shows the sigmoid growth curve?

a) A and B b) C c) A d) B

19. Which of the following functions is/are not the function/s of cytokinin?

I. New leaves formation
II. Chloroplast formation in leaves
III. Lateral shoot formation
IV. Adventitious shoot formation
V. Rooting on stem cuttings

Choose the correct option

a) Only I b) II and III c) Only IV d) Only V

20. Stimulus of vernalisation is perceived by

a) Shoot tips b) Mature tissues c) Embryo tips d) Both (a) and (c)