

**Class : XI<sup>th</sup>**  
**Date :**

**Subject : BIOLOGY**  
**DPP No. : 10**

## Topic :- Plant Growth & Development

1. Rapid and dramatic increase in shoot length is called
 

a) Triple response growth	b) Bolting
c) scarification	d) Night break effect
  
2. Environment heterophylly is seen in
 

a) Cotton	b) Coriander	c) Larkspur	d) Buttercup
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3. Genetically dwarf plants can be induced to grow tall by using
 

a) Gibberellins	b) Phycobillins	c) Auxins	d) Cytokinins
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4. Increased growth per unit time is termed as
 

a) Nascent growth rate	b) Growth rate	c) Biomass	d) All of these
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5. Which plant hormone promotes seed dormancy, bud dormancy and causes stomatal closure?
 

a) IAA	b) Abscisic acid	c) GA	d) Cytokinin
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6. I. Lag phase → Log phase → Stationary phase  
 II. Geometric and Arithmetic phase of growth  
 III. Growth shown by all living organism *in vivo*  
 IV.  $L_t = L_0 + rt$   
 Match the above characters with sigmoid curve, arithmetic growth, embryo development and choose the correct option accordingly  

Sigmoid curve	Arithmetic growth	Embryo development	
a) II	I	III, IV	b) I, III
c) I	II, III	IV	d) III, IV
			I
			II
  
7. A plant have 13 hours critical day light under which condition it will flower
 

Duration of light period	Duration of dark period		
a) 13	11	b) 11	13
c) 12	12	d) 10	14

8. The shedding of leaves, flowers or fruits due to change in the hormonal balance in plants, is referred as  
 a) Senescence                      b) Ascission                      c) Photoperiodism                      d) Vernalization
9. The phytohormone that induces cell elongation is known to be produced by a fungus. The asexual stage of this fungus is called  
 a) *Rhizopus sexualis*                      b) *Fusarium moniliformae*  
 c) *Gibberella fujikuroi*                      d) *Fusarium oxysporum*
10. Cytokinins are mostly  
 a) Glucosides                      b) Amino purines                      c) Acidic                      d) Phenolic
11. Geotropic response is perceived by  
 a) Mature roots                      b) Elongation roots                      c) Root cap                      d) Root hairs
12. The natural plant hormone isolated from corn kernels and coconut milk is  
 a) Florigen                      b)  $GA_3$                       c) Free auxins                      d) Zeatin
13. In the expression,  $W_1 = W_0 e^{rt}$  (geometrical growth),  $W_1, W_0, r, t$  represents  
 $W_0$                        $W_1$                        $r$                        $t$   
 a) Initial size   Final size   Growth rate   Time of growth  
 b) Final size   Initial size   Growth rate   Time of growth  
 c) Final size   Initial size   Growth rate   Time of dividing  
 d) Initial size   Final size   Growth rate   Time of dividing
14. Natural cytokinins are synthesized in tissue that are  
 a) Senescent                      b) Dividing rapidly                      c) Storing food material                      d) Differentiating
15. Which of the following processes is concerned with Cholodny-Went theory?  
 a) Photomorphogenesis                      b) Photoperiodism                      c) Phototropism                      d) Photorespiration
16. Growth at cellular level is the increase in the amount of  
 a) Cell wall                      b) Cell membrane                      c) Protoplasm                      d) All of the above
17. Which one of the following is a natural growth inhibitor?  
 a) NAA                      b) ABA                      c) IAA                      d) GA
18. I. Antagonist to GA  
 II. Promoted bud dormancy  
 III. Promoted stomatal closure  
 IV. Promoted abscission layer  
 Identify the hormone/s which promote/s all these events in plants and choose the correct option  
 a) Cytokinin                      b) Auxin                      c) Abscisic acid                      d)  $C_2H_4$

19. Thigmotropism is best seen in  
a) Tendrils                      b) Leaf apex                      c) Root apex                      d) Stem apex
20. In coleoptile tissue, auxin is  
a) Not transported because it is used where it is made  
b) Transported by diffusion  
c) Transported from the base to tip by osmosis  
d) Produced by growing apices of stem, which migrate to the region of its action

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