

Chapter 4
Physiology and Biochemistry

1. Which of the following type of solution has higher levels of solutes than the solution?
 (A) Isotonic
 (B) Hypertonic
 (C) Hypotonic
 (D) Anisotonic

2. Which of the following are the component of water potential?
 (A) Osmotic potential
 (B) Pressure potential
 (C) Gravitational potential
 (D) Assimilation potential

3. Uridylyltransferase is a single enzyme of P_{II} that derives
 (A) Uridylylation
 (B) Adelynation
 (C) Deuridylylation
 (D) Dinitration

4. Which of the following can be difference between short day plant and long day plant?
 (A) Short day plants give flower when photoperiodism is less than the critical day length
 (B) Short day plants inhibit flowering during interruption of darkness in light period
 (C) Short day plants inhibited flowering if the long dark period is interrupted by a flash of light
 (D) Short day plant doesn't effected by GA

5. The changes occur during vegetative phase to reproductive phase in plants are
 (A) SAM give rise to flower instead of shoot
 (B) Formation of germ line
 (C) changes in the pigmentation of some cells
 (D) number of cells are set aside in the shoot meristem of the embryo

6. One hormone hastens maturity period in juveline conifers, a second hormone controls xylem differentiation, while the third increase the tolerance of plant to various stresses. They are
 (A) cytokinin
 (B) auxin
 (C) gibberellin
 (D) ABA

7. Identify the CORRECT option for the effects of the red and far red light.

	Red Light	Far Red Light
(A)	Stimulates germination	Inhibits germination
(B)	Inhibits flowering in short day plant	Stimulates flowering in short day plants
(C)	Cause epicotyls hook to unbend	Maintain epicotyls hook bend

(D)	Inhibits the formation of anthocyanins	Stimulates the formation of anthocyanins
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8. ABA involved in
 (A) tolerance of plants against different stresses
 (B) dormancy of seed
 (C) increased in cell division
 (D) inhibitor of metabolism
9. Plant is girdled (ringed)
 (A) removal of phellogen
 (B) lead to growth of phloem
 (C) root dies first
 (D) tissue below ring began shrivel
10. Stomata guard cells perform functions like
 (A) producing sugars
 (B) protecting the inner region of leaf
 (C) regulating the amount of water lost
 (D) chloroplast storage

Answer

1. (A), (B), (D)
 2. (A), (B), (C)
 3. (A), (C)
 4. (A), (C), (D)
 5. (A), (B), (C)
 6. (B), (C), (D)
 7. (A), (B), (C)
 8. (A), (B), (D)
 9. (A), (C), (D)
 10. (A), (C), (D)