

Class: 11
Subject: biology
Topic: Plant growth and development
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

1. ATP molecules required for synthesis of a glucose molecule in Calvin Benson cycle are
- 36
 - 38
 - 12
 - 18

Answer: C

2. Compensation point is the value of a factor where there is
- Beginning of photosynthesis
 - Little photosynthesis
 - Photosynthesis equal to rate of respiration
 - Neither photosynthesis nor respiration

Answer: C

3. Chloroplast contains maximum quantity of
- RuDP-carboxylase
 - Hexokinase
 - Pyruvic carboxylase
 - None

Answer: A

4. Photosynthesis in C4 plants is relatively less limited by atmospheric CO₂ levels because
- Effective pumping CO₂ into bundle sheath cells
 - Rubisco in C4 plants has higher affinity for CO₂
 - Four carbon acids are the primary initial CO₂ fixation products
 - The primary fixation of CO₂ is mediated via PEP carboxylase

Answer: D

5. R.Q. is less than 1 if the respiratory substrate is
- A. Organic acid
 - B. Fats and proteins
 - C. Sucrose
 - D. Glucose

Answer: C

6. Which one of the followings is a synthetic auxin?
- A. IAA
 - B. NAA
 - C. IBA
 - D. GA

Answer: B

7. Enzyme used in conversion of glucose to glucose-6-phosphate is
- A. Hexokinase
 - B. Phosphokinase
 - C. Phosphohexokinase
 - D. Isomerase

Answer: A

8. An enzyme that can stimulate germination of barley seeds is
- A. α -amylase
 - B. Lipase
 - C. Protease
 - D. Invertase

Answer: A

9. Water is lost in liquid state in some plants through hydathodes. These hydathodes
- A. Remain always open
 - B. Do not show any specificity in opening and closing
 - C. Remain closed at night
 - D. Remain closed during day

Answer: A

10. Which is produced during water stress that brings stomatal closure
- A. Ethylene
 - B. Abscisic acid
 - C. Ferulic acid
 - D. Coumarin

Answer: B

11. Root hairs are

- A. Multicellular
- B. Bicellular
- C. Unicellular
- D. None of the above

Answer: C

12. Complete girdling ultimately kills the tree due to

- A. Starvation of root
- B. Stoppage of photosynthesis
- C. Nonmovement of minerals
- D. Nonmovement of water

Answer: A

13. A solution concentration having the same solute as that of the cell sap is called

- A. Isotonic
- B. Hypertonic
- C. Hypotonic
- D. Saturated solution

Answer: A

14. Red drop discovered by Emerson is due to disruption of photochemical activity of

- A. Carotenoids
- B. PS I
- C. PS II
- D. Both B and C

Answer: C

15. From which was kinetin isolated

- A. Coconut milk
- B. Pineapple
- C. Soyabean
- D. Groundnut

Answer: A

16. When a cell is placed in 0.25 M concentrated sugar solution, there is no change in it. So the external solution is called

- A. Hypertonic
- B. Isotonic
- C. Hypotonic
- D. None of the above

Answer: B

17. Hygrometer is used to measure

- A. Wind speed
- B. Relative humidity
- C. Wind direction
- D. None of the above

Answer: B

18. Coconut milk factor is

- A. Auxin
- B. Gibberellin
- C. Abscisic acid
- D. Cytokinin

Answer: D

19. Terminal oxidation comprises

- A. Synthesis of metabolic water
- B. Electron transport
- C. Oxidative phosphorylation
- D. All the above

Answer: D

20. Parthenocarpic development of fruit is brought about by

- A. 2, 4, 5-T
- B. NAA, 2T
- C. NAA, 2, 4-D
- D. 2, 4-D

Answer: C