

1. What is glycolysis?
2. What is oxidative phosphorylation?
3. What is the net gain of ATP in glycolysis?
4. What is terminal oxidation?
5. Expand ETS.
6. State when RQ is greater than the unity.
7. Why Kreb's cycle is called TCA cycle?
8. What is Richmond and Lang effect?
9. What is compensation point?
10. Name one 7c sugar product in C<sub>3</sub> cycle.
11. Why is Calvin cycle also known as C<sub>3</sub> cycle?
12. How Glycolysis different from photolysis of water?
13. Write the full form of PEPA.
14. What are CAM plants?
15. What is the full form of RUBISCO.
16. What is Photophosphorylation?
17. What is Emerson's enhancement effect?
18. Name the CO<sub>2</sub> acceptors in the dark phase of photosynthesis in C<sub>3</sub> and C<sub>4</sub> plants.
19. Give two examples of C<sub>4</sub> plants.
20. Give two examples of CAM plants.
21. What is Kranz anatomy?
22. What is action spectrum?
23. What is absorption spectrum?
24. What is photon?
25. What is LHC?
26. What are the accessory pigments in plants?
27. Where does photorespiration occur?
28. Name the first stable compound of light independent phase of photosynthesis.
29. Name the first stable compound of C<sub>4</sub> pathway.
30. Which enzyme is common between C<sub>2</sub> and C<sub>3</sub> cycle?
31. Name a water-soluble plant pigment.
32. Write short note on:
  - Chemiosmotic theory
  - Senescence
  - Significance of CAM
  - Calvin cycle
  - Emerson's enhancement effect
  - Photorespiration
33. Describe ETS in reference to oxidative phosphorylation.
34. Schematically mention the steps of glycolysis with intermediate enzyme used at each step.
35. Mention differences between C<sub>2</sub> and C<sub>3</sub> plants.
36. Mention differences between CAM and C<sub>3</sub> plants.
37. Mention differences between CAM and C<sub>4</sub> plants.

38. Discuss why photorespiration is a wasteful process?
39. State the other name of dark reaction of photosynthesis.
40. Schematically describe the dark reaction mentioning the intermediate enzymes.
41. What is carbon assimilation? Describe the process involved in light phase of photosynthesis.
42. Describe various reactions involve in TCA cycle citing the names of enzymes involved.
43. Discuss the pathway of Z-scheme in photophosphorylation.
44. Distinguish between cyclic and non-cyclic photophosphorylation.