

PRACTICE QUESTIONS

Photosynthesis

The first stage of photosynthesis takes place in the_____.

- A. Thylakoids.**
- B. Grana**
- C. Stomata**
- D. Stroma**

In the leaf, the CO₂ enters and the oxygen is released through_____.

- A. Stroma
- B. Stoma
- C. Granum
- D. Epidermis

Which of the following is not required during photosynthesis?

- A. Water**
- B. Carbon dioxide**
- C. Oxygen.**
- D. Light**

During what stage of photosynthesis is O₂ produced?

- A. Carbon fixation**
- B. Light – dependent reactions.**
- C. Light – independent reactions**
- D. Calvin cycle**

In plant cell, leaves are _____.

- A. Responsible for storage**
- B. Responsible for photosynthesis.**
- C. Responsible for support**
- D. None of the above**

Question 6

In the light reactions, solar energy is converted to chemical energy stored in both ATP and _____.

- A. AMP
- B. ADP
- C. NADPH.
- D. NADH

Both carotenoids and chlorophyll are _____.

- A. Coenzymes**
- B. Organelles**
- C. Pigments**
- D. Cofactors**

ATP is _____.

- A. required for the Calvin cycle.**
- B. a product of the Calvin cycle**
- C. required for the light reactions**
- D. not required during photosynthesis**

The Calvin cycle occurs in the _____ of the chloroplast.

- A. Thylakoids
- B. Stoma
- C. Stroma
- D. The inner mitochondrial membrane

What energy-rich organic compound is produced as a result of the Calvin cycle?

- A. ATP**
- B. Sugar**
- C. NADPH**
- D. O₂**

In the leaf, chloroplasts are concentrated in the _____.

- A. Epidermis**
- B. Veins**
- C. Mesophyll**
- D. Thylakoids**

The oxygen released during photosynthesis comes from:

- A. Carbon dioxide**
- B. Carbon dioxide and water**
- C. Water**
- D. Glucose**

The chemical reactions that break larger molecules into smaller molecules. It is usually an exergonic process.

- A. Anabolism**
- B. Mechanism**
- C. Catabolism**
- D. Dynamism**

The chloroplast is the site of photosynthesis in a plant cell. It is enclosed by _____ membranes.

- A. One
- B. Two
- C. Three
- D. Four

Photosynthesis is an _____ reaction.

- A. Exergonic**
- B. Endergonic.**
- C. a & b**
- D. None of the above**

What type of metabolic reaction involves a loss of electrons from the molecule involved?

- A. Oxidation**
- B. Reduction**
- C. Phosphorylation**
- D. Fermentation**

Which of the following is not a coenzyme?

- A. FAD**
- B. NAD**
- C. NADP**
- D. ATP**

Plants are _____.

- A. Autotrophs**
- B. Prototrophs**
- C. Heterotrophs**
- D. Auxotrophs**

What type of metabolic reaction involves a gain of electrons from the molecule involved?

- A. Oxidation**
- B. Reduction**
- C. Phosphorylation**
- D. Fermentation**

The release of energy in an organism depends on the conversion of

- A. AMP to ADP.**
- B. ADP to ATP.**
- C. ATP to ADP.**
- D. ATP to AZP.**

Which of the following are produced during the light reactions ?

- A. CO₂, electrons and ATP**
- B. Glucose, electrons and ATP**
- C. Oxygen, electrons and ATP**
- D. Water**

Photoautotroph are organisms

- A. Depending on others organisms**
- B. Making their food depending on inorganic chemicals**
- C. Depending on consumers**
- D. Making their food depending on light**

Grana are found within organelles called

- A. Golgi apparatus**
- B. Lysosomes**
- C. mitochondria**
- D. Chloroplasts**

The fuel for respiration in plants mainly comes from?

- A. Photosynthesis**
- B. The Krebs cycle**
- C. Electron transport chain**
- D. Glycolysis**

Which of the following organisms DO NOT carry on photosynthesis?

- A. Fungi**
- B. Plants**
- C. Algae**
- D. Protists**

ANSWERS

1. A
2. B
3. C
4. B
5. B
6. C
7. C
8. A
9. C
10. B

11. C
12. C
13. C
14. B
15. B
16. A
17. D
18. A
19. B
20. C

21. C
22. D
23. D
24. A
25. A