



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORK SHEET - 34

Class: IX

Sub: LIFE SCIENCE

Date: 09.07.2021



Topic: Photosynthesis: Dark Phase C-2 AND C-3 CYCLE

F.M. : 15

Choose the correct option:

(1x15=15)

1. Photosynthesis cannot take place at night due to :-
a) lack of sufficient light b) stomata remains closed c) photolysis does not occur
d) All of these
2. The fixation of carbon dioxide is brought by the acceptor :-
a) Ribulose biphosphate b) Ribulose monophosphate c) Phosphoglyceric acid
d) None of these
3. The site of Dark phase is :-
a) Grana b) Membrane of thylakoid c) Stroma d) All of these
4. The first stable compound in C₃ cycle is :-
a) Pyruvic Acid b) 3-Phosphoglyceric acid c) 2-Phosphoglyceric acid
d) Phosphoenol Pyruvic acid
5. C-3 cycle is also named as :-
a) Calvin cycle b) Biosynthetic phase c) Light Independent phase d) All of these
6. Full form of RuBP is :-
a) Ribulose Bisphosphate b) Ribulose 1,5, Bisphosphate c) Ribulose phosphate
d) Both (a) and (b)
7. The process by which green plants liberate oxygen in presence of light :-
a) Respiration b) Photosynthesis c) Photo respiration d) None of these
8. The first stable product of C-2 cycle is :-
a) Phosphoglyceric acid b) Phospho-glycolic acid c) Glycolic acid d) Phosphorus
9. The phases of calvin cycle are :-
a) Carbon fixation b) Reduction c) Regeneration of RuBP d) All of these
10. Reduction of Phosphoglyceric acid is brought about by :-
a) ATP b) Protons c) NADPH₂ d) Both ATP and NADPH₂
11. The reduction of phosphoglyceric acid forms the compound :-
a) Phosphoenol pyruvic acid b) Pyruvic acid c) Phosphoglyceraldehyde
d) Phosphoric acid

12. The organelles which are involved in C-2 cycle along with chloroplasts are :-
a) Mitochondria b) Ribosomes c) Microbody d) Mitochondria and Microbody both
13. Phosphoglyceraldehyde is used to :-
a) Produce glucose b) Regenerate RuBP c) Produce Phosphoglyceric acid
d) Both (a) and (b)
14. Which of the following occurs during the dark phase of photosynthesis?
a) Carbon dioxide is released b) ATP is generated c) Phosphoglyceraldehyde is synthesized
d) Oxygen is produced
15. Synthesis of carbohydrate which takes place in Calvin Cycle is :-
a) Fructose b) Glucose c) Sucrose d) Both glucose and fructose

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