



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

WORK SHEET - 20 (solutions)

Class: IX

Sub: LIFE SCIENCE

Date: 29.04.2020

Topic: Photosynthesis:Components chlorophyll and sunlight

F.M. : 15

Choose the correct option:

(1x15=15)

- The types of chlorophyll in higher plants are:
a) Chl a b) Chl b c) Chl c d) Both (a) and (b)
Answer : Both (a) and (b) (d)
- Major element of Chlorophyll is
a) Carbon b) Hydrogen c) Magnesium d) All of these
Answer : All of these (d)
- Deficiency of Magnesium leads to the disease:
a) chlorosis b) leaf curls c) mottling d) wart formation
Answer : Chlorosis (a)
- Chlorophyll is an example of:
a) Simple protein b) Chromoprotein c) conjugated protein d) Both (b) and (c)
Answer: Both (b) and (c) (d)
- The following is not an accessory pigment:
a) carotene b) xanthophylls c) chlorophyll d) phycoerythrin
Answer : Chlorophyll (c)
- Photosystems or Light harvesting complexes are aggregates of:
a) Only chlorophyll molecules b) only accessory pigments c) both chlorophyll and accessory pigments d) none of these
Answer: both chlorophyll and accessory pigments (c)
- The energy packets of light are called:
a) protons b) photons c) sun rays d) none of these
Answer : Photons (b)
- On capturing photons the chlorophyll molecules gets :
a) oxidized b) reduced c) solarised d) remains unaffected
Answer : oxidized (a)
- The source of sunlight in aquatic plants are:
a) Direct sun rays b) reflected sun rays c) refracted sun rays d) All of these
Answer : refracted sun rays (c)

10. The role of ejected electron from chlorophyll is used :
- a) To liberate ATP
 - b) To form NADPH₂
 - c) To be taken by acceptor
 - d) to be taken by acceptor and finally help in fixing Carbon dioxide
- Answer: to be taken by acceptor and finally help in fixing carbon dioxide (d)**
11. The process of addition of inorganic phosphate to ADP in presence of light is called:
- a) Photosynthesis
 - b) photolysis
 - c) photophosphorylation
 - d) phosphorylation
- Answer : photophosphorylation (c)**
12. Destruction of sunlight due to strong sunlight:
- a) photolysis
 - b) photophosphorylation
 - c) solarization
 - d) none of these
- Answer: solarization (c)**
13. The photolysis of water results in:
- a) Formation of H⁺ ions
 - b) formation of OH⁻ ions
 - c) formation of O₂
 - d) all of these
- Answer : All of these (d)**
14. The energy released due to activation of chlorophyll is used for :
- a) Synthesis of ATP
 - b) Splitting of water
 - c) formation of glucose
 - d) none of these
- Answer: synthesis of ATP (a)**
15. The colour of carotenes is:
- a) green
 - b) yellowish orange
 - c) red
 - d) none of these
- Answer: yellowish orange (b)**

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