



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF BIOLOGY
CLASS XI
PHOTOSYNTHESIS IN HIGHER PLANTS
WORKSHEET-16

1. Where are photosynthetic pigments located in the chloroplast? [1]
2. Expand RUBP, ATP and NADP. [1]
3. State the Law of limiting factors. [1]
4. Identify the internal structure of a plant that helps us to identify whether it is C₃ or C₄ plant. [1]
5. Name two photosynthetic pigments belonging to carotenoids. [1]
6. What is photophosphorylation? [2]
7. Distinguish between:
 - a) Respiration and photorespiration
 - b) Absorption spectrum and action spectrum [2]
8. Do reactions of photosynthesis called as Dark Reaction need light? Explain. [3]
9. Describe briefly the contribution of the following scientists:
 - a) Jan Ingenhousz
 - b) C.B. Van Niel
 - c) Joseph Priestly [3]
10. Give the comparison between the following:
 - a) C₃ and C₄ pathways
 - b) Cyclic and non cyclic pathways [3]
11. Explain how during light reaction of photosynthesis, ATP synthesis is a chemi osmotic phenomenon. [3]
12. Photorespiration is a wasteful process. Discuss. [3]
13. With the help of a diagram, explain dark reaction of photosynthesis. [3]
14. Draw a schematic diagram of Z scheme of light reaction. [3]