

CBSE TEST – 2**Section – A : (1 × 3 = 3)****M.M : 35**

1. How many times does carbonic anhydrase enhance the formation of carbonic acid?
2. What is the function of nucleolus?
3. What is the basis of designating C₃ and C₄ cycle of photosynthesis?

Section – B : (2 × 5 = 10)

4. $2\text{H}_2\text{O} \rightarrow 2\text{H}^+ + \text{O}_2 + 4\text{e}^-$ on the basis of the above equation, answer the following questions:
 - (a) Where does this reaction take place in plants during photosynthesis?
 - (b) What is the significance of this reaction?
5.
 - (a) Mention two key features of metaphase of mitosis.
 - (b) What are inclusion bodies? Give two examples.
6. RUBISCO is an enzyme that acts both as carboxylase and oxygenase. Why do you think this enzyme carries out more carboxylate in C₄ plants?
7. Differentiate between osmosis and diffusion.
8. Guttation and transpiration are the two mechanisms by which.

Section – C : (3 × 4 = 12)

9.
 - (a) Write any four functions of Boron in plants.
 - (b) Name two free-living bacteria that are nitrogen fixers.
10.
 - (a) Write any four functions of Auxins in plants.
 - (b) What is seed dormancy?
11.
 - (a) Give reason for each of the following
 - (i) The concentration of certain ions is higher inside the vacuole than in cytoplasm.
 - (ii) Golgi bodies are found nearer to ER in a cell.
 - (b) Mention two key features of Anaphase.
12. Draw a labelled diagram of a chloroplast. There is division of labour in chloroplast. Justify.

Section – D : (5 × 2 = 10)

13. Where does Krebs's cycle occur in a cell? Describe the reactions in proper sequence with the help of a schematic representation (indicating the sites of NADIFAD reduction, CO₂ release etc).
14.
 - (a) What is Kinetochore? Mention its function.
 - (b) Differentiate between saturated and unsaturated fatty acids with an example of each.
 - (c) Write the structural formula of triglyceride.