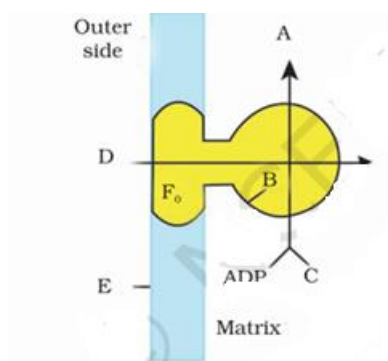


INDIAN SCHOOL NIZWA

CLASS XIA: SUB: BIOLOGY ,CH- RESPIRATION IN PLANTS. WORKSHEET

1. Give differences between aerobic & anaerobic respiration
2. Give schematic representation of mechanism of aerobic respiration.
3. (a) Give schematic representation of glycolysis. (b) What are its end products? (c) How many ATP & NADH are produced by it.
4. What is oxidative decarboxylation? What happens to pyruvate immediately after the reaction? Name the enzyme involved in the reaction.
5. (a) Give schematic representation of Kreb's Cycle. (b) What is the net gain of NADH + A+ in the cycle? (c) What is the no. of CO₂ produced in it? (d) Give significance of TCA cycle.
6. Give schematic representation of electron transport chain in mitochondria & give role of complex I, II, III, IV & V.
7. What is oxidative phosphorylation? Describe the structure & role of F₀-F₁ particles in this process.
8. In tabular form calculate the total No. of ATP produced from one molecule of glucose during aerobic respiration.
9. Justify the statement. "Respiratory pathway – An amphibolic pathway."
10. What is respiratory quotient? Give R.Q. values for carbohydrate, fats and proteins.
11. Given below is a diagram showing ATP synthesis during aerobic respiration, replace the symbols A, B, C, D and E by appropriate terms given in the box. F₁ Particle, P_i, 2H⁺, Inner mitochondrial membrane, ATP, F_o particle, ADP



12. In the following flow chart, replace the symbols a,b,c and d with appropriate terms. Briefly explain the process and give any two application of it.

