

INDIAN SCHOOL NIZWA
CLASS: XI CH-12 PLANT RESPIRATION-MCQs

1. **What is the correct equation for aerobic respiration?**
 - A) $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + 38ATP$
 - B) $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + 36ATP$
 - C) $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + 34ATP$
 - D) $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + 686kcal$
2. **Which of the following is true for respiration in plants?**
 - A) Respiration occurs only at night.
 - B) Respiration occurs only during the day.
 - C) Respiration takes place both during day and night.
 - D) Plants do not respire at night.
3. **Where does the Krebs cycle (or TCA cycle) occur?**
 - A) Cytoplasm
 - B) Mitochondrial matrix
 - C) Outer mitochondrial membrane
 - D) Thylakoid membrane
4. **Which of the following is the final electron acceptor in aerobic respiration?**
 - A) $NADH$
 - B) $FADH_2$
 - C) Oxygen
 - D) Water
5. **In aerobic respiration, where is the majority of ATP produced?**
 - A) Glycolysis
 - B) Krebs cycle
 - C) Electron Transport Chain (ETC)
 - D) Pyruvate oxidation
6. **What is the net gain of ATP during anaerobic respiration (fermentation)?**
 - A) 32 ATP
 - B) 16 ATP
 - C) 8 ATP
 - D) 2 ATP
7. **In yeast undergoing anaerobic respiration, what are the end products of pyruvic acid?**
 - A) Lactic acid and CO_2
 - B) Ethanol and CO_2
 - C) Acetic acid and water
 - D) Citric acid and water
8. **What does the Respiratory Quotient (RQ) represent?**
 - A) The ratio of oxygen consumed to carbon dioxide produced during respiration
 - B) The ratio of carbon dioxide produced to oxygen consumed during respiration
 - C) The amount of energy released during respiration
 - D) The rate at which plants respire
9. **Glycolysis is also known as:**
 - A) EMP pathway
 - B) Krebs cycle
 - C) Calvin cycle
 - D) Cori cycle
10. **What is the first CO_2 acceptor in C_4 Plants**
 - A) PEP B) OAA C) RUBP D) RuBP carboxylase.