

Worksheet
Class XI
Biology
Respiration in Plants

NAME-

DATE-

SECTION -A

Q1. What are the two types of respiration? Differentiate between the two.

Q2. Tabulate the differences between aerobic and anaerobic respiration.

Q3. Why does anaerobic respiration produce less energy than aerobic respiration?

Q4. What is the end product of glycolysis in aerobes, and where does this process occur? List the conditions under which fermentation occurs in plant cells.

Q5. What is respiratory quotient? What does it indicate?

SECTION-B

Q1. Name the end product of glycolysis. List two ways by which molecules of ATP are produced in glycolysis during aerobic respiration in a cell.

Q2. Write a short note on fermentation.

Q3. Does pyruvic acid enter the Krebs cycle directly?

Q4. What is the respiratory quotient when fats are used in respiration and why?

SECTION-C

Q1. Differentiate between glycolysis and Krebs's cycle.

Q2. What is the importance of F_0-F_1 particles in ATP production during aerobic respiration?

Q3. How many ATP molecules are produced, per molecule of glucose, in aerobic respiration?

Q4. What is the amphibolic pathways? Explain with reference to respiratory pathway.

SECTION-D

Q1. Explain the major steps in Krebs's cycle. Where does this process occur in a cell?

Q2. Where is electron transport system operative in mitochondria? Explain the system highlighting the role of oxygen.