

Question 1.

Question: Define the term "cell." (1 mark)

Answer:

The cell is the basic structural, functional, and biological unit of all known living organisms.

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Question: List the main differences between plant cells and animal cells. (3 marks)

Plant cells have a cell wall, while animal cells do not. Plant cells contain chloroplasts, which are absent in animal cells. Animal cells often have lysosomes which are rarely found in plant cells.

Question: What is the primary function of the mitochondria? (1 mark)

Answer:

The primary function of the mitochondria is to produce ATP through cellular respiration, providing energy for the cell.

Question 2.2

Question: Briefly explain the process of osmosis. (2 marks)

Answer: Osmosis is the passive movement of water molecules from a region of lower solute concentration to a region of higher solute concentration across a selectively permeable membrane.