

Home Assignment

Q1) Why does the plant cell, placed in a hypertonic solution, not burst?

Because it is surrounded by a rigid cell wall. The cell wall can withstand the turgor pressure of the turgid cell contents by exerting counter wall pressure. That's why the plant cell not swell up or burst if placed in a hypotonic solution.

Q2) What happens when a fully turgid plant cell is placed in a hypertonic solution? Name the phenomenon.

When a fully turgid plant cell is placed in a hypertonic solution, the cytoplasm along with plasma membrane shrinks and separates from the cell wall as water flows out from the vacuole of the cell. This phenomenon is called plasmolysis.