

(Q.)Name two-cell organelles, which have DNA apart from nucleus. Ans : (1) Plastids (2) Mitochondria

(Q.)Name the non - living parts of a cell.

Ans: 1.Cell wall (plants only) 2.Vacuoles 3.Granules (cell inclusions)

(Q.)What will happen if the organization of a cell is damaged due to certain physical or chemical reasons?

(Ans) When the organization of a cell gets damaged, Lysosomes will burst and their enzymes will eat up their own cell organelles. Therefore, Lysosomes are also known as the suicidal bags of the cell.

(Q.)Write any four differences between the plasma membrane and cell wall.

Plasma Membrane	Cell Wall
1. It is made up of lipids and protein.	1. It is made up of cellulose.
2. It is living.	2. It is dead.
3. Present in both plant and animal cell.	3. Found exclusively in plant cell.
4. It regulates entry and exit of molecules in and out of the cell.	4. Cell wall provides structural strength to the plants.

(Q.) Differentiate the terms: (i) Hypotonic (ii) Isotonic (iii) Hypertonic

(Ans) (i) If a medium surrounding the cell has a higher water concentration than that of the cell, the cell will gain water by osmosis. Such a solution is known as a hypotonic solution.

(ii) If a medium has exactly the same water concentration as that of the cell, there will be no net movement of water across the cell membrane. Such a solution is known as an isotonic solution.

(iii) If a medium has a lower concentration of water than the cell, meaning that it is a very concentrated solution, the cell will lose water by osmosis. Such a solution is known as a hypertonic solution.

(Q.)If the nucleus is removed from the cell what will happen to the cell?

(Ans) The cell will lose its control and fail to regulate the cellular activity and therefore it will not divide further.

(Q.)Write the main functions of a vacuole.

(Ans) It maintains osmotic pressure, thus helps in maintaining and regulating turgidity and flaccidity of the cell. It also is the site of storage of compounds and waste materials.

(Q.)How is cytoplasm different from nucleoplasm?

(Ans) CYTOPLASM	NUCLEOPLASM
1. It encloses nucleus and itself is bounded by cell membrane.	1. It is the space within the nuclear envelope.
2. It contains cell organelles and cell inclusions.	2. It has transparent semi solid, granular substance or matrix called the Nucleoplasm.