

Q No. 1:-

Describe "Cell structure."

Write at least three differences between animal and plant cell.

Answer:-

→ Cell structure:-

The word cell is derived from the Latin word "cellula" which means "a little room". Cell is the basic unit of structure and function of all living organisms. The cells that make up our bodies are so small that they cannot be seen with naked eye. Cytology is the study of all aspects

of the cell. Cells contain some organelles include:-

- Nucleus
- Mitochondria
- Ribosomes
- Endoplasmic Reticulum
- Vacuole
- Golgi apparatus
- Lysosome etc.

Cells can be divided into the particular groups based on their characteristics. e.g. prokaryotic and eukaryotic cells. The organisms that contain one cell are called as unicellular organisms and those having many cells are called multicellular.

organisms.

Animal cell	Plant cell
→ Nucleus is present at centre.	→ Nucleus is pushed to side due to large-sized vacuole.
→ Centrioles are present.	→ Centrioles are absent.
→ Plastids are absent.	→ Plastids are present.

Q No.2:-

Explain difference in structure and function between cell wall and cell membrane.

Cell Wall	Cell membrane
<u>Definition</u>	
<ul style="list-style-type: none">• Cell wall is fully permeable, outermost layer present in plant, fungal, bacterial and algal cells.	<ul style="list-style-type: none">• Cell membrane is selectively permeable membrane present in almost all cell types.
<u>Structure</u>	
<ul style="list-style-type: none">• A rigid and thick cell component	<ul style="list-style-type: none">• A flexible and comparatively thin

membrane.

Location

- Present outside plasma membranes
- Present outside of cytoplasm.

Functions

- provides structural strength
- gives definite shape to cell.
- protecting cell against pathogens and mechanical injuries etc.
- provides shape to cell acting as a barrier.
- aids in selective transportation of molecules across membrane
- helps in regulation

of movements of
ion in and out
of cells.