

(b) INTRINSIC PROTEINS :-

- Such Protein Partially or wholly remain embedded in Phospholipid.
- Such Protein can not be separated easily.
- It is 70% of the whole Protein.

4. FUNCTION OF PLASMA MEMBRANE :-

- It Provide definite shape to the cell
- Protect the cell by acting as a barrier.
- receives chemical messengers from other cells
- Acts as a receptor
- Cell mobility, secretion and absorption of substances.

TRANSPORT OF SUBSTANCE Across Membrane :-

- Transport of substance across the Plasma membrane is called Conduction.
- It is of two types :-
 - (a) ACTIVE TRANSPORT
 - (b) PASSIVE TRANSPORT

(a) ACTIVE TRANSPORT :-

- occurs from lower concentration to higher concentration.
- During this type of transport energy is utilized.
- e.g. - Sodium Pump.

(b) PASSIVE TRANSPORT :-

- It occurs from higher concentration to lower concentration.

- During this type of transport energy is not utilized.
- Passive transport is of two types:-

(i) Osmosis

(ii) Diffusion

(i) Osmosis:-

- Osmosis always occurs through semi-permeable membrane.
- Osmosis is of two types:-

[A] Endosmosis

[B] Exosmosis

[A] Endosmosis:-

- It is the process in which water enters from surrounding medium into the cells.
- It is seen when cell is immersed in hypotonic solution.

[B] Exosmosis:-

- It is the process in which water goes out of the cell into surrounding medium.
- It is seen when cell immersed in hypertonic solution.

Notes:-

- If RBC is kept in a isotonic solution no osmosis take place.
- If RBC is kept in hypotonic solution. RBC Ruptures.
- If RBC is kept in hypertonic solution RBC becomes flaccid (weak) ^{soft}.

- Hypotonic Solution:** - Outside of cell solution is very dilute and inside is concentrate cell gain water through osmosis called Hypotonic Solution
(Cell has higher concentration than surrounding)
- Hypertonic solution:** - Cell has lower concentration than surrounding is called Hypertonic Solution
- Isotonic solution:** - Both the medium has same concentration called Isotonic solution.

(ii) DIFFUSION :-

Diffusion is of two types -

a) ENDOCYTOSIS

b) EXOCYTOSIS

a) ENDOCYTOSIS :-

- It is the process of engulfment of food particles in bulk, having size larger than the size of pore in the Plasma Membrane.

i) PHAGOCYTOSIS :-

- It is the process of engulfment of large size solid food particles by the cell through plasma Membrane.

ii) PINOCYTOSIS :-

- It is the process of ingestion of a fluid food material by the cell through Plasma Membrane.

b) EXOCYTOSIS :-

- It is a process in which cell release out substance from it.
- Conduction of nerve impulse takes place through plasma membrane of nerve cell.

- Plasma membrane plays important role in recognition of various cells.
e.g. - Macrophages engulfes only dead RBC.
 - Cell organelles like E.R. nuclear membrane etc. develop from Plasma Membrane.
 - The Microvilli of intestinal cells increases surface area of absorption so, rate of absorption increase.
 - The site for cells recognition are located on the surface of Plasma Membrane.
- Note: Salic acid is involved in cell recognition.
- The antigenic property of a cells are located on the surface of Plasma Membrane.
 - Plasma membrane of Nerve fibre transmit nerve impulse.

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