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## Passive transport can be further of following three types

- (a) Osmosis It is the process by which water molecules pass through a membrane from a region of higher concentration to a lower concentration.
- (b) Simple Diffusion In this process, neutral molecules move across the membrane along the concentration gradient (from higher to lower concentration), e.g., Gases and small molecules.
- (c) Facilitated Diffusion In this process, the molecules are transported along concentration gradient by the help of ion channels and permeases. Energy is not required in this process.

## **Differences between Active and Passive Transport**

| Active Transport                                      | Passive Transport                           |
|---|---|
| In this process, energy is required.                  | Energy is not required.                     |
| It is a rapid process.                                | It is comparatively slower                  |
|   | process.                                    |
| It occurs usually against the concentration gradient. | It occurs along the concentration gradient. |
| It is highly selective.                               | It is non-selective.                        |
| It requires carrier proteins.                         | It occurs without carrier proteins.         |

## **Functions**

## Cell membrane possess the following functions

- (i) It is a selectively permeable or semi-permeable membrane, allows only selected substances to pass inwardly.
- (ii) It protects the cell from injury.
- (iii) Membranes have carrier proteins for active transport.
- (iv) Cell membrane contain enzymes which perform certain reaction on their surface, e.g., ATPase, phosphatase, etc.