

Lab (4)

Plasmolysis

The process in which cells lose water in a hypertonic solution , causing the cell to shrink due to diffusion of water out of the cell.

Type of solution regarding to the concentration of solutes

1. Hypertonic
2. Isotonic
3. Hypotonic

Types of plasmolysis:-

1. **Incipient plasmolysis** :- the stage of plasmolysis at which the first sign of shrinkage of cell contents from cell wall becomes delectable . it take place if the cell is putted in isotonic (approximately) solution and the water will continue to move inside and outside the cell.
2. **Evident plasmolysis** :- stage when the cell wall has reached its limit of contraction and cytoplasm has detached from cell wall attaining spherical shape. This type of plasmolysis happens when the cell is putted in hypertonic solution leading the water inside the cell to get out to the surrounding solution.

تجربة القطرة الساقطة :-

Experiment of (falling drop) grad kg rove.

- 1- Prepare 2 solution , hypertonic and hypotonic
- 2- Prepare 3 tubes , hypertonic , isotonic (distill water) , hypotonic.
- 3- Prepare a piece of onion or potato add one piece in each tube for 5-10 min., and add a drop of methylene blue stain to each tube.
- 4- Prepare anther 3 tubes like in 2 (group B)
- 5- Taken a drop from each tube of group A, then add it on each tube of group B.
- 6- See the movement or diffuse of each drop in the solution.