

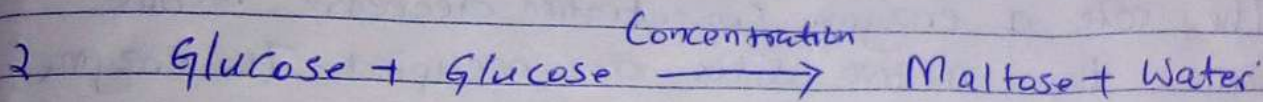
Q1

Eggs

Inside of eggs is hypertonic (highly concentrated) than the distilled water (hypotonic). Distilled water moved through the mosaic membrane into the egg thus increasing the mass.

6.

Heat beyond optimum / very high temperatures denatures the membrane which contains protein. The protein is thus denatured thereby affecting the function of the membrane.



3

The chemical molecules are big hence cannot pass the cell membrane hence the membrane allows selectivity what gets in and out.

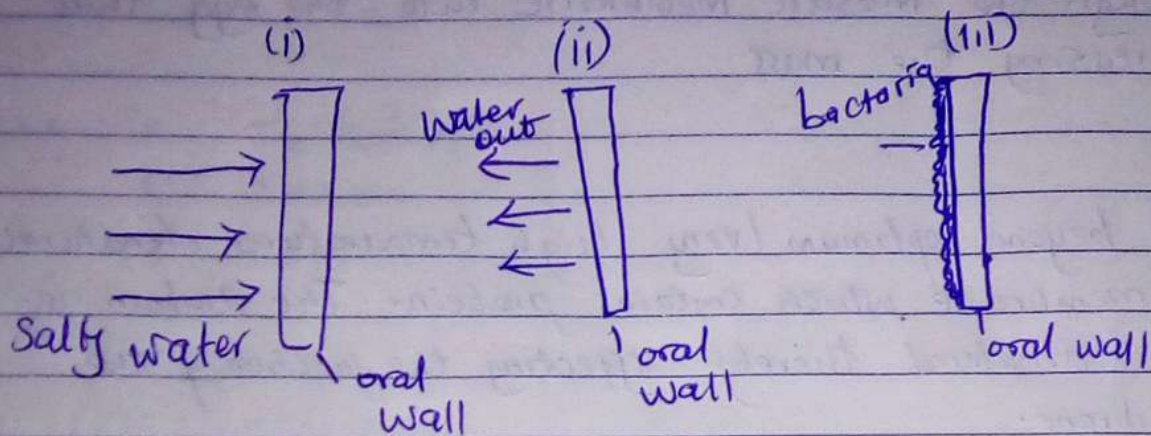
4 (a)

The level of water and iodine solution will decrease. However, the color of the solution will remain the same since the solution is permeable to membrane. The solution will move by diffusion to the side containing starch since the solution of water and iodine has small molecules.

(b) The colour of starch will turn blue black since starch will react with iodine to form a complex. Level of starch solution will increase while iodine and water gets in.

5

Salt draws water out of the oral tonsils. This will draw the bacteria along with water. By so doing the potential bacteria is gotten rid off.



6. The rate of enzyme concentration decrease because all the active sites are occupied. The enzyme becomes inactive due to absence of substrate.

(7)

(i) C - pumping ~~loss~~ of ions by sodium.

Pumping requires energy which must be produced by mitochondrion.

(ii) D - Moving hydrogen ions against their concentration gradient. This is transport which requires energy from mitochondrion.