

Q1

a)

Egg 3  
Inside of egg 3 is hypertonic (highly concentrated) than distilled water (hypotonic). The distilled water moved through the mosaic membrane into the egg, increasing its mass.

b) Heat denatures the heat beyond optimum/very high temperature denatures the membrane which contain proteins. The proteins in the membrane are denatured thereby affecting the function of the membrane.

c) Glucose + Galactose  $\xrightarrow{\text{Condensation}}$  Maltose + Water

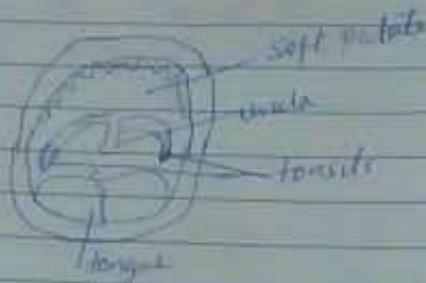
Q2 The chemical molecules are big hence cannot be selectively pass the cell membrane hence the membrane selectively allows what get in and out.

a) The level of water and iodine solution will decrease. However the colour of the solution will remain the same since the solution is permeable to membrane, the solution will move by ~~diffusion~~ <sup>diffusion</sup> 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. The level of starch solution will increase and iodine and water gets in.

Tonsils

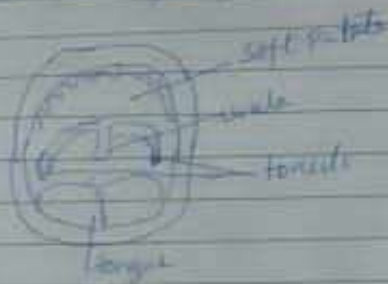
5. Salt draw water out of oral tissues, while creating an barrier that locks out water and harmful bacteria from getting back.



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- D - Movement of hydrogen ion against concentration gradient is by active transport which requires energy from mitochondria.

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