Movement into and out of cells – 2021 O Level 5090
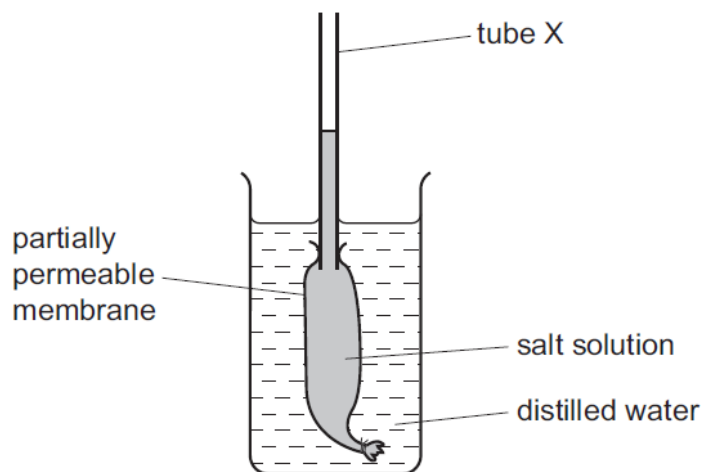
1. Nov/2021/Paper_11/No.2
   Which process occurs by diffusion alone?

   A movement of carbon dioxide into the palisade cells in a leaf

   B uptake of magnesium ions by root hair cells

   C movement of food from the stomach to the duodenum

   D transfer of glucose molecules from the ileum into the blood

2. Nov/2021/Paper_11/No.3
   An experiment to investigate osmosis is set up as shown.

   What happens to the height of the liquid in tube X and the concentration of the salt solution?

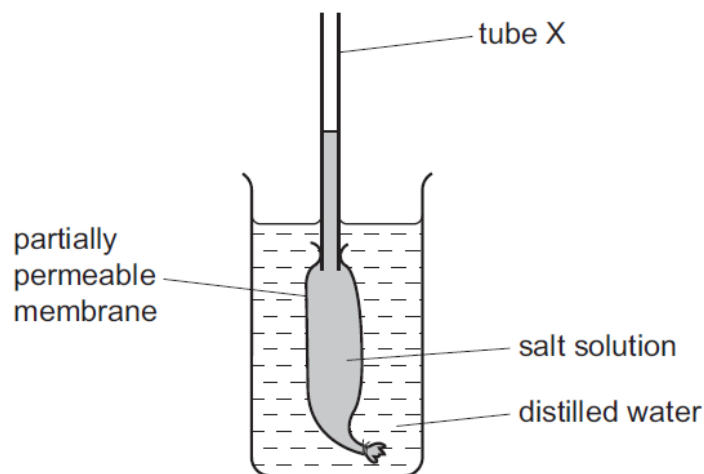 | | height of the liquid in tube X | concentration of the salt solution |
   |---|---|---|
   | A | decreases | decreases |
   | B | decreases | increases |
   | C | increases | decreases |
   | D | increases | increases |

3. Nov/2021/Paper_12/No.2
   Which statement about diffusion is correct?

   A Diffusion always involves the movement of water molecules.

   B Diffusion depends on the presence of a partially permeable membrane.

   C Diffusion only happens to molecules in a solution.

   D Diffusion only involves molecules moving down a concentration gradient.

4. Nov/2021/Paper_12/No.3

An experiment to investigate osmosis is set up as shown.

What happens to the height of the liquid in tube X and the concentration of the salt solution?

	height of the liquid in tube X	concentration of the salt solution
A	decreases	decreases
B	decreases	increases
C	increases	decreases
D	increases	increases

5. Jun/2021/Paper_11/No.2

A piece of plant tissue is transferred from a beaker of water into a concentrated sugar solution.

Which row describes what happens?

	movement of water	volume of tissue cells
A	into the cells	decreases
B	into the cells	increases
C	out of the cells	decreases
D	out of the cells	increases

6. Jun/2021/Paper_11/No.3

Which statements about active transport are correct?

1   Ions move from a region of high concentration to a region of low concentration.

2   Ions move across the cell membrane.

3   Energy released during respiration is used to move ions into or out of a cell.

A 1, 2 and 3   **B** 1 and 2 only   **C** 1 and 3 only   **D** 2 and 3 only

6. Jun/2021/Paper_11/No.3