# Assessment in IGCSE Biology 0610

# Session 2: Handout 2.25

## Reviewing a mark scheme

Use the mark scheme you have constructed to mark these two examples of candidates' answers to question 4 on Handout 2.24.

(Five pages total, including this one)

# Assessment in IGCSE Biology 0610

## Session 2: Handout 2.25

### Reviewing a mark scheme

Use your mark scheme to mark these two examples of candidates' answers.

**4** Fig. 4.1 shows a typical animal cell and a typical plant cell.

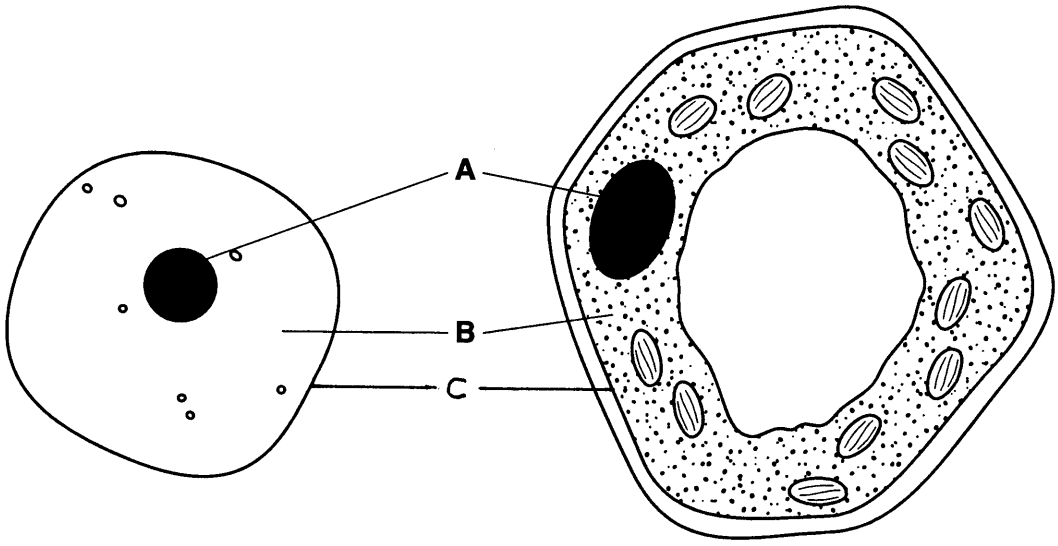


**Fig. 4.1**

**(a) (i)** Name the parts of the cells labelled **A** and **B**.

**A** nucleus

**B** ~~cha~~ cytoplasm [2]

**(ii)** Label on the diagram, with a letter **C**, another structure that occurs in both cells. [1]

**(b)** For each of the following types of cell, state **one** way in which it is different from the animal cell in Fig. 4.1. State the function of each type of cell.

**(i)** cell lining the trachea (windpipe)

*difference* The cells in the trachea have cilia.

*function* They are closely packed for continuity and for the removal of dirt and dust particles in the air. [2]

**(ii)** red blood cell

*difference* There is no nucleus in the red blood cell.

*function* This is to increase surface area for more oxygen to readily combine with the the haemoglobin. [2]

**(c)** Materials can enter the cells shown in Fig. 4.1 by diffusion and osmosis.

**(i)** Define *diffusion*.

Diffusion is the movement of particles from a region of higher concentration to a region of lower concentration down the concentration gradient. [2]

**(ii)** Describe how osmosis differs from diffusion.

Osmosis differs from diffusion as it is diffusion of water molecules from a region of higher water potential to that of lower water potential, down the concentration gradient and a partially permeable membrane. [2]

[Total : 11]

4 Fig. 4.1 shows a typical animal cell and a typical plant cell.

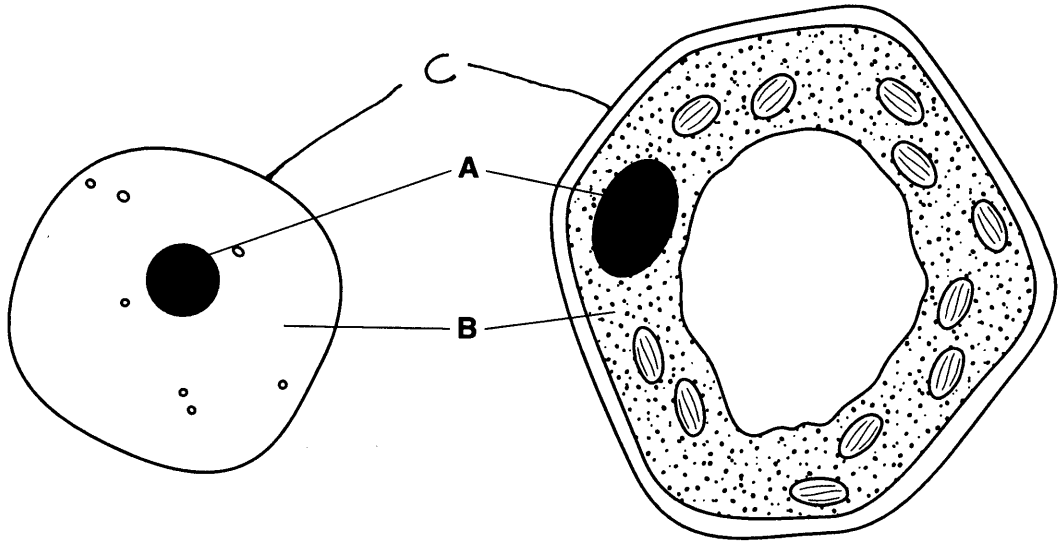


**Fig. 4.1**

**(a)** **(i)** Name the parts of the cells labelled **A** and **B**.

**A** Nucleus

**B** Chloroplast or Chlorophyl [2]

**(ii)** Label on the diagram, with a letter **C**, another structure that occurs in both cells. [1]

**(b)** For each of the following types of cell, state **one** way in which it is different from the animal cell in Fig. 4.1. State the function of each type of cell.

**(i)** cell lining the trachea (windpipe)

*difference* Animals trachea is containing a larger surface area, whilst the plants is smaller.

*function* helping in the digestion of foods, breaking them down. [2]

**(ii)** red blood cell

*difference* does not have a nucleus, but is just a flat daughn-nut shaped circle with no hole

*function* Delivery iron around the body. Has haemoglobin that helps to circulate iron around the body. [2]

**(c)** Materials can enter the cells shown in Fig. 4.1 by diffusion and osmosis.

**(i)** Define *diffusion*.

is the movement of large molecules into smaller molecules, which are able to diffuse into smaller areas. [2]

**(ii)** Describe how osmosis differs from diffusion.

Osmosis occurs in water while diffusion occurs in cells. Osmosis is the movement of molecules escaping out of smaller or larger areas [2]
through using tubes.

[Total : 11]