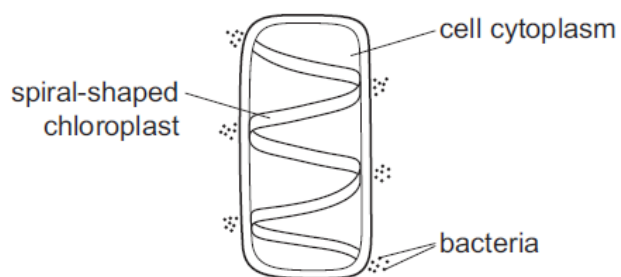


1. Nov/2020/Paper_11/No.12

The diagram shows a cell with groups of bacteria around its edge.



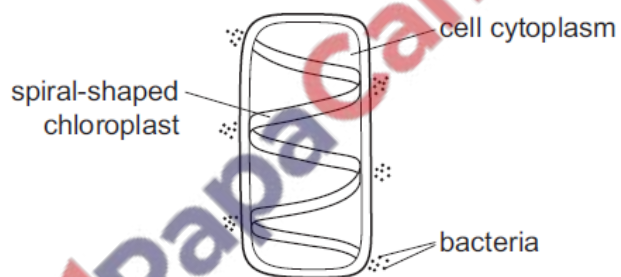
The bacteria move to areas of high oxygen concentration.

Which process in the cell causes the bacteria to form these groups?

- A digestion
- B photosynthesis
- C reproduction
- D respiration

2. Nov/2020/Paper_12/No.12

The diagram shows a cell with groups of bacteria around its edge.



The bacteria move to areas of high oxygen concentration.

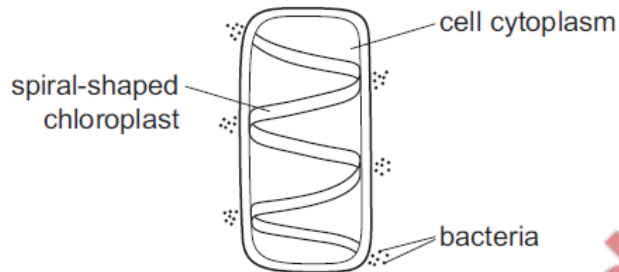
Which process in the cell causes the bacteria to form these groups?

- A digestion
- B photosynthesis
- C reproduction
- D respiration

3. Nov/2020/Paper_12/No.23
What is produced during anaerobic respiration in muscles?

- A carbon dioxide
- B ethanol
- C lactic acid
- D water

4. Nov/2020/Paper_13/No.22
The diagram shows a cell with groups of bacteria around its edge.



The bacteria move to areas of high oxygen concentration.

Which process in the cell causes the bacteria to form these groups?

- A digestion
- B photosynthesis
- C reproduction
- D respiration

5. Nov/2020/Paper_21/No.21
The list shows some processes that happen in the human body.

- 1 water enters cells by osmosis
- 2 muscles contract
- 3 impulses travel along neurones
- 4 oxygen diffuses into cells

Which of these require energy released by respiration?

- A 2 only
- B 1 and 3 only
- C 2 and 3 only
- D 1, 2, 3 and 4

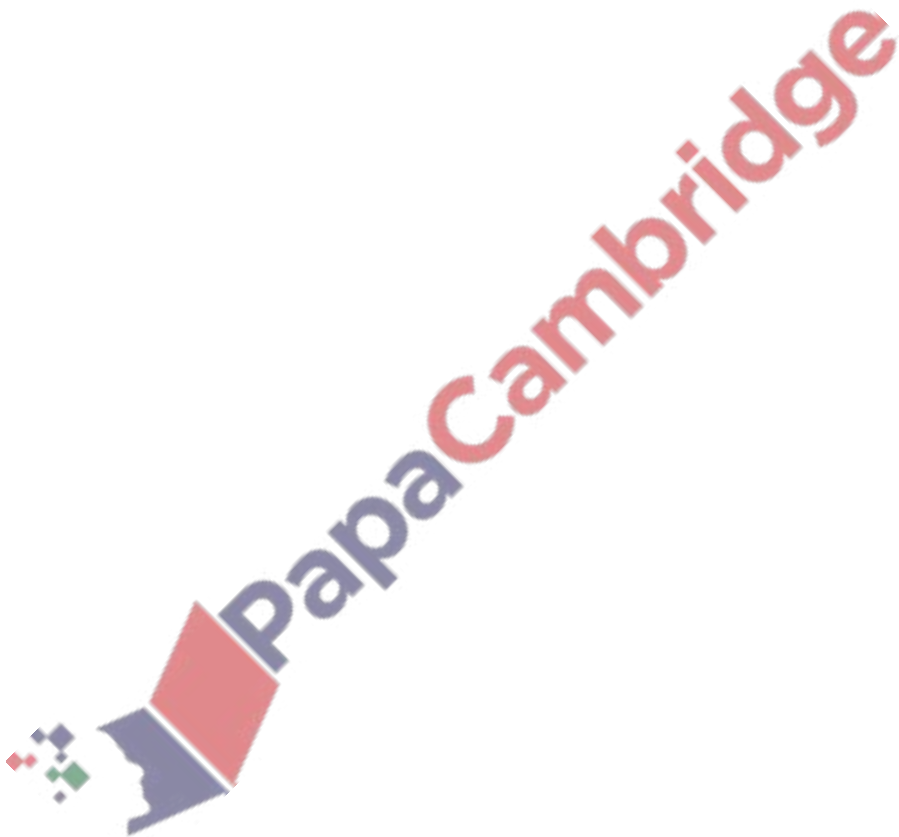
6. Nov/2020/Paper_22/No.21
What is produced during anaerobic respiration in muscles?

- A carbon dioxide
- B ethanol
- C lactic acid
- D water

7. Nov/2020/Paper_23/No.21

What is produced by anaerobic respiration in yeast?

- A alcohol, carbon dioxide and water
- B alcohol and carbon dioxide only
- C carbon dioxide and lactic acid
- D lactic acid only



(a) Yeast cells have many structures in common with a plant cell.

Fig. 4.1 is a drawing of a yeast cell.

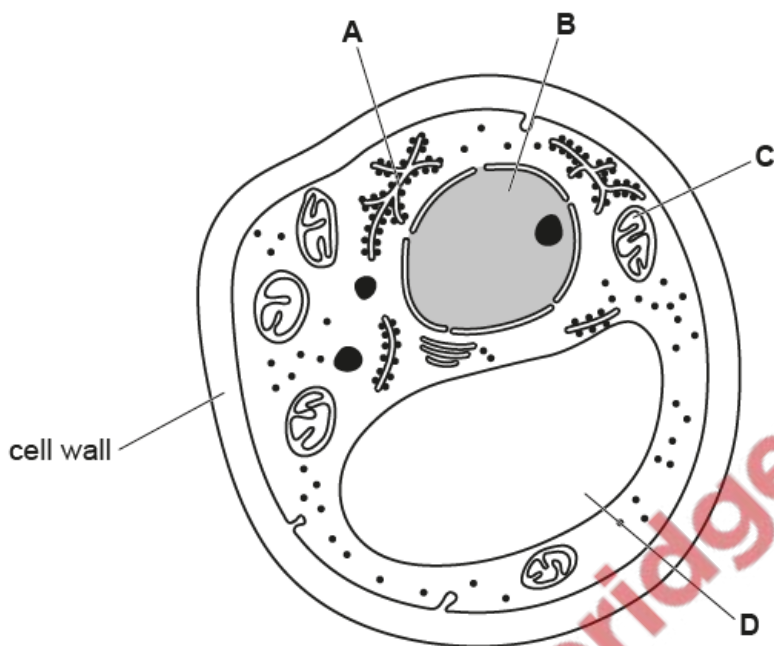


Fig. 4.1

(i) State the names of the cell structures labelled **A** and **D** on Fig. 4.1.

A

D

[2]

(ii) State the functions of the cell structures labelled **B** and **C** on Fig. 4.1.

B

C

[2]

(iii) State the name of **one** structure that is found in plant cells but is absent in yeast cells.

..... [1]

(b) Yeast is used in the production of ethanol to manufacture a type of biofuel.

Fig. 4.2 is a flow chart of the process.

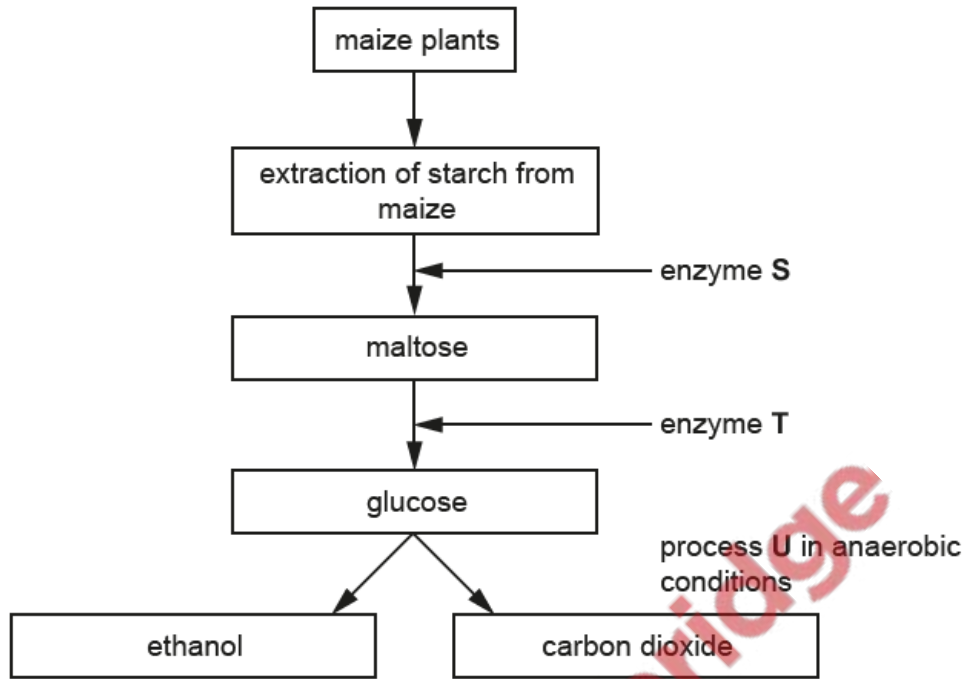


Fig. 4.2

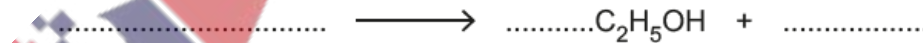
(i) State the names of enzymes **S** and **T**.

S

T

[2]

(ii) Yeast is used in process **U**. Complete the balanced chemical equation for anaerobic respiration in yeast.



[2]

(iii) Suggest the advantages of using biofuels instead of fossil fuels.

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[3]

(iv) Carbon dioxide may be collected from process **U** and sold for use in glasshouses.

Explain why carbon dioxide is used in glasshouses.

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[4]

[Total: 16]

