## **Enzymes - 2021 IGCSE 0610**

## 1. March/2021/Paper\_12/No.10

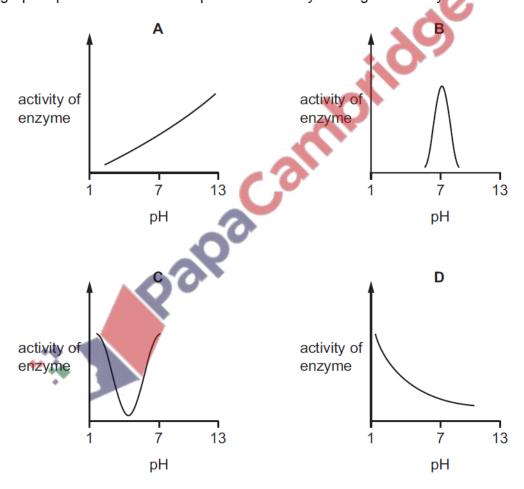
A human enzyme was used in an experiment. All factors were kept constant, apart from temperature.

What happened to the rate of reaction when the temperature was reduced steadily from  $35 \,^{\circ}\text{C}$  to  $5 \,^{\circ}\text{C}$ ?

- A It decreased steadily.
- **B** It increased and then decreased.
- C It increased steadily.
- **D** It remained the same.

## 2. March/2021/Paper\_12/No.11

Which graph represents the effect of pH on the activity of a digestive enzyme?



## **3.** June/2021/Paper\_11/No.11

Which statement describes a catalyst?

- A a substance that decreases the rate of a chemical reaction and is not changed by the reaction
- **B** a substance that decreases the rate of a chemical reaction and is changed by the reaction
- **C** a substance that increases the rate of a chemical reaction and is changed by the reaction
- **D** a substance that increases the rate of a chemical reaction and is not changed by the reaction

ridge

## 4. June/2021/Paper 11/No.39

What is a use of pectinase in the food industry?

- A to extract juice from fruit
- B to make biofuels
- C to make biological washing powders
- **D** to make bread rise

#### **5.** June/2021/Paper 12/No.11

Which statement about an enzyme-controlled reaction is correct?

- A During the reaction, the substrate changes into products.
- **B** The enzyme is gradually used up during the reaction.
- **C** The enzyme is slowly broken down during the reaction.
- **D** The higher the temperature, the slower the reaction.

#### **6.** June/2021/Paper 13/No.10

Starch is digested by amylase in the mouth, but it is not digested in the stomach.

What is the reason for this?

- A All starch digestion is completed in the mouth.
- **B** The pH in the stomach is not suitable for the amylase to work.
- **C** The starch does not stay in the stomach long enough to be digested.
- **D** The temperature in the stomach is not suitable for the amylase to work.

#### **7.** June/2021/Paper\_21/No.11

Starch is digested by amylase in the mouth, but it is not digested in the stomach.

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- C The starch does not stay in the stomach long enough to be digested.
- **D** The temperature in the stomach is not suitable for the amylase to work.

## **8.** June/2021/Paper\_21/No.12

Which statement describes a catalyst?

- A a substance that decreases the rate of a chemical reaction and is not changed by the reaction
- B a substance that decreases the rate of a chemical reaction and is changed by the reaction
- **C** a substance that increases the rate of a chemical reaction and is changed by the reaction
- **D** a substance that increases the rate of a chemical reaction and is not changed by the reaction

#### 9. June/2021/Paper 21/No.16

What are the products when proteins are broken down?

- A amino acids
- B fatty acids
- C glycerol
- D simple sugars

#### 10. June/2021/Paper 22/No.12

Which statement about an enzyme-controlled reaction is correct?

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- **D** The higher the temperature, the slower the reaction.

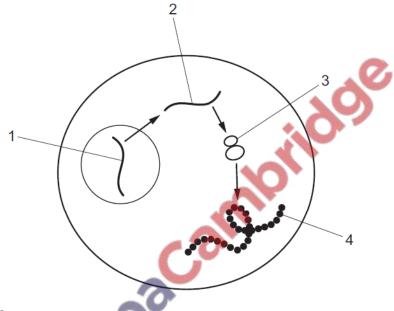
# **11.** June/2021/Paper\_23/No.12

Which type of molecule are enzymes made of?

- A carbohydrate
- B fat
- C protein
- **D** vitamin

## **12.** June/2021/Paper\_23/No.32

The diagram shows structures involved in the synthesis of an enzyme in a cell.



What is structure 2?

- A amino acids
- **B** DNA
- C mRNA
- D protein