**ENZYMES**

**1.** Which of the following could cause denaturation of an enzyme?

A. Substrate concentration

B. A competitive inhibitor

C. High temperature

D. Low salt concentration

(1)

**2.** Which graph shows the relationship between the substrate concentration and the rate of an enzyme controlled reaction?



(Total 1 mark)

**3.** The graph below shows enzyme activity plotted against temperature. What is happening at point I?



A. The enzyme is being denatured.

B. pH changes are slowing the reaction.

C. The concentration of the substrate remains constant.

D. The reaction is increasing in speed.

(Total 1 mark)

**4.** (a) Define the term *active site* of an enzyme.

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(1)

(b) Outline how enzymes catalyze biochemical reactions.

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(2)

(c) Explain the effect of pH on enzyme activity.

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(3)

(d) State **three** functions of lipids.

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(2)

(Total 8 marks)

**5.** Explain the effects of temperature, pH and substrate concentration on enzyme activity.

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(Total 8 marks)