

Candidate's Name.....

Signature:.....House.....

P530/1
S6 BIOLOGY
(Theory)
Paper 1
27th March, 2024
1 hour



KING'S COLLEGE, BUDO
Uganda Advanced Certificate of Education
S6 BIOLOGY P530/1 TEST 3
(THEORY)
1 hour

INSTRUCTIONS

This paper is made up of *three* questions

Attempt *all* questions in the spaces provided.

FOR EXAMINER'S USE ONLY

Question	Marks scored	Out of
1		10
2		10
3		10
Total		30

1. (a) What is meant by **enzyme denaturation**? (3 marks)

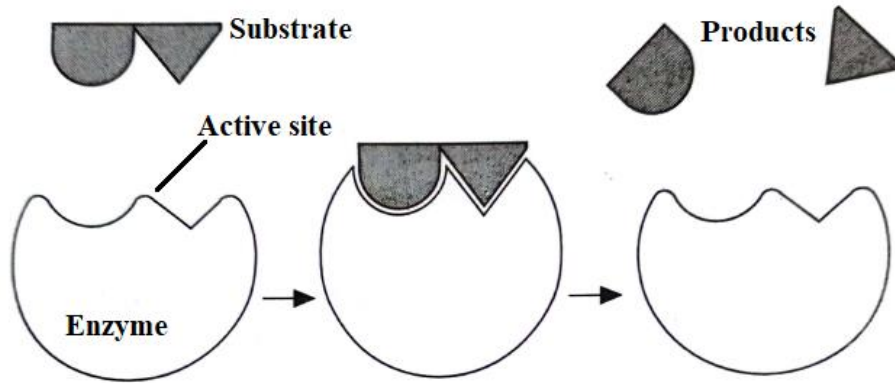
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(b) The figure below shows the mechanism of the working of an enzyme.



With reference to the figure above, explain the;

(i) **specificity** of an enzyme. (03 marks)

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(i) **mechanism of enzyme action**. (04 marks)

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2. (a) (i) Distinguish between **ventilation** and **gaseous exchange**. (02 marks)

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(ii) With reference to **gaseous exchange**, state **four** ecological advantages of terrestrial organisms over aquatic organisms. (04 marks)

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(b) Explain how the following increase the efficiency of the **tracheal system**?

(i) rings of **chitin** around the trachea. (02 marks)

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(ii) **hairs** around the spiracles. (02 marks)

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3. (a) What is;

(i) **Action spectrum.**

(02 marks)

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(ii) **Photoperiodism.**

(02 mark)

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(b) Briefly relate **action spectrum** to the following

(i) flowering.

(03 marks)

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(ii) photosynthesis.

(03 marks)

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END