

Candidate's Name.....

Signature:.....



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

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

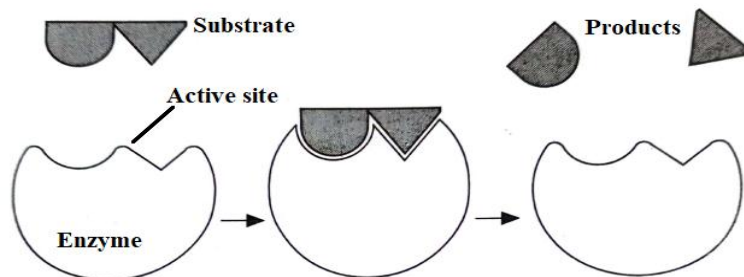
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(b) The figure below shows the mechanism of the working of an enzyme.



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) Why is the structure of the **plasma membrane** of a cell

(i) described as **partially permeable**? **(02 marks)**

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(ii) modelled as **fluid mosaic**? **(03 marks)**

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(b) Explain the advantages of the development of membrane bound organelles in eukaryotic cell. **(03 marks)**

(i).....
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(ii).....
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(iii).....
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(c) State two organelles in eukaryotic cells which are not membrane bound. **(02 marks)**

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3. (a) What is meant by the term **cell cycle**? **(02 marks)**

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(b) Briefly explain the significance of any *four* events that occur

(i) between two successive **mitotic** divisions? **(04 marks)**

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(ii) during **prophase I** of meiosis. **(04 marks)**

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END