**NAME…………………………………………….class…………..adm………………Roll………**

**KAHUHO UHURU HIGH SCHOOL**

**MID TERM 3 2014**

**BIOLOGY FORM 2 EXAM**

**TOTAL MARKS: 50**

***Answer all questions in the spaces provided***

1. State two factors that affect the rates of breathing (2 marks)

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1. What are the causes of the following diseases (2marks)
2. Tuberculosis

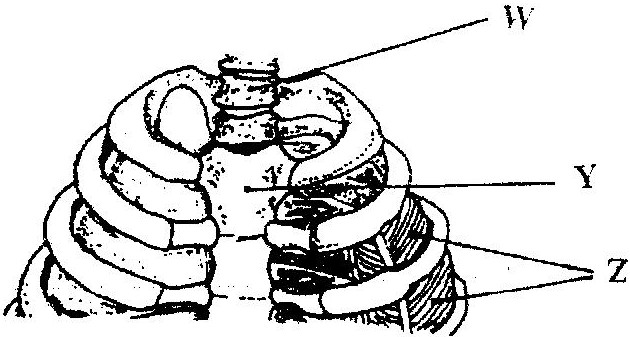
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1. Pneumonia

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1. Explain the importance of a counter current flow system in gaseous exchange in fish (3 marks)

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1. The diagram below represents a part of the rib cage.

a) Name the parts labeled W, Y and Z. (3marks)

W ……………………………………………………

Y …………………………………………………….

Z ……………………………………………………..

b) How does the part labeled Z facilitates breathing in? (3marks)

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5) What characteristics do mammalian lungs and the gills of a bony fish have in common that enables them to exchange gases effectively (4 marks)

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6)List two structures used for gaseous exchange in land plants (2marks)

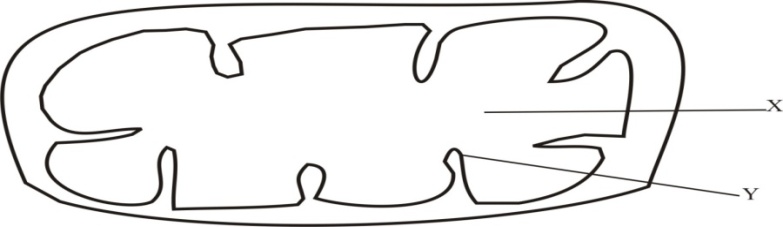
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7) Explain the photosynthetic theory of opening of the stomata (5 marks)

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8) Below is a diagram of an organelle that is involved in respiration



1. Name the organelle …………………………………………………………… ( 1mark)
2. Name the part labeled **X**………………………………………………………… (1 mark)
3. What is the purpose of the part labeled **Y** (1 mark)

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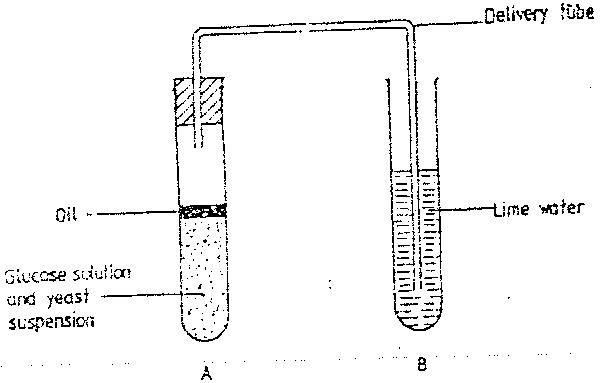
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9. Define the term oxygen debt (2 marks)

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1. The diagram below shows a set – up that was used to demonstrate fermentation



Glucose solution was boiled and oil added on top of it. The glucose solution was then allowed to cool before suspension.

* 1. Why was the glucose solution boiled before adding the yeast Suspension? (1mk)

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* 1. What was the importance of cooling the glucose solution before adding the yeast suspension? (1mk)

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* 1. What was the use of oil in the experiment? (1mk)

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* 1. What observation would be made in test tube B at the end of the experiment? ( 1 mk)

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* 1. Suggest a control for this experiment ( 1mk)

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1. What is meant by the following terms as used in repiration (2marks)
2. Respiratory quotient

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1. Glycolysis

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1. Distinguish between aerobic and anaerobic respiration (4 marks)

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1. Describe Inhalation and exhalation in human beings (10marks)

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