**KAHUHO UHURU HIGH SCHOOL**

**TERM 3 2014 MID TERM 3 EXAM**

**BIOLOGY 231 / 3 Name…….………………………………………………………….**

**PAPER 3 PRACTICAL Class…………………………….Adm No……………….Roll……**

**TIME 1 ½ HRS**

**INTRUCTIONS:**

* ***Answer ALL the questions in the spaces provided.***
* ***You are required to spend the first 10 minutes of the* 1 ¾ *hours allowed for this paper . Candidates may be penalized for recording irrelevant information and incorrect spelling of technical terms.***

1. You are provided with the following:

* Specimen K
* Dilute hydrochloric acid
* Iodine solution
* Benedicts solution
* 1% copper sulphate solution
* 0.1% sodium hydroxide
* sodium hydrogen carbonate
* Distilled water,
* 3 Test tubes
* Water bath
  1. Extract a solution from K by crushing and adding some water to make a test tube full. test the extract using the reagents provided and tabulate your results as follows: - (12 mks)

|  |  |  |  |
| --- | --- | --- | --- |
| TEST | **PROCEDURE** | **OBSERVATION** | **DEDUCTION** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

* 1. Name any other food substance NOT tested above but of great value in nutrition (1mk)

……………………………………………………

* 1. Which nutritional value does the food mentioned in (b) above provide (1mk)

……………………………………………………….........................................................

* 1. Of the food substrates tested above, which one produces the greatest kilo joules per gramme

(1mk)

…………………………………………………….

1. The photographs below are samples taken from plant reproduction. Study them and answer the questions that follow.







Fig C

Fig A

Fig D

Fig B

z

x

y

Fig E

1. Identify the parts labelled (3marks)

X………………………………..………………

Y………………………………………………..

Z………………………………………………..

1. Name the type of petals in the organ found in fig A (1mark)

………………………………………………………………………………………..

………………………………………………………………………………………..

1. Giving a reason, identify the type of pollination in fig A (2marks)

………………………………………………………………………………………..

………………………………………………………………………………………..

1. Identify the types of placentation found in fruits in fig B and D (2marks)

B………………………………………………………………………………………..

………………………………………………………………………………………..

D………………………………………………………………………………………..

………………………………………………………………………………………..

1. i)How can one classify the fruits in fig C and D (2marks)

………………………………………………………………………………………..

………………………………………………………………………………………..

ii) Give reasons for your answer in d) i) above

………………………………………………………………………………………..…

………………………………………………………………………..…………………

………………………………………………………..…………………………………

1. Giving reasons,identify the agents of seed dispersal in fig D and E (4marks)

D………………………………………………………………………………………..

…………………………………………………………………………………………..

E……………………………………………………………………………….………..

…………………………………………………………………………………………..

1. The photographs below are blood vessels taken from the body of a healthy human being. Use it to answer the questions that follow.



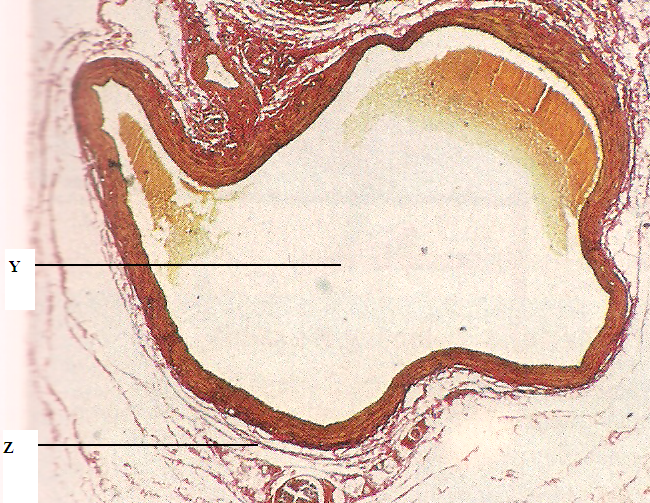


Fig 1

Fig 2

* 1. Identify vessels 1 and 2 (2mks)

1……………………………………

2……………………………………

* 1. Give two reasons for your answers in (a) above (2 mks)

………………………………………………………………………………………..

………………………………………………………………………………………..

………………………………………………………………………………………..

c)Identify the parts labeled (3mks)

X………………………………………..

Y……………………………………….

Z……………………………………….

* 1. State three structural differences between vessel 1 and 2 (3mks)

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* 1. Which defect will occur as a result of vessel 2 becoming swollen and flabby due to failure of the valves to function properly? (1mk)

………………………………………………………………………………………..

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