**Name………………………………………..………….…… Adm.No. ……..……….… Class …….……….**

**231/3**

**BIOLOGY**

**Paper 3**

**(Practical)**

**June 2014**

**1 ½ hours**

**KAHUHO UHURU HIGH SCHOOL**

 **Mid Term Examination 2014 Form Three**

**INSTRUCTIONS**

This paper has ONE section ONLY

Answer **ALL** the questions in this paper

All answers should be written in the spaces provided on the question paper.

**Questions (50 marks)**

1. You are provided with solutions labeled S, reagents Benedicts, Iodine, Hcl, NaHCO3, DCPIP solutions.
2. Using solution S and reagents provided, carry out a food test and record the observation and conclusions in the table below. (9 marks)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Procedure | Observation | Conclusion |
| Iodine Test |  |  |  |
| Non Reducing Sugar |  |  |  |
| DCPIP Test |  |  |  |

1. Identify the functions of the food you tested under the following as utilized by human beings (2marks)

DCPIP………………………………………………………………….…………………………….……

Non Reducing Sugar…………………………………………………………….……………………………

**b)** What is the significance of using the following reagents while testing for the above food tests(2 marks)

 i) Hydrochloric acid

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

 ii) Sodium Hydrogen carbonate solution

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

(c) Name two areas in the human body where the food tested with iodine in the table above is digested. (2marks)

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

1. The diagram below was taken from a unit of an organ in the human body.
2. Identify the structure…………………………………………….. (1 mark)

b

e

f

a

d

c

g



1. Identify the parts labeled (6 marks)

 a…………………………………………..

 b…………………………………………..

 c………………………………………….

 d……………………………………….…

 e………………………………………….

 f………………………………………….

1. State the function of the part labelled g and b (2 marks)

g…………………………………………………………………………………………………..…

b…………………………………………………………………………….……………………….

1. Explain the role of the part labeled g in osmomoregulation (2 marks)

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

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

1. The part labelled d in desert animals is longer than that of animals in aquatic areas. Explain this with reference to osmoregulation (2 marks)

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

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

1. Identify 3 contents that enter part labelled g but are not found in part labelled b (3 marks)

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

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

3.The photographs below were as samples from the Kenya wildlife service. Use them to answer the questions that follow.







U V W







X Y Z

a) Name the classes to which photographs labeled U,V, X and Z belong (3 marks)

U…………………..…………………

V………………….………………….

X……………………………………..

Z……………………………………..

1. Among the photographs, Identify; ( 3 marks)

 Predator……………………………………

Prey………………………………………..

Scavenger………………………………….

1. From observable features only, state one adaptation each that enables the following organisms to survive in their habitats ( 4marks)

U………………………………………………………………………………………………………

V………………………………………………………………………………………………………

Y………………………………………………………………………………………………………

Z……………………………………………………………………….……………………………...

1. State two effects that water pollution will have to the animal labeled X (2marks)

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

1. Starting with grass, construct a food chain that involves organisms V,W and Y (Use letters only)(4 marks)
2. What would be the effect of the following to the food chain you constructed? (2 marks)
3. prolonged drought

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

1. Removal of Y

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

1. i) Photograph Z indicates a type of a defensive behaviour, Name the type of behaviour (1 mark)

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

 The end