**Name………………………………………………… Index No. …………………….**

**School ………………………………………………... Date……. …………………….**

 **Sign……. …………………….**

231/3

BIOLOGY

**PAPER 3**

**PRACTICAL**

**Time: 2 Hours**

## INSTRUCTIONS TO CANDIDATES

1. Answer all the questions.
2. Spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.
3. Answers MUST be written in the spaces provided in the QUESTION PAPER ONLY.

**FOR EXAMINERS USE ONLY**

|  |  |  |
| --- | --- | --- |
| **QUESTION** | **Max Score** | **Candidate Score** |
| 1 | 14 |  |
| 2 | 14 |  |
| 3 | 12 |  |
| **TOTAL SCORE** | 40 |  |

*This paper consists of 8 printed pages.*

*Candidates should check the question paper to ensure that all pages are printed as indicated*

1. Label test tubes J K L M. Measure 5ml of the Hydrogen perixode provided and pour into each test tube. Peel specimen N provided and obtain four cube of about 1cm3. Grind one of the cubes put in test tubes J add water and boil for about 5 minutes. Grind other two cubes place them in test tube K and M respectively. The remaining cube put it in L.

a) Record the observation in (1mk

 J…………………………………………………………………………………………..

 K………………………………………………………………………………………….

 L…………………………………………………………………………………………..

 M…………………………………………………………………………………………..

b) Compare the observations made in (2mks)

(i) K and J

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ii) K and M (2mks)

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c) Account for your answer in b(i) (ii) (4mks)

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d) Write a word equation for the reaction taking place in tube M. (2mks)

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2. Below are photographs labelled J and K of organs obtained from different animals.The organs perform similar functions.



 a) Identify the organs (2mks)

J…………………………………………………………………………………………..

 …………………………………………………………………………………………….

 K…………………………………………………………………………………………..

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b) State the functions performed by the organs. (2mks)

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 c) Name the parts labelled X Y and Z in photograph. (3mks)

J…………………………………………………

X……………………………………………….

Y……………………………………………….

Z……………………………………………….

d) i) Identify the parts labelled 1,2 and 3 in photograph K. (3mks)

1………………………………………………

2……………………………………………….

3……………………………………………….

ii) Using observable features state how the parts labelled 1 and 3 you identified in (d)(i) above are adapted to their functions. (4mks)

1………………………………………………

3……………………………………………….

3. Below are diagrams of specimens J K and L that have been obtained from different regions of the same mammalian body. Examine them.

 

 a) i) Identify the diagrams

J …………………………………

 K ………………………………..

 L ………………………………..

ii) State one functions for each of the diagrams

 J …………………………………

 K ………………………………..

 L ………………………………..

b) i) State two adaptations of L to its function in above. (2mks)

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ii) Name the structure that fits into the large opening of J, K and L (1mk)

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c) Name three features that difference late specimen L from specimen J and K. (3mks)

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***End***