

Name..... Index No.....
School..... Candidate's sign.....
Date.....

231/3
BIOLOGY
PAPER 3
PRACTICAL
July/August 2010
Time: 1 ¾ hrs

MANGA DISTRICT JOINT EVALUATION TEST – 2010
Kenya Certificate of Secondary Education (K.C.S.E)

BIOLOGY
PAPER 3
PRACTICAL
July/August 2010
Time: 1 ¾ hrs

Instruction to candidates

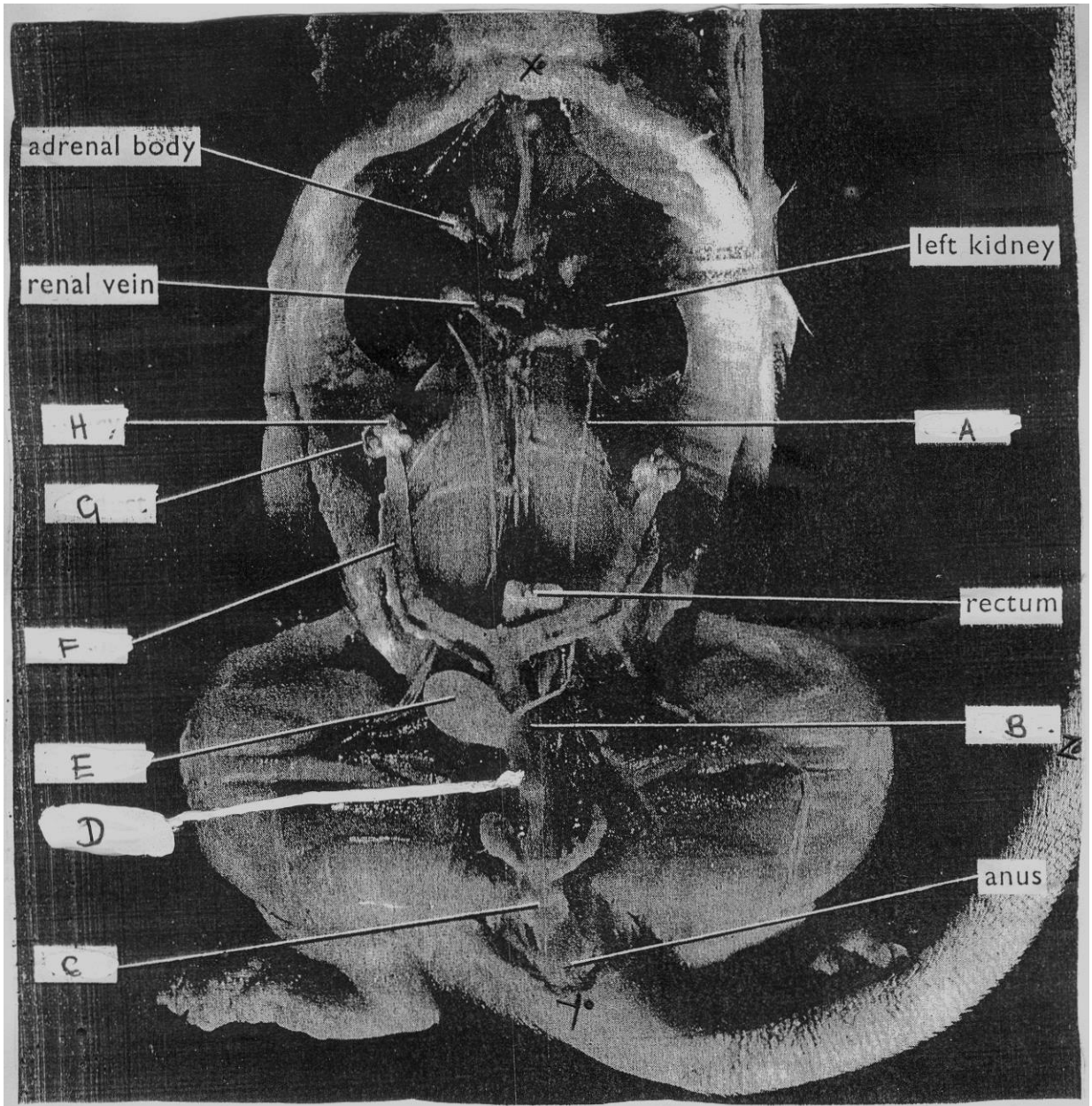
1. Write your name and index number in the spaces provided at the top of this page.
2. Sign and write the date of examination in the spaces provided above.
3. Answer **all** the questions.
4. You are required to spend the first **15** minutes of the **1 ¾** hours allowed for this paper reading the whole paper carefully before commencing your work.
5. Answers **must** be written in the spaces provided in the question paper.
6. Additional pages must not be inserted.

For Examiner's Use Only.

Question	Maximum Score	Candidate's Score
1	15	
2	10	
3	15	
TOTAL	40	

This paper consists of 8 printed pages. Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing.

1. Below is a photograph of a dissected mammal. Examine the photograph.



(a) Name the parts labeled A, B, C,D,F and H (6mks)

A:

B:

C:

D:

F:

H:

(b) State the functions of the structures labeled E and G. (2mks)

E

.....
.....

G

.....
.....

(c) (i) Name the sex of the mammal in the photograph. (1mk)

.....
.....

(ii) Give a reason for your answer in (c) (i) above.

.....
.....
.....

(d) From the photography identify one feature that helps classifying the organism into class mammalian. (1mk)

.....
.....

(e) (i) The actual length of the tail from Y to Z in the photograph is 20cm. Calculate the Magnification of the photograph. (2mks)

.....
.....
.....

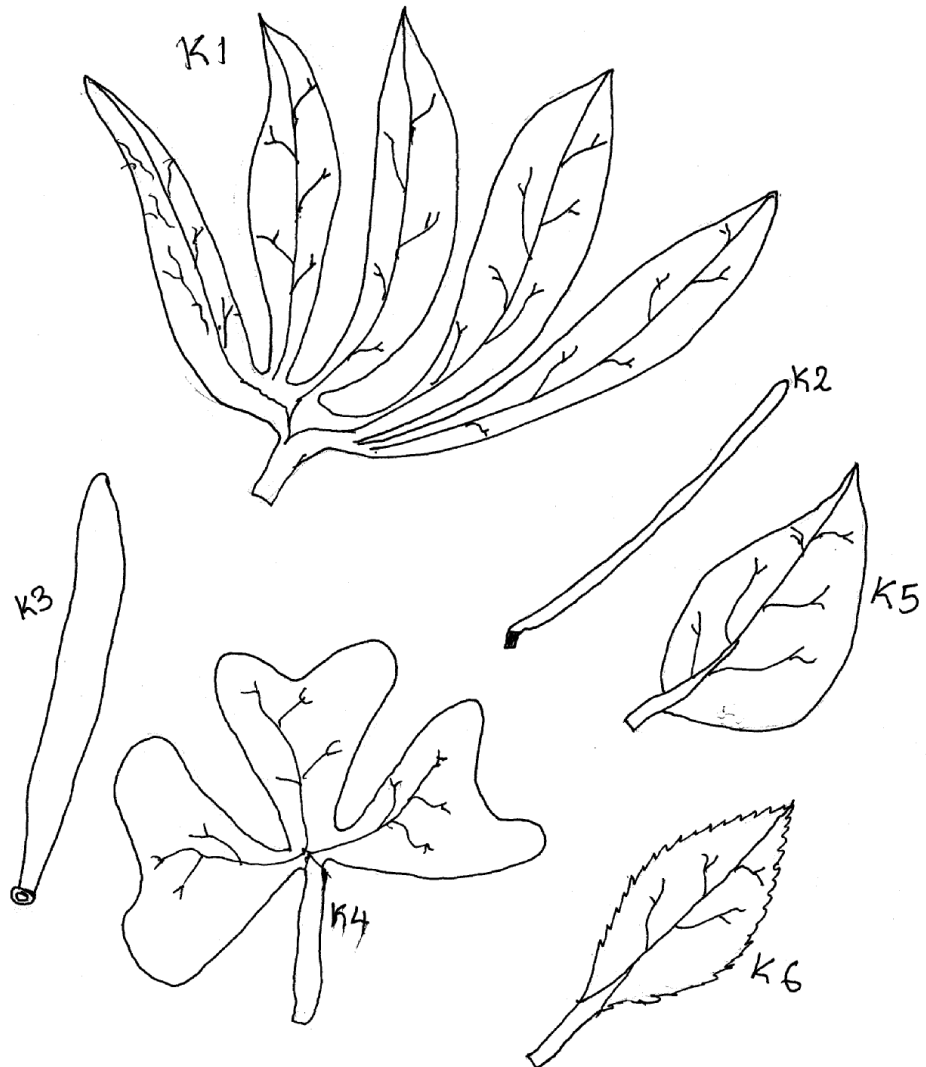
(ii) Calculate the actual length of the mammal from the neck marked X to the point marked Y on the tail. (2mks)

.....
.....
.....

2. You are provided with a food substances labeled J. Using the reagents and filter paper provided carry out tests to determine the food substance(s) in substance J. (10mks)

Food substances being tested for	Procedure	Observations	Conclusions

3. You are provided with specimens labeled K1 , K2, K3, K4, K5 and K6. Use the dichotomous key provided to identify them.



Using the observable features in the photographs complete the dichotomous key given below.

(3mks)

- | | | |
|-----|--------------------------------------|-----------------|
| 1 a | leaf simple..... | Go to 2 |
| 1 b | leaf compound | Go to 5 |
| 2 a | leaf needlelike | Go to 3 |
| 2 b | | Go to 4 |
| 3 a | leaf compact | panaceae |
| 3 b | leaf hollow | A maryllidaceae |
| 4 a | leaf withstand serrated margin | verbenaceae |
| 4b | | Nyctaginaceae |
| 5a | leaf palmate | Euphorbiaceae |
| 5b | | Oxalidaceae |

(b) Use the completed dichotomous key to identify the family to which each plant belongs. In each case show the steps you followed to arrive at the identity.

Identity	Steps followed
K1
K2
K3
K4
K5.....
K6

