

NAME .....

DATE .....

INDEX NO. .... CANDIDATE'S SIGNATURE .....

231/3

BIOLOGY

PAPER 3

(Practical)

JULY/AUGUST, 2010.

TIME: 1¾ HOURS.

## MBOONI WEST DISTRICT JOINT EVALUATION TEST

**Kenya Certificate of Secondary Education.**

231/3

BIOLOGY

PAPER 3

(Practical)

TIME: 1¾ HOURS.

### INSTRUCTIONS TO CANDIDATES

Answer all the questions.

You are required to spend the first 15 minutes of the 1¾ hours allowed for the paper reading the whole paper carefully before commencing your work.

Answers must be written in the spaces provided in the question paper.

Additional pages must not be inserted.

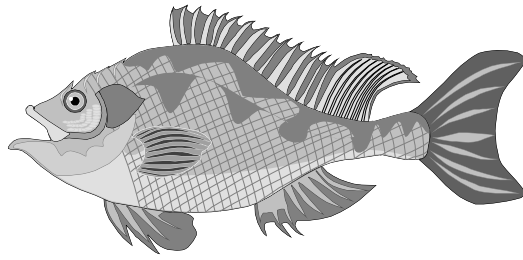
### FOR EXAMINER'S USE ONLY

Questions	Maximum score	Candidate's scores
Question 1	12	
Question 2	12	
Question 3	16	
<b>Total score</b>	<b>40</b>	

*This paper consists of 5 printed pages.*

*Candidates should check to ensure that all pages are printed as indicated and no questions are missing*

1. Study the diagram below and answer the questions that follow:



(a) (i) Name the class to which the specimen belongs 1 mark

.....

(ii) Give **two** reasons for your answer in (a) (i) above 2 marks

.....

.....

(b) (i) What term is used to describe the shape of the specimen? 1 mark

.....

(ii) What is the significance of your description in (b)(i) above? 1 mark

.....

(c) Measure in millimetres the length of the

i) specimen from the tip of the mouth to the tip of the tail  
 length \_\_\_\_\_ mm 1 mark

ii) tail from the anus to the tip of the tail  
 length \_\_\_\_\_ mm 1 mark

iii) Using the measurement in (c) (i) and (ii) above, calculate the tail power 2 marks

.....

.....

.....

(d) Name the fins that enable the animal shown above to

(i) Balance and change direction 2 marks

.....

(ii) For propulsion 1 mark

.....

2. You are provided with suspension labelled P.

(a) Using the reagents provided, test for the food substances in the suspension. In the table below, record the food tested your procedures, observations and conclusions 8 marks

Food substance	Procedure	Observation	Conclusion

(b) Name **two** enzymes that may be required to digest suspension P in the alimentary canal in human beings. 2 marks

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(c) State the role of hydrochloric acid and sodium hydrogen carbonate in the experiment 2 marks

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(d) State the functions of the food substances confirmed present in (a) above 2 marks

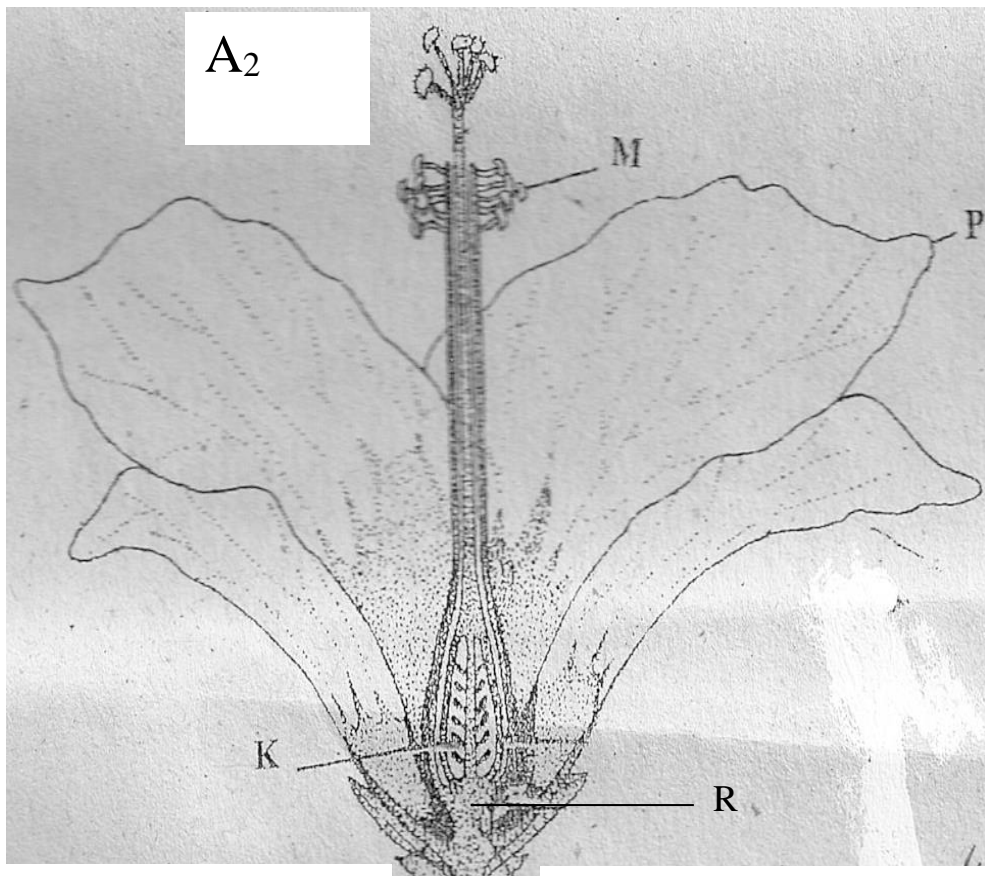
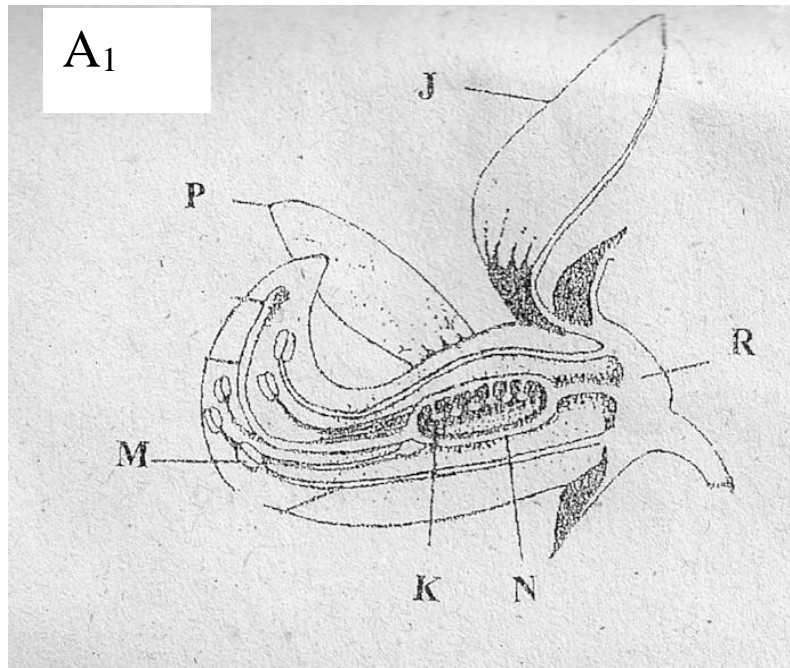
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3. Below are photographs labelled A<sub>1</sub>, A<sub>2</sub>, of floral parts from two different plants. Study them carefully then answer the questions that follow.



(a) State with a reason the plant division from which the specimens were obtained 2 marks

Division .....

Reason .....

.....

(b) State with a reason the agent of pollination of the above named specimens 2 marks

Agent .....

Reason .....

.....

(c) Using observable features only, state the major differences between specimen A<sub>1</sub> and A<sub>2</sub> 2 marks

A <sub>1</sub>	A <sub>2</sub>

(d) Identify the parts labelled J, K, R and M 4 marks

J .....

K .....

R .....

M .....

(e) Describe the floral parts of specimen A<sub>2</sub> 3 marks

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

(f) Describe the androecium of specimen A<sub>1</sub> 3 marks

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