

Name

Index Number /

Candidate's Signature

Date

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

JULY/AUGUST 2013

TIME: 1 $\frac{3}{4}$ HOURS

LENOCET EVALUATION TEST
KENYA CERTIFICATE OF SECONDARY EDUCATION

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

Instructions to candidates

- Write your name and index number in the spaces provided above.
- Answer ALL the questions.
- You are required to spend the first 15 minutes of the 1 $\frac{3}{4}$ hours allowed for this 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

Question	Maximum Score	Candidate's Score
1	16	
2	11	
3	13	
Total Score	40	

1. You are provided with a substance labelled H. Filter the substance and collect the filtrate. Filtration is expected to be complete after about 30 minutes. Using the reagents provided, test for the food substances in the residue and the filtrate. Record your procedure, observations and conclusions in the tables below.

RESIDUE

(12marks)

	Food substance	Procedure	Observation	Conclusion
(i)				
(ii)				
(iii)				

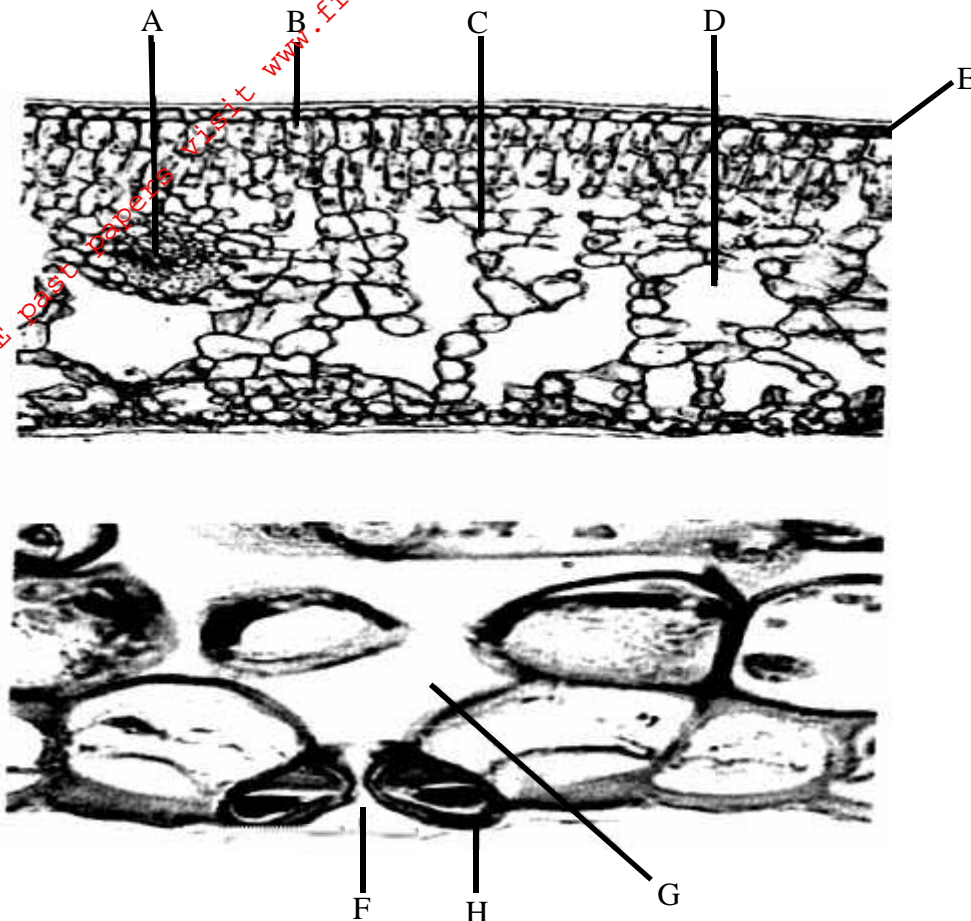
FILTRATE

(3marks)

	Food substance	Procedure	Observation	Conclusion
(i)				
(ii)				
(iii)				

(b) Name the hormone that is responsible for the digestion of milk protein. (1mark)

2. Study the photo micrograph shown below and answer the question that follows.



(a) Label the parts marked above. (4marks)

A _____

B _____

E _____

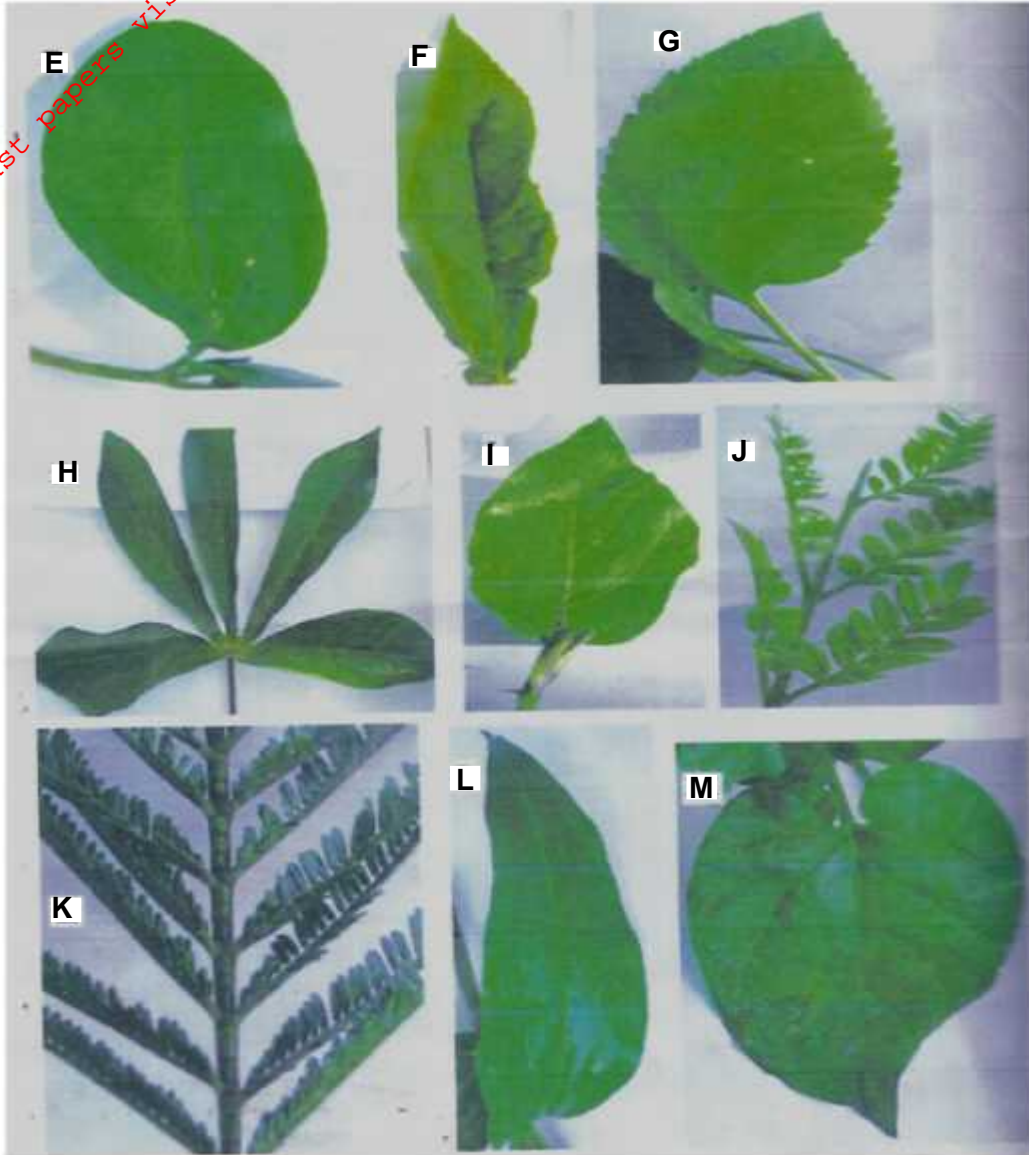
F _____

(b) How is structure H adapted to its function? (2marks)

(c) Other than the structures shown in the photomicrograph, state other structures that are used for gaseous exchange by plants. (2marks)

- (d) (i) State the habitat of the plant from which the micrograph was taken. (1mark)
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- (ii) Give two reasons for your answer in d(i) above. (2marks)
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-

3.



(a) Using observable features in the photographs, complete the dichotomous key given below. (4marks)

1. (a) Simple leaf go to 2
 (b) Compound leaf go to 7
2. (a) Leaves with parallel veins..... Mexican marigold
 (b) go to 3
3. (a) Leaves notched at the base..... Phaseous vulgaris
 (b) Leaves not notched at the base..... go to 4
4. (a) Leaves with smooth margin..... Croton megalocarpous
 (b) Leaves with serrated margin..... go to 5
5. (a) Solanum incunum
 (b) Leaves smooth without hairs..... go to 6
6. (a) Leaves shape cordate..... Bidens pilosa
 (b) Leaves shape linear Prunus domestica
7. (a) Leaves palmate Manihot esculentum
 (b) go to 8
8. (a) Acacia measnsii
 (b) Leaflets rounded at the tip..... Jacaranda mimosifolia

(b) Use the completed dichotomous key to identify the plants. (9marks)

Specimen	Steps followed	Identity
E		
F		
G		
H		
I		
J		
K		
L		
M		