

Name.....

Index No.

Candidate Signature.....

Date

School

231/3

**BIOLOGY
(PRACTICAL)**

Paper 3

July / August - 2008

Time: 1 ¾ Hours

TRANS-NZOIA EAST DISTRICT MOCKS EXAMINATION - 2008

Kenya Certificate of Secondary Education (K.C.S.E)

231/3

**BIOLOGY
(PRACTICAL)**

Paper 3

July / August - 2008

Time: 1 ¾ Hours

INSTRUCTION TO CANDIDATES

- Write your name and index number in the spaces provided at the top of this page.
- Write name of the school and date of examination in the spaces provided above
- Answer ALL questions
- You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading 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.

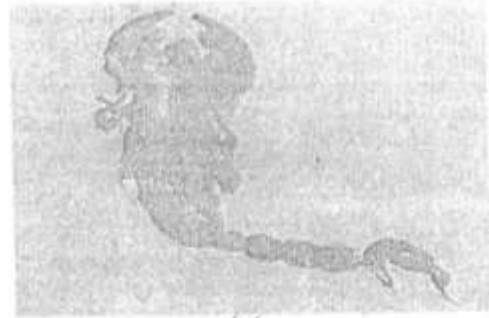
FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1	14	
2	13	
3	13	
	40	

This paper consists of 12 printed pages.

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

1. Specimen's J,K and L are photographs of animals. Specimen's J and K belong to same phylum.



a) Using observable features, state the phylum of specimen J and K.

Phylum (1mk)

.....

Features (2mks)

(i)

(ii)

b) (i) Using observable features only, state the class to which the photograph of specimen J belong.

(3mks)

Specimen J	Class	Features
J		

(ii) State the mode of feeding of specimen K. (1mk)

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.....

(iii) Give a reason for your answer in b(ii) above. (1mk)

.....
.....

(iv) State the ecological role played by specimen K in its habitat. (1mk)

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.....

c) (i) State the class to which specimen L belongs. (1mk)

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.....

(ii) Give TWO reasons for your answer in c(i) above. (2mks)

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(iii) State how specimen L is adapted for survival in its habitat. (2mks)

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2. You are provided with a portion of an onion bulb.

- Remove one freshly leaf from the portion,
- Peel the epidermis from the inner surface of the leaf,
- Place it on a drop of water on a slide,
- Place a cover slip on the epidermis,
- Place a drop of iodine at one edge of the coverslip. Drain-off excess iodine solution and water from opposite edge of the cover slip with a blotting paper,
- Observe the epidermis under low power, then under medium power.

a) Draw and label TWO neighbouring cells.

(5mks)

Magnification

(1mk)

b) Why was staining of the epidermis necessary?

(1mk)

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c) Work out the length and width of one cell as seen under medium power.

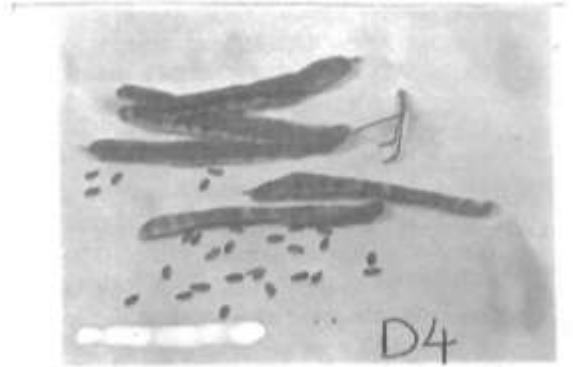
(6mks)

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3. You are provided with photograph's of specimen's labelled D₁, D₂, D₃, D₄ and D₅. Examine them.



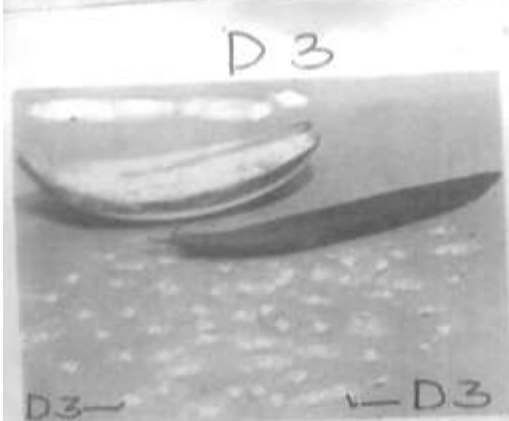
D1



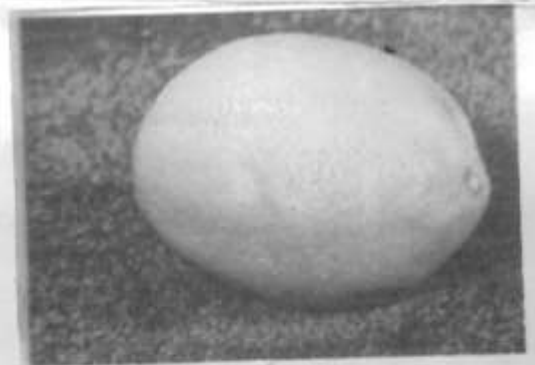
D4



D2



D3



D5

a) Giving reasons, state the agent of dispersal of specimens in the photographs. (10mks)

Specimen	Agent of dispersal	Reasons
D ₁		
D ₂		
D ₃		
D ₄		
D ₅		

b) State the types of gynoecium and placentation of specimen D₄. (2mks)

i) Gynoecium

.....
.....

ii) Placentation

.....
.....

c) State the importance of seed/fruit dispersal. (1mk)

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