NAME……..…… INDEX NO…….....……..……

SCHOOL…… CANDIDATE'S SIGNATURE……

DATE……..…….……..

231/3
BIOLOGY
PAPER 3
(PRACTICAL)
JULY/AUGUST 2014
TIME: 1¾ HOURS

TRANS-NZOIA COUNTY JOINT EXAMINATIONS-2014

Kenya Certificate of Secondary Education

BIOLOGY
PAPER 3
(PRACTICAL)
TIME: 1¾ HOURS

INSTRUCTIONS TO CANDIDATES:

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) Answer all the questions in the spaces provided.
(d) You are required to spend the first 15 minutes of the 1¾ hours allowed for this paper reading the whole paper carefully before commencing your work.
(e) Additional papers must not be inserted.
(f) This paper has three questions and pages.
(g) Students should check the question paper to ascertain that all the paper are printed as indicated and that no questions are missing.

FOR EXAMINER'S USE ONLY:

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

1. (a) You are provided with suspension W. Using the reagents provided carry food test and record the procedure, observation and conclusion.

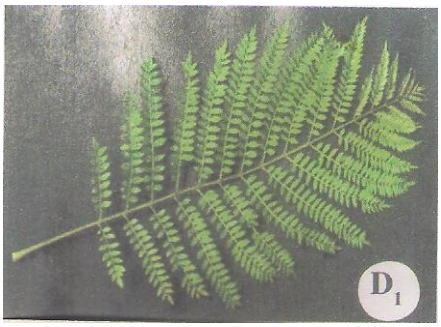
Food substance	Procedure	Observations	Conclusion

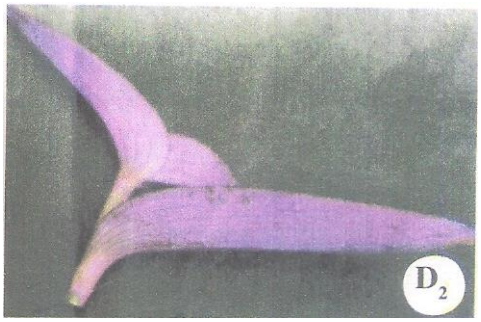
(12 marks)

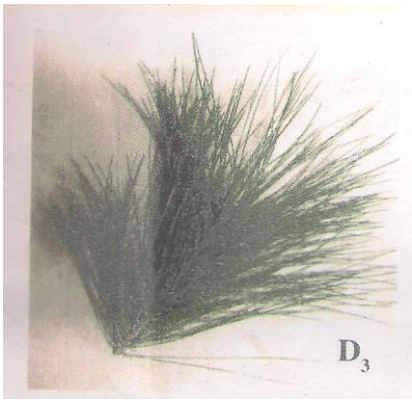
(b) Mention **two** enzymes that may be required to digest the content of suspension W in the alimentary canal of mammal. (2 marks)

(c) State the purpose of hydrochloric acid in the experiment. (1 mark)

2. You are provided with seven photographs of plant specimens. They are labelled specimen D_1, D_2, D_3, D_4, D_5, D_6, D_7.







(a) Use the dichotomous key to identify the taxonomic group of each of the seven specimens in the photographs provided.

<u>The dichotomous key</u>

1.	(a)	Leaves needle like	----------	go to 2
	(b)	Leaves broad	----------	go to 3
2.	(a)	Leaves arranged in clusters on stem	----------	Pinaceae
	(b)	Leaves not arranged in clusters on stem	----------	Auraucariaceae
3.	(a)	Leaves compound	----------	go to 4
	(b)	Leaves simple	----------	go to 7
4.	(a)	Leaf pinnate	----------	go to 5
	(b)	Leaf bipimate	----------	go to 6
5.	(a)	Leaflets attached to many small stalks that join the main one	----------	Mimosaceae
	(b)	Leaflets attached to one stalk	----------	Rosaceae
6.	(a)	Leaflets attached to many small stalks that join the main one	----------	Bignonaceae
	(b)	Leaflets attached to one stalk	----------	Compoistae

7. (a) Leaves green ---------- go to 8
(b) Leaves purple ---------- go to 9

8. (a) Leaves parallel veined ---------- Graminae
(b) Leaves net veined ---------- Geranaceae

9. (a) Leaves parallel veined ---------- Commelinaceae
(b) Leaves net veined ---------- Euphorbiaceae

Specimen	Steps followed	Identify
D_1		
D_2		
D_3		
D_4		
D_5		
D_6		
D_7		

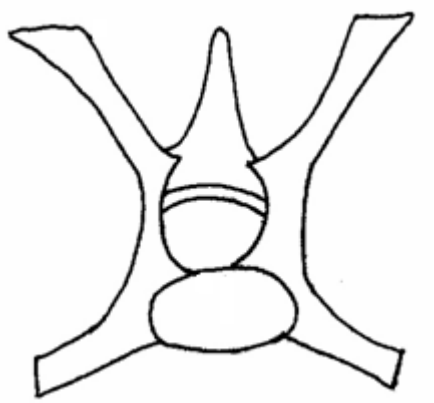
(14 marks)

(b) Suggest the possible habitat that specimen D_4 is adapted to. (1 mark)

_____

3. The diagram **below** represents bones obtained from a mammal.

A_1



A_2

A_3

(a) Identity bones. (3 marks)

A_1 _____

A_2 _____

A_3 _____

(b) Name parts labelled. (3 marks)

X _____

Y _____

Z _____

(c) From which region of the body was bone labelled A_2 obtained. (1 mark)

_____

(d) State the function of part labelled **X**. (1 mark)

_____

_____

_____

(e) State **two** adaptations of bone labelled A_1 to its function. (2 marks)

_____

_____

_____

_____

ANSWERS:

Order a copy of answers from www.schoolsnetkenya.com/order-e-copy

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