

Name:

Adm. No

School:

Candidate's Sign.....

Date:

**231/3
BIOLOGY
PAPER 3
OCT/NOV 2010
TIME: 2 ¼ HOURS**

**SOUTH LINK JOINT EVALUATION TEST
FORM THREE**

**Biology
Paper 3**

INSTRUCTIONS TO CANDIDATES:

- Answer **ALL** the questions in the spaces provided.

For Examiner's Use Only:

QUESTIONS	MAXIMUM SCORE	CADNIDATE'S SCORE
1	21	
2	09	
3	10	
TOTAL	40	

1. You are provided with specimen A and B

a) Make a longitudinal section through specimen A. Make a labeled diagram of its longitudinal section (4mks)

b) Using a pestle and mortar, crush some leaves one half of the specimen. Using the reagents provided test for food substances present in the extract. Record your findings in the following table (8mks)

Food	Procedure	Results	Conclusion

c) Cut six leaflets into 4 cm long pieces. Make a slit 2 cm long at one end of each of leaflets. Immerse the leaflets into solution X,Y and Z. Leave the set up for 30 minutes. Account for the results in

i) Solution X (3mks)

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ii) Solution Y (3mks)

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iii) Solution Z (3mks)

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2 a) You are provided with specimens B. Study it and answer the following questions.

Using the hand lens study specimen B

(i) Identify the phylum and class to which it belongs

Phylum _____ (1mk)

Reasons (2mks)

.....

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(ii) Class _____ (1mk)

Reasons (2mks)

.....

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(iii) How is specimen B adapted to living in cracks? (3mks)

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3. Study the diagrams below and answer the questions that follow.



P



Q



T



S



R

A dichotomous key was constructed to identify the plant leaves as follows:

- 1. (a) Simple leaf..... Go to 2
- (b) Compound leaf..... Go to 4
- 2. (a) Leaf has serrated margin..... Hibiscus
- (b) Leaf has smooth margin..... Go to 3
- 3. (a) Leaf is broad Mango
- (b) Leaf is Ovate..... Morning glory
- 4. (a) Leaf has many leaflets..... Nandi flame
- (b) Leaf has three leaflets..... Bean.

Identify the leaves by following the correct steps using the table below.

Leaf	Steps	Identify
P		
Q		
R		
S		
T		

(10mks)