

NAME:INDEX NO.....CLASS.....

ADM NO:DATE.....SIGN.....

231/3

BIOLOGY

PAPER 3

PRACTICAL

TIME: 1 ¾ HOURS

POST MOCK TERM 3 2019

Kenya Certificate of Secondary Education (KCSE) September 2019

Instructions to candidate

- Answer ALL questions
- You are required to spend the first 15 min of 1³/₄ hours allowed for this paper reading the whole paper before carefully before commencing your work.
- Answer must be written in the spaces provided in the question paper
- Don't insert additional page /paper

FOR EXAMINER USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
1	14	
2	13	
3	13	
TOTAL	40	

1. You are provided with specimen A and B

a) Name the sub-division to which the specimen belong (1mk)

.....

b) Name the class to which the specimens belong (2mks)

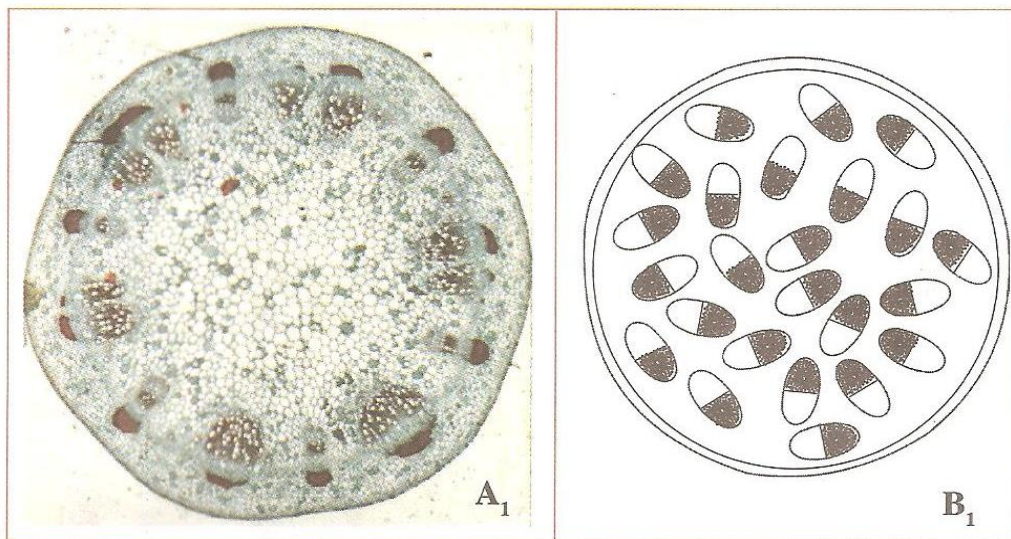
A.....

B.....

c) State three observable differences between the leaves of specimen A and B (3mks)

Leaves A	Leaves B

d) The diagram below show the cross-sections of stems obtained from specimens A and B



(i) Match the stem cross-sections with the specimens

(2mks)

.....

(ii) Outline three differences between the two stems

(3mks)

Specimen A ₁	Specimen B ₁

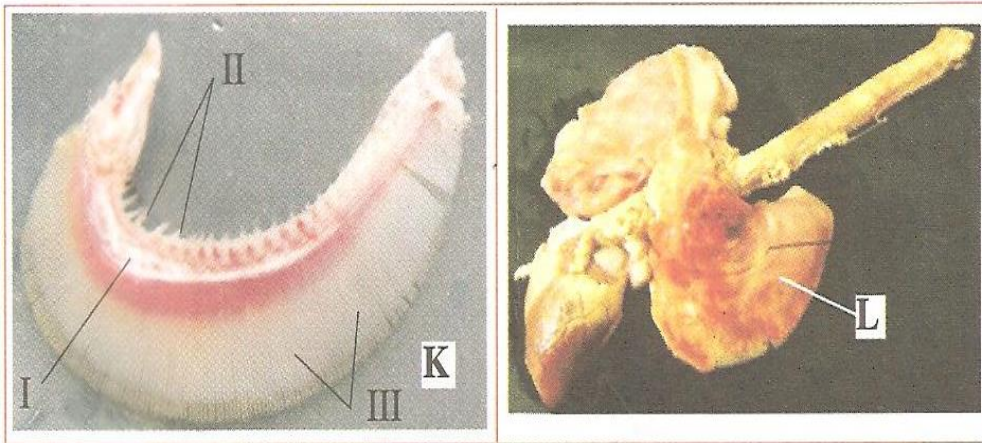
e) Suggest the agent of pollination of the flowers of specimen A (1mk)

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Give reason for your answer (1mk)

.....

2. You are provided with photographs of specimens labeled **K (gills)** and **L (lungs)**. Examine them and answer the questions that follow.



(a) Name the class of organisms from where the specimens were obtained (2mks)

Specimen	Class
K	
L	

(b) Label all the parts of specimen K on the photograph (3mks)

I.....

II.....

III.....

(c) State the functions of each of the parts you have labeled in (b) above (3mks)

.....

.....
.....

(d) State three ways in which the part labeled L is adapted to its functions (6mks)

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

(e) State the functional relationship between specimens K and L (1mk)

.....
.....

3. You are provided with:

- 1ml Olive oil
- K₁ (Concentrated sodium hydrogen carbonate solution)
- K₂
- Irish potato
- Test tube
- Iodine solution

Label two test tubes X and Y. Into each test tube; put 2cm³ of water and 8 drops of Olive oil. To the test tube labeled X, add 8 drops of Liquid K₁. Shake both test tubes and allow the contents to stand for 2 minutes

a)(i) Record your observation in: (2mks)

Test tube X

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

Test tube Y

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

(ii) Name the process that has taken place in test tube X (1mk)

.....

(iii) State the significance of the process named in (a) (i) above in digestion (1mk)

.....

(iv) Name the:

I. Digestive juice in human beings that has the same effect on oil as liquid K₁ (1mk)

.....

II. Region of alimentary canal where the juice is secreted (1mk)

.....

b) Label two test tubes E and F. place 2cm³ of liquid K₂ into each. Add a drop of iodine solution into each test tube

(i) Record your observations (1mk)

.....

(ii) Suggest the identity of liquid K₂ (1mks)

.....

(iii) Cut out a cube whose sides are 1cm from the Irish potato provided. Crush the cube to obtain a paste and place the paste in the test tube labeled E. Leave the set up for at least 30minutes

Record your observations (2mks)

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(iv) Account for the results in (b) (iii) above (2mks)

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