KCSE MOCKS

BIOLOGY PAPER 3

Consists 3 KCSE Mock set Exams.

(Class of KCSE March 2021)

For Marking Schemes Contact Mr Machuki 0795491185

Kenya Educators Contacts:

+254795491185

kenyaeducators@gmail.com

For more e-learning resources contact Kenya Educators via the contacts above.

FOR MARKING SCHEMES CALL/TEXT/WHATSAPP 0795491185

PRE-MOCK 1

CONFIDENTIAL INSTRUCTION FOR BIOLOGY PP3 PRE-MOCK 1

2 Pieces of *Tradescantia zebrina* stem (4 cm each) – labelled D

20 ml of Solution labelled L_1 – distilled water in 50 ml beaker

20 ml of Solution labelled L_2 - 2 % salt solution in 50 ml beaker.

Scalpel blade.

PRE-MOCK 1

NAME……CLASS……HOUSE…… INDEX No……

Candidates signature……

231/3

Biology

Paper 3

(Practical)

Time:1 $\frac{3}{4}$ *HOURS*

KCSE PRE-MOCK 1

Instructions to Candidates ○ Answer ALL the three questions

in the spaces provided.

- Spend the first 15 minutes of the 1 hour & 45 minutes to read through the paper carefully before commencing your work.
- One may be penalized for recording irrelevant information and for incorrect spelling, particularly of *technical* terms.
- **Additional pages must not be inserted.**

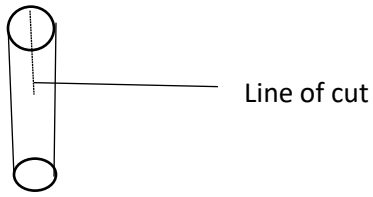
For Examiner's Use Only

QUESTION	Maximum Score	Candidate's Score
1	12	
2	15	
3	13	

- **This paper consists of 7 printed pages.**

- **Candidates should check the question paper to ensure that all the pages are printed as indicated and no question is missing.**

1. You are provided with two pieces of plant material labelled specimen D. using a scalpel cut a longitudinal section half way through the middle of each piece as shown in the diagram below.



Place one piece in solution labelled L_1 and the other piece in the solution labelled L_2. Allow the set up to stand for 30 minutes.

(i) Record your observation (2 marks)

L_1……

L_2……....

(b) Examine the pieces.

(i) Record other observations besides those made in (a) (i) above. (3marks)

L_1……

L_2……

(ii) Account for the observation in (a) (i) above. (5 marks)

……

……

……

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……

(ii) Account for the observation in (b) (i) above. (3marks)

……

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……

2. You are provided with photographs of specimen M and N. Examine them.

M

N

a) Identify the bones. (2marks)

M ……

N……..

b) Name the parts labeled X and Y. (2marks)

X……..

Y…….

c) State **three** significance of the part labelled Y. (3 marks) Y

(i).....……

(ii)……

(iii) ……..

d) Calculate the actual size of specimen labelled M. (Show your working). (3marks)

……

……

……

……

……

e) Name the part of the mammalian body from where the specimens were obtained. (1mark)

……

f) State with reasons the type of joint formed at the proximal and distal end of M (4marks)

Proximal end …….

Reason……

Distal end……..

Reason……

3. a) The photographs below are for specimen labelled P,Q and R.

P

Q

U

R

V

(i) State with a reason the class to which specimens P belongs. (3 marks)

P ……..

Reason ……

(ii) What type of germination is exhibited by Q? (2marks)

Q ……

Give a reason for your answer.

……

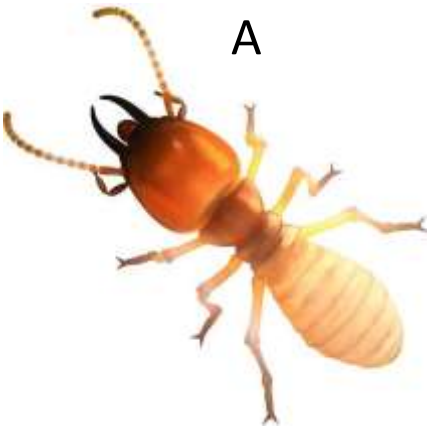
(iii) Name the parts labelled U and V on the photographs above. (2marks)

U …….

V……..

3. (b) The diagrams below shows the photographs of specimens A and B

A



B

(b) (i) Using observable features only, state the class to which the specimen in photographs A belongs. (1mark)

…….

(ii) Give a reason for your answer. (1mark)

…….

b) (iii) State the habitat in which the specimen in photograph B is found. (1mark)

……..

b) (IV) Identify the stage of development of the specimen in photograph B. (1mark)

……

(v) Give a reason for your answer in (b) (iv) above. (1mark)

……

MOCK 1

KCSE MOCK 1

BIOLOGY PAPER 3 PRACTICAL REQUIREMENTS

1.Besides other laboratory fittings and equipment, each candidate will require the following:

- A germinated maize seedling (with the first foliage leaves) labelled **A**

- A germinated bean seedling (with the first foliage leaves) labelled **B**

2. **Each candidate should have:**

One ripe banana

Scalpel/blade

3. Iodine solution
Dilute sodium hydroxide solution
1 % copper (II) sulphate
Boiling tube
3 test tubes
Distilled water
N- Small intestine of a cow5cm for each student. (Inner contents should intact)

MOCK 1

NAME: …… ADM NO:

.....CLASS……

DATE…….....

SIGN……..

231/3

BIOLOGY

PAPER 3

PRACTICAL

TIME: 1 ¾ HOURS

KCSE MOCK 1

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

Instructions to candidate

- **Answer ALL questions**
- **You are required to spend the first 15 min of $1^{3}/_{4}$ 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**

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

1. You are provided with specimens labelled **A** and **B**. Examine the specimens and answer the questions that follow.

(a) With a reason state the type of germination in each of the specimens.
(4 marks)

Specimen **A**. Type of germination:
.....

Reason:
.....
.....

.....
.....

Specimen **B**. Type of germination:
.....

Reason:
.....
.....

.....
.....

(b) Draw a well labelled diagram of specimen **B**.
(5 marks)

(c) Using observable features only state the class to which each of the specimens belongs.
(4 marks)

Specimen **A**. Class:
.....

Reason:
.....
.....

.....
.....

Specimen **B**. Class:
.....

Reason:
.....
.....

.....
.....

Q2.You are provided with a specimen labeled **T** which is a fruit. Use it to answer the questions that follow.

a) Make a **transverse** section of the specimen **T**. Draw and label at least 3 parts. 6mks

b) With reasons, state the identity of fruit **T.**

Type of fruit.....1mk

Reason

.....1mk

c) Suggest the possible agent of dispersal and give **two** reasons

Agent

.....1mk

Reason

.....

.....

2mk

d) What is the placentation of **T**?

……1mk

e) Specimen **T** was green in colour before it was treated with a plant hormone.

Suggest the plant hormone.

……1mk

3. You are provided with a specimen labeled N. Squeeze the contents of N into the test tube. Add $3cm^3$ of water and shake the contents. Reserve the piece of intestine for question (b)

a)Use the reagents provided to test for the presence of various food substances in N extract. Record your observations in the table below (6mks)

Food substance tested	Procedure	Observation	Conclusion

b)Account for the results obtained in (a) above.

(2marks)

……
……
……
……
……

c)Cut specimen N along its length to expose the inner surface
(2marks)

……
……
……
……
……

……i) Compare the inner and outer surface of the specimen. Record your observations.
(2marks)

……
……
……
.....

ii)Account for your observation of the inner surface.
(2marks)

……
……
……
……
……