

Name.....

Index No...../.....

School.....

Candidate's Signature.....

Date

231/3

BIOLOGY

PRACTICAL

Paper 3

July/August 2010

1 ¾ Hours

BUNGOMA JOINT EVALUATION TEST - 2010
Kenya Certificate of Secondary Education (K.C.S.E)

231/3
BIOLOGY

INSTRUCTIONS TO CANDIDATES

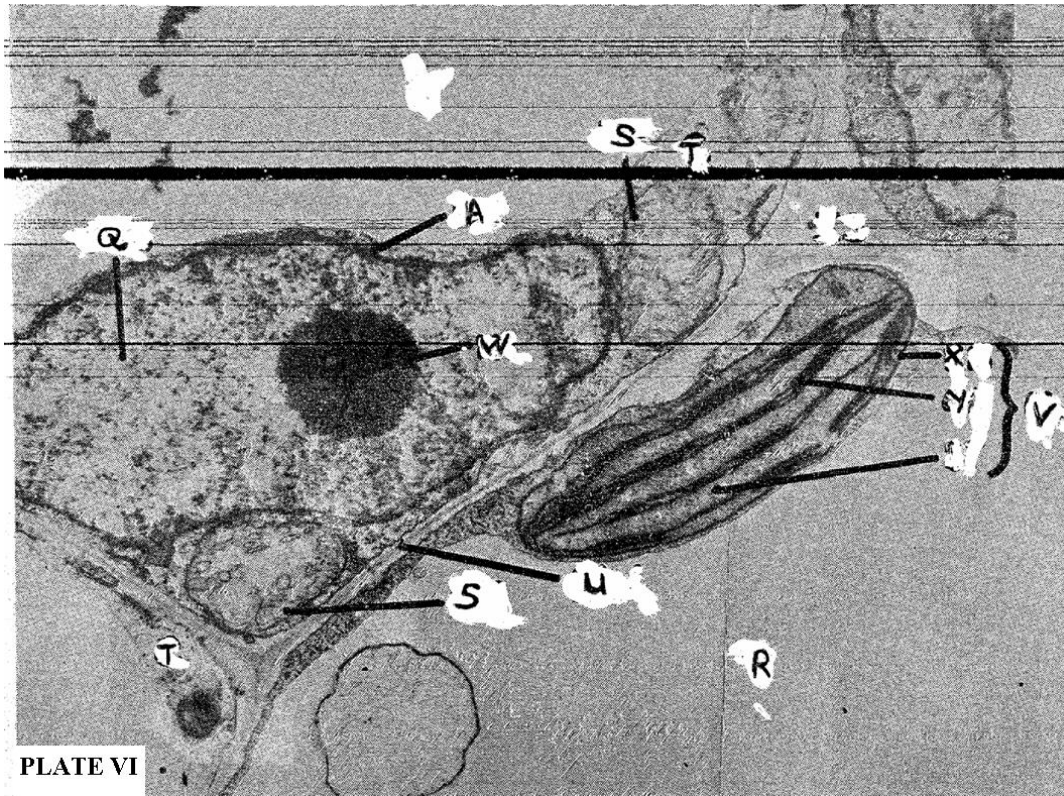
- Write your name and Index Number in the spaces provided above.
- Sign and write date of examination in the spaces provided above.
- You are required to spend the first 15 min of the 1 ¾ hours allowed for this paper reading the whole paper careful before commencing your work.
- Answers must be written in the spaces provided in the question paper. Additional pages must not be inserted

For Examiners use only.

| Section | Question | Maximum Score | Candidates Score |
|----------------|------------------------|----------------------|-------------------------|
| | 1 | 14 | |
| | 2 | 14 | |
| | 3 | 12 | |
| | TOTAL SCORE | 40 | |

This paper consists of 4 Printed pages. Candidates should check the question paper to ensure that all the Papers are printed as indicated and no questions are missing

1. Study the micrograph of the cell below and give a function for each in the table below. (10mks)



- a) Identify the parts labeled Q, R, S, T and W and state a function for each in the table below.

| | Identify | Function |
|---|----------|----------|
| Q | | |
| R | | |
| S | | |
| T | | |
| W | | |

- b) How is the structure labeled V adapted to its function. (2mks)

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- c) State one structural similarity between structures labeled V and S. (1mk)

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2. You are provided with specimens P and Q. study them carefully and answer the questions that follow;

- a) i) Identify the type of fruits represented by specimen P and Q and give a reason in each case.

| | Specimen P | Specimen Q |
|---------------|------------|------------|
| Type of fruit | | |
| Reason | | |

(4mks)

ii) Make a longitudinal section through specimen P.

Draw and fully labeled one half.

(4mks)

b) i) Cut a transverse section through specimen Q. State the type of placentation. (1mk)

ii) To 1cm³ of DCPIP in a clean test tube, add 0.1% solution of ascorbic drop by chop shaking thoroughly after every drop till the colour of DCPIP disappears. Record the number of drops used. (1mk)

iii) Squeeze out the juice from specimen Q into a beaker. Filter and discard the residue to another 1cm³ of DCPIP in a test tube, add the juice from specimen Q drop by drop while shaking after every drop until the colour of DCPIP disappears. Record the number of drops used. (1mk)

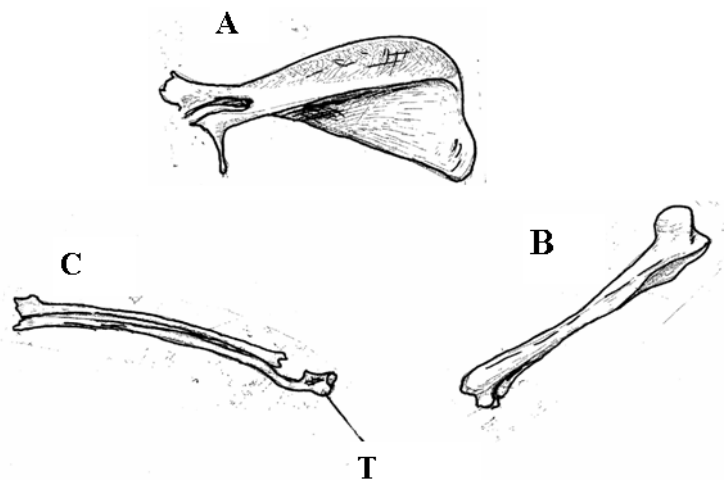
iv) From the results obtained in b (i) and (ii) above, calculate the percentage of ascorbic acid in the juice obtained from specimen Q. Show your working. (2mks)

v) State two factors that would influence the accuracy of the result above. (2mks)

3. Examine the photograph of bones obtained from a mammal.

a) Identify them.

(3mks)



A _____
B _____
C _____

b) Name the joint formed between:

i) the distal end of bone **A** and **C** (1mk)

.....

ii) the proximal end of bone **B** and the apex of **A** (1mk)

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c) How is the specimen labeled **A** adapted to its functions? (4mks)

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d) i) Name the part labeled **T** on specimen **C** (1mk)

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ii) State two functions of the part **T**. (2mks)

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