**NAME…………………………………………….………..ADM. NO………….….........................………**

**SCHOOL………………………………………………..CLASS............... SIGN…………....................….**

 **DATE…………………......................….……**

**231/3**

**BIOLOGY**

**PAPER 3**

**TIME: 1 ¾ HOURS**

**AUGUST-2022**

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**CEKENAS END OF TERM TWO EXAM-2022**

**FORM FOUR EXAM**

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

**231/3**

**BIOLOGY**

**PAPER 3**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces provided above
2. Sign and write date of examination in the space provided.
3. Answer ALL the questions in the spaces provided.
4. You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.
5. Additional papers must not be inserted.
6. Candidates may be penalized for recording irrelevant information and for incorrect spelling of technical terms.
7. Candidates should answer all the questions in English

**For examiners use only**

|  |  |  |
| --- | --- | --- |
| Question | Maximum score | Candidate’s score |
| 1 | 13 |  |
| 2 | 14 |  |
| 3 | 13 |  |
| Total score | 40 |  |

1. You are provided with a specimen T that has been obtained from a plant.

a) i) Identify the part of plant that is T. (1mk)

…………………………………………………………………………………………………………………...

ii) Give one reason for your answer in a (i) above. (1mk)

…………………………………………………………………………………………………………………...

…………………………………………………………………………………………………………………...

b) Cut specimen T into two halves to obtain its cross sections. Squeeze the juice from specimen T into the beaker provided. Using the reagents provided, test the food substances present in specimen T. record your results in the table below. (9mks)

|  |  |  |  |
| --- | --- | --- | --- |
| Food | Procedure | Observation  | Conclusion  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

c) Specimen T is dispersed in nature by animals. Give two importance of fruits and seed dispersal. (2mks)

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2. You are provided with specimen J. examine it and answer the questions below.

a) i) Identify the subdivision of the plant from which J was obtained. (1mk)

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ii) Give a reason. (1mk)

…………………………………………………………………………………………………………………...

b) State the class of J. (1mk)

…………………………………………………………………………………………………………………...

Reason. (1mk)

…………………………………………………………………………………………………………………...

c) i) What is the mode of pollination of J. (1mk)

…………………………………………………………………………………………………………………...

ii) Give a reason for your answer in (i) above. (1mk)

…………………………………………………………………………………………………………………...

d) Describe the following parts: (2mks)

i) Corolla

…………………………………………………………………………………………………………………...

ii) Androecium

…………………………………………………………………………………………………………………...

e) Carefully open T and remove the petals. Remove one stamen and make a well-labelled diagram. Indicate the magnification. (4mks)

3. Study the photograph below and answer the questions that follow:



a) Name the three bones labelled A, B and C. (3mks)

A……………………………………………………………………………………………………………

B…………………………………………………………………………………………………………....

C……………………………………………………………………………………………………………

b) Name the cavity Z and state its role. (2mks)

…………………………………………………………………………………………………………………...

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c) Name the structure labelled T and state the role it plays in female mammals. (2mks)

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d) In the photograph show with letter K where ball and socket joint is formed and name the bone that forms the joint. (2mks)

e) Give one name of the structure formed by bones C, G and T. (1mk)

…………………………………………………………………………………………………………………...

f) i) Where is it found in the mammalian body. (1mk)

…………………………………………………………………………………………………………………...

ii) The actual length of the specimen from points X and Y is 20.8cm. Calculate the magnification of the photograph. (2mks)

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