Name ...…………………………………………………………. INDEX. No ………….

Candidate’s signature……………………………………………CLASS……………….

**KASSU JET EXAMINATION  
Kenya Certificate** **of Secondary Education**

***231/3***

**BIOLOGY**

**Paper 3**

**(Practical)**

**June, 2018**

**1 3/4 Hours**

* Write your name, Index Number , class in the spaces provided above
* Write the date of examination in the space provided above
* Answer ALL the questions
* **FOR EXAMINER'S USE ONLY**

|  |  |  |
| --- | --- | --- |
| QUESTION | SCORE | CANDIDATES SCORE |
| 1 | 12 |  |
| 2 | 15 |  |
| 3 | 13 |  |
| **TOTAL** | **40** |  |

1. a)You are provided with specimen labelled Q. Remove the endosperm and crush using a motor and pestle. Add distilled water and obtain a solution. Decant the mixture to obtain solution Q1. Using the reagents provided, test the food present in solution Q1. (8marks)

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

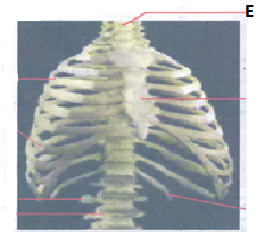
b) Account for your observation in (a) above (3marks)

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c) Name the type of germination represented in the specimen above (1 mark)

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2. a). You are provided with a photograph with part of human skeleton. Use it to answer questions that follow.



i) Name the first vertebra labelled E and state how it is adapted to its function. (4marks)

Name………………………………………………………………………………………………

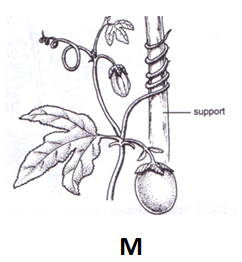
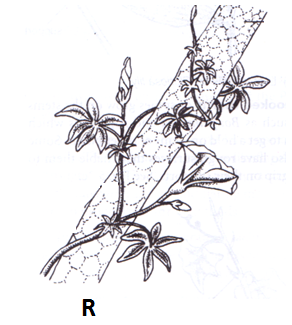
Adaptations

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ii) Name the structure in the skull that articulates with the vertebra E (1mark)

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(iii) Below are two photographs of plants.

(a) Identify support structures used by the plants in photographs M and R shown above. (2marks)

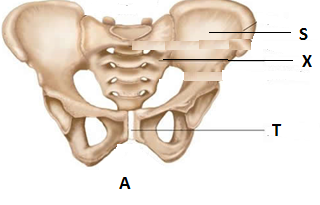
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(b) Other than the structures illustrated above, name any one support structure in herbaceous plants. (1 mark)

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b) The photographs below represent some skeletal materials obtained from a certain mammal.

Study them then answer the questions that follow.



i) Identify fused bone labelled X (1mark)

………………………………………………………………………………………………………

ii) Name parts S and T on photograph A and part U on photograph B (3mrks)

iii) Name the type of joint formed at the proximal and distal end of bone B (2marks)

Proximal end…..……………………………………………………………………………………

Distal end…………………………………………………………………………………………...

iv) Name the type of joint found in structure labelled X (1mark)

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3. a).You are provided with specimen labelled P. Using a sharp scalpel, cut the specimen longitudinally to obtain two halves. Draw a large well labelled diagram of one of the sections obtained. (5marks)

b) i) Identify the agent of pollination of the above specimen (1mark)

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ii) Give three reasons for your answer above (3 marks)

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iii) Describe the floral parts of specimen P (4mark)

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