NAME ………………………………………………ADM. NO ………………CLASS:……….

DATE……………..

231/3

BIOLOGY

PAPER 3

PRACTICAL

NOV.

**TIME: 13/4HRS**

**MWAKICAN FORM 3 JOINT EXAMINATION - 2016**

**KENYA CERTIFICATE OF SECONDARY EDUCATION**

**Instruction to Candidates**

* Write your Name, Adm. No., Class and Date in the spaces provided
* Answer all the questions
* You are required to spend the first 15 minutes of the 13/4Hrs around for this paper reading the whole paper carefully before commencing your work
* Answers must be written in the spaces provided in the question paper. Additional

Pages must not be inserted.

* The paper consists of six printed pages.

**FOR EXAMINER’S USE ONLY**

|  |  |  |
| --- | --- | --- |
| **QUESTION** | **MAXIMUM SCORE** | **CANDIDATE’S SCORE** |
| 1  2  3 | 13  13  14 |  |
| **TOTAL SCORE** | **40** |  |

1. You are provided with a suspension labelled W
2. Using the reagents provided only, carry out food test and complete the table below (12 mks)

|  |  |  |  |
| --- | --- | --- | --- |
| **Food substance** | **Procedure** | **Observations** | **Conclusions** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. i) Name the enzymes that are required to digest the suspension W in the alimentary

canal (1mk)

ii) State the medium under which the enzymes named in a(i) above functions

best.(1mk)

1. Name the deficiency diseases a child that is fed on the above suspension W only is likely to suffer from (2mks)
2. Photographs J and KI represents specimens which were obtained from different habitats.



1. With reasons identify the habitat of specimen J and KI (4mks)

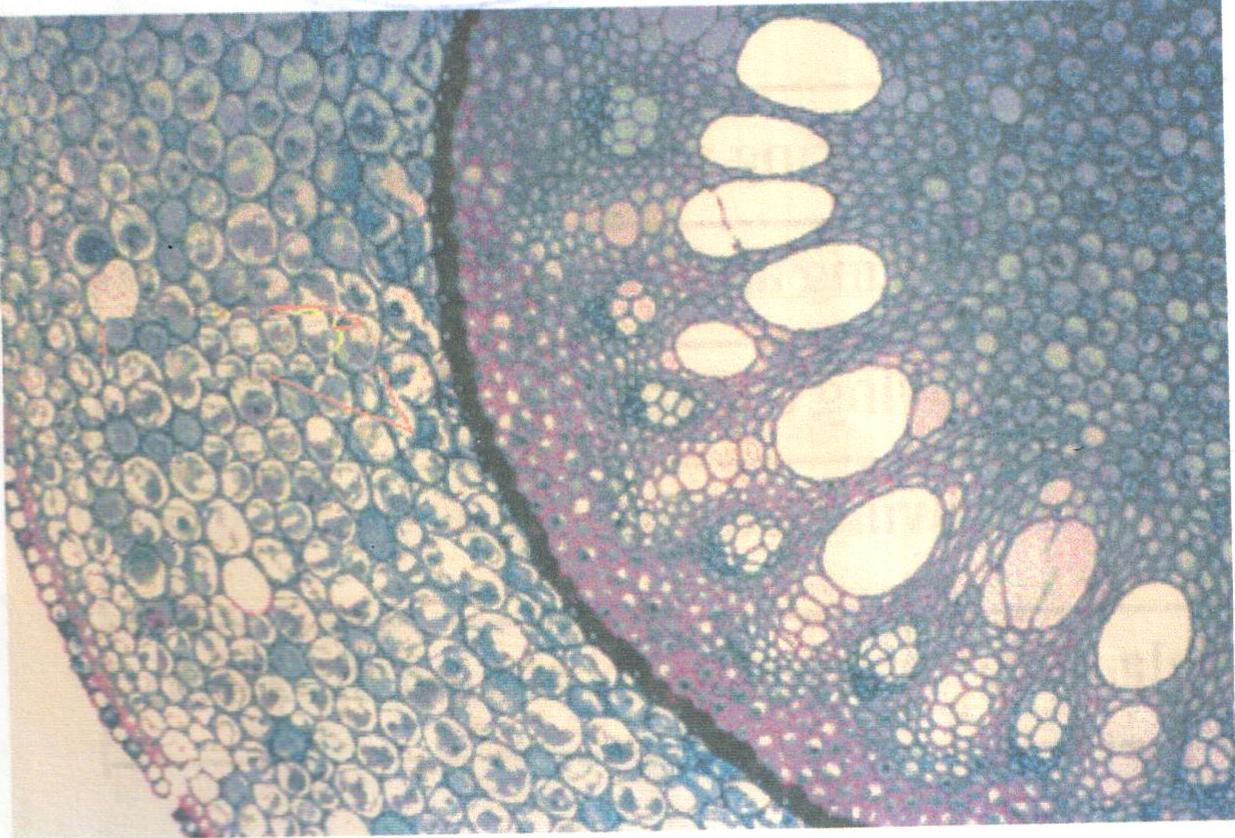
KI –

Reason(s)

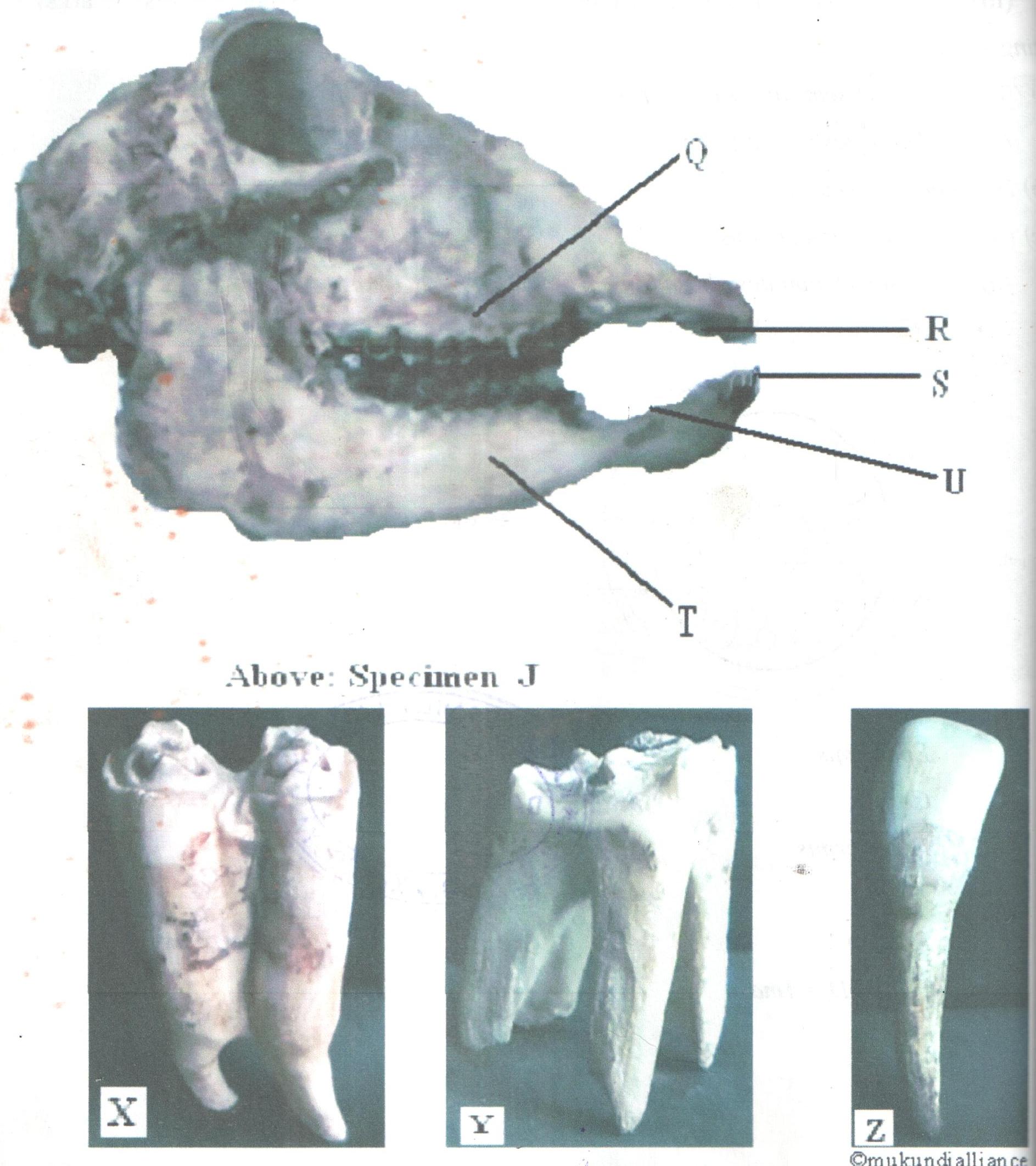
J –

Reason(s)

1. Give the term used to describe plants found in the same habitat with specimen J (1mk)
2. State three modifications found in the stomata of leaves found in the habitat of specimen J (3mks)
3. The photograph below was obtained from a cross-section of part of specimen K1



1. From which part of plants was the cross section obtained? (1mk)
2. Give reason for your answer in d(i) above (1mk)
3. Draw a plan diagram of the cross-section shown and label any four parts (2mks)
4. Below are photographs named J, X, Y and Z representing parts of a certain animal. Study them to answer the questions that follow.



1. Name the parts labeled in the photograph above as: (4mks)

Q –

R –

S –

T –

1. What is the function of part labelled U? (1mk)
2. What is the mode of feeding of the animal from which the specimens above were obtained? (1mk)
3. Fill the table below to distinguish between specimen X, Y and Z above (9 mks)

|  |  |  |  |
| --- | --- | --- | --- |
| **Specimen** | **Name** | **Adaptation** | **Function** |
| X |  |  |  |
| Y |  |  |  |
| Z |  |  |  |