

NAME.....INDEX NO.....

SCHOOL.....DATE.....

SIGN.....

231/3

Biology paper 3

(Practical)

1 $\frac{3}{4}$ HRS

July/August 2012.

BUNGOMA JOINT INTER-SCHOOLS EVALUATION TEST (JISSET)

Kenya Certificate of Secondary Education 2012

231/3

Biology paper 3

(Practical)

TIME: 1 $\frac{3}{4}$ HRS

July/August 2012.

INSTRUCTIONS TO CANDIDATES

- ❖ Write your name and index number in the spaces provided at the top of this page.
- ❖ Answer all the questions in the spaces provided.

For examiner's use only

Question	Maximum score	Candidate's score
1	13	
2	15	
3	12	
Total score	40	

1. Below are photographs of specimens obtained from plants. Examine the photographs

(See the attached photographs)

a) For each of the specimens, name the mode of pollination and the features that adapt the specimen to the mode of pollination.

Specimen R

-Mode of pollination (1mrk)

.....

-Adaptive features. (2mrks)

i).....

.....

ii).....

.....

Specimen S1

-Mode of pollination (1mrk)

.....

-Adaptive features (2mrks)

i).....

.....

ii).....

.....

b) Label any **four** parts on specimen R (2mrks)

c). Name the structure labeled X on specimen S1. (1mrk)

.....

.....

d).Using observable features, only state **two** differences between R and S. (2mrks)

.....

.....

.....

.....

e).With a reason, name the class of the spermatophyta to which specimen R belongs. (2mrks)

Class.....

Reason.....

.....

2. The photographs labeled R, S, T and V are of bones obtained from a mammal. Examine them. **(see the attached photographs)**

a) Identify the bones and name the part of the mammalian body from which each bone was obtained. (4mrks)

Bone	Identify	Where found
R		
S		
T		
V		

b) i). Name the joint formed between bones S and T at point marked X. (1mrk)

.....

ii) Give the characteristics of the joint named in (b) (i) above. (1mrk)

.....

.....

c). i). Name the bone structure labeled Y. (1mrk)

.....

ii). State **one** function of the bone structure named in C (i) above. (1mrk)

.....

.....

d).i). Using observable features give **two** adaptations of the bone labeled R. (2mrks)

.....

.....

.....

ii). On the bone in photograph V, draw a diagram of bone R to show the articulation between the two bones. (2mrks)

e). Name the part labeled Z in the photograph 5 and state its function. (2mrks)

Part Z.....

Function.....

.....

f). Name the joint formed by bone T with adjacent bones at its distal end. (1mrk)

.....

3. a). You are provided with a sample of food labeled P in solution form. Using the reagents provided, carry out tests on the food sample to identify the type of food substances present. (6mrks)

Food substance	Procedure	Observation	Conclusion

b). Suggest the regions of the human digestive system where the foods tested are digested. (2mrks)

.....

.....

.....

.....

.....

c). State enzyme involved in the digestion of the foods tested. (2mrks)

.....

.....

.....

d). Name the deficiency diseases of each of the food tested. (2mrks)

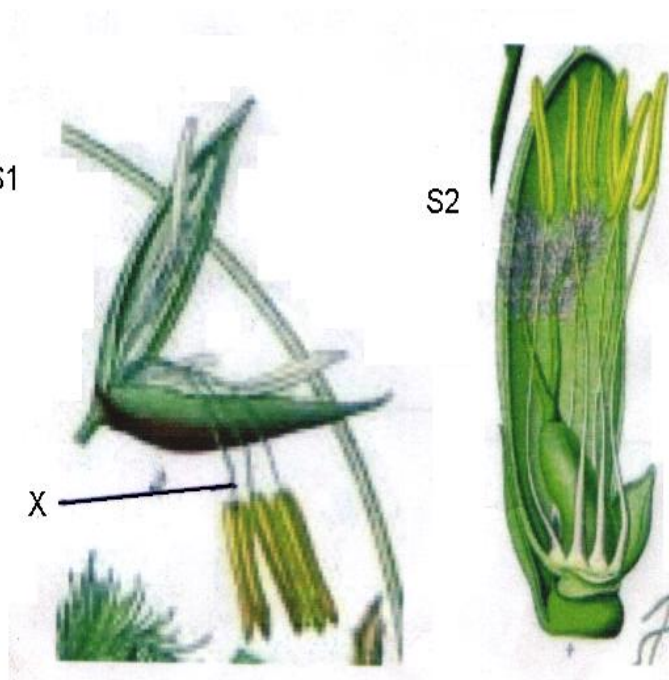
.....

.....

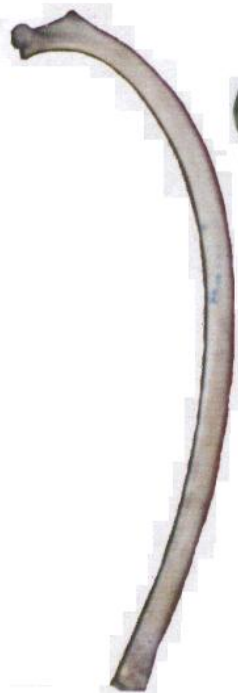
Photographs for question 1



R



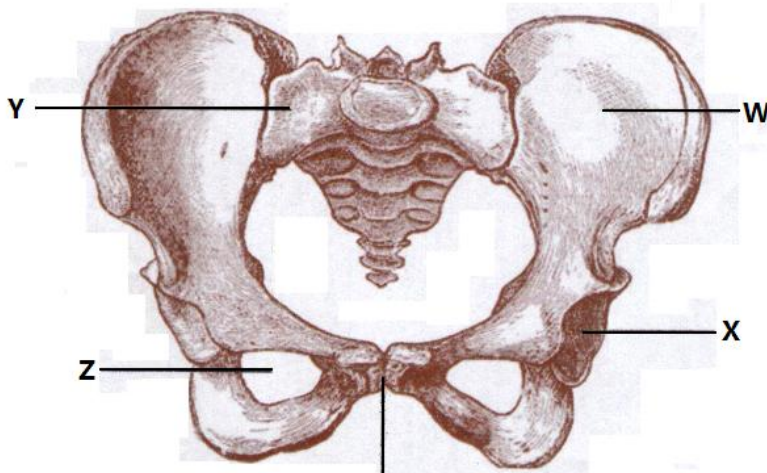
Photographs for question 2



Bone R



Bone T



Bone S



Bone V

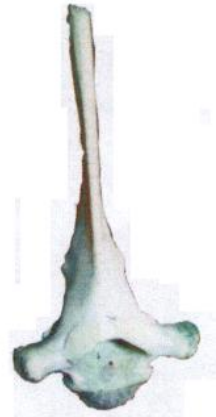
Photographs for question 2



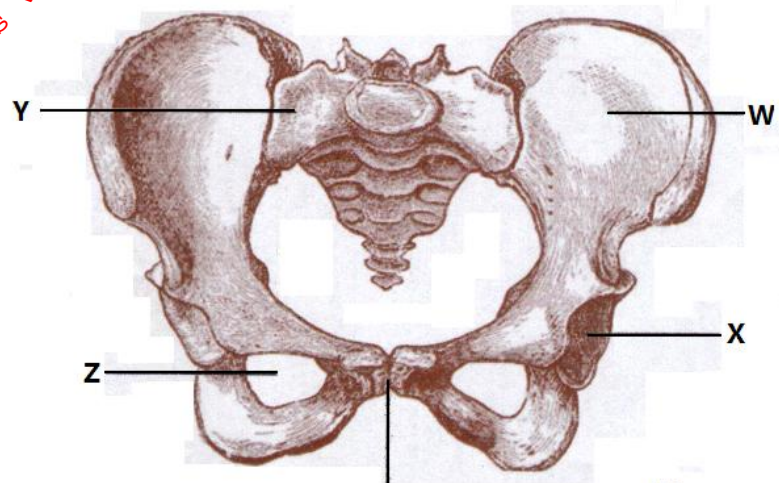
Bone R



Bone T



Bone V

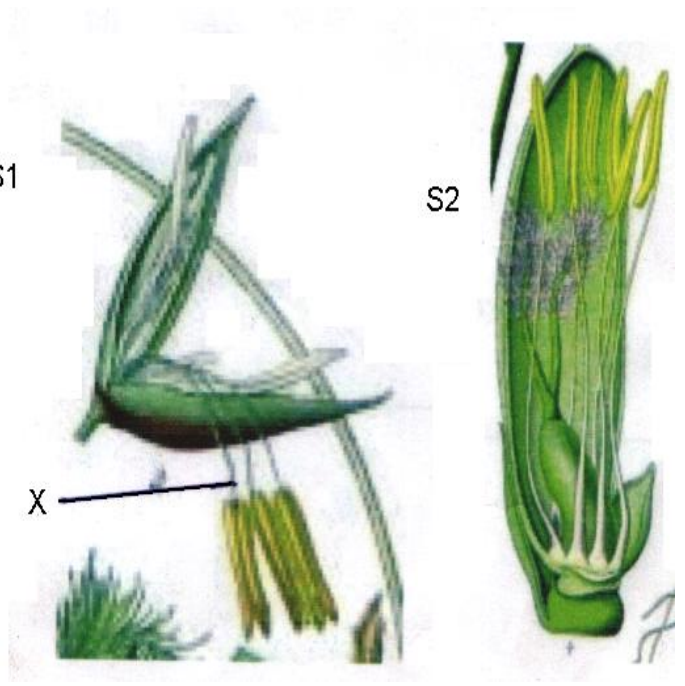


Bone S

Photographs for question 1



R



S1

S2

X