

2) Below are photographs and specimens labeled E and F which were obtained from the same animal? Examine them.



(a) With reasons identify E and F. (4 marks)

E:.....

Reason

.....

F:.....

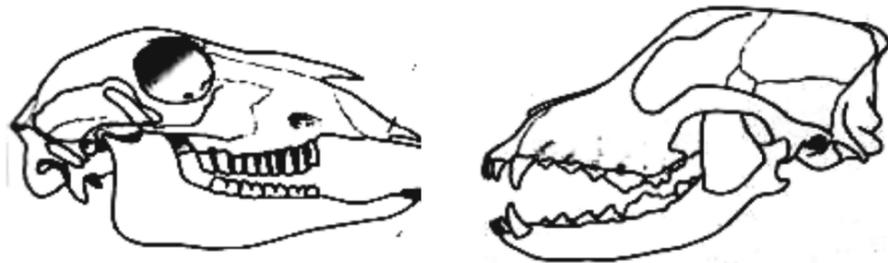
Reason

.....

(b) On a photograph E label four parts on the specimen. (4 marks)

.....  
 .....  
 .....

(c) Examine the following diagrams labeled L and M.



Suggest the diet of each of the animals whose skulls are shown in the diagram. (4 marks)

L.....

Reasons.....

M.....

Reasons.....

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

SCHOOL: ..... CANDIDATE'S SIGN.....

DATE: .....

231/3  
 BIOLOGY  
 PAPER 3  
 (Practical)  
 July/August 2014  
 1 3/4 Hours

**NAROK SOUTH SECONDARY SCHOOLS JOINT EXAMINATION**  
 Kenya Certificate of Secondary Education (K.C.S.E)  
**BIOLOGY**  
**PAPER 3**

**INSTRUCTIONS TO THE CANDIDATES**

- i) Write your **Name** and **Index number** in the spaces provided above
- ii) **Sign** and write the **Date** of Examination in the spaces provided
- iii) Answer all questions in the spaces provided in the question paper
- iv) You are required to spend the first 15 minutes of the 1 3/4 hours allowed for this paper reading the whole paper carefully before commencing your work.
- v) Additional pages must not be inserted

**FOR EXAMINERS USE ONLY**

Question	Maximum Score	Candidates Score
1	16	
2	12	
3	12	
<b>TOTAL</b>	<b>40</b>	

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

1. You are provided with a photograph of specimen X, using a cork borer; nine strips of 2cm length were made. Three strips were placed into a solution labeled Z, three other strips were placed in solution Y and the last three strips were left in a petri dish labeled W. The experiment set ups were allowed to stand for 20 minutes.



- i. What observations would be made after 20 minutes when the strips are touched?

Strips in solution Y	
Strips in solution Z	

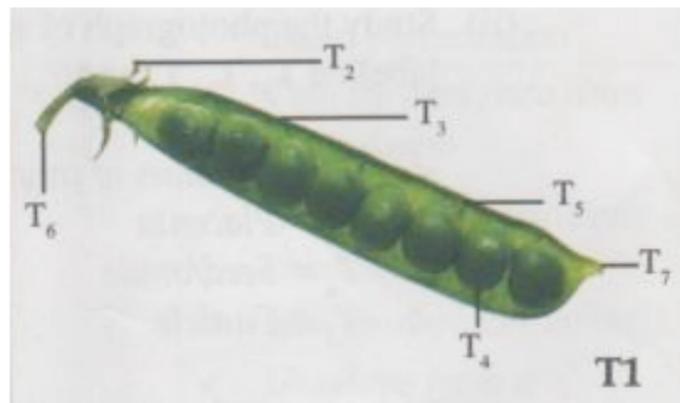
- i. Account for the observation recorded in (C)I above. (4 marks)

.....  
 .....  
 .....

- i. State the role of the setup W (1 mark)

b You are provided with.

- Specimen S<sub>1</sub>
- Specimen T<sub>1</sub>



- ii) Specimen S1 was cut longitudinally. The photograph below shows one half.

Name the parts labeled S<sub>2</sub>, S<sub>3</sub>, S<sub>4</sub>, S<sub>5</sub> and S<sub>6</sub> (5 marks)



- (iii) Study the photograph of specimen T<sub>1</sub> and name the parts labeled T<sub>2</sub>, T<sub>3</sub>, T<sub>4</sub> and T<sub>5</sub> (4 marks)

- (iv). List three differences between specimen S<sub>1</sub> and T<sub>1</sub> (3 marks)

- 2) You are provided with a solution K. Using the reagents provided only, test for the food substances present in the solution K. In the table below; (12 marks)

Food test	Procedure	Observation	Conclusion