	Index No:
C 111	

Candidate's Signature Date:

For Note R.

NYAMIRA SUB-COUNTY JOINT EVALUATION EXAM

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

231/3**Biology** Paper 3 $2\frac{1}{2}$ Hours

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided above •
- Sign and write the date of examination in the spaces provided.
- Answer *all* the questions in the spaces provided. •

Question	Maximum score	Candidate's
		score
1	17	
2	12	
3	11	
Total	40	

For Examiners Use Only

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

You are provide with specimen K. make then cross sections of the leaf stalk. Place the sections on a 1. glass slide. Using a dropper, add a drop of methylene blue to the sections. After 5 minutes, use a blotting paper to dry the sections. Examine one using a hand lens (a) Make a well labeled drawing of the section (6mks)

	(a) Make a well labeled drawing of the section	1	(6mks)			
	Sit www.fr					
	(a) Make a well labeled drawing of the section					
	(b) In the table below, state the functions of th	e parts labeled in (a) above	(6mks)			
		Function				
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
FOT NOTE FILE						
tho,						
\$ ^{0°}						
	(c) Why were the following procedures done?					
	(i) Making thin sections		(1mk)			
			•••••			
	(ii) Adding a drop of methyelene blue to th	e sections				
(d) Examine the specimen with aid of a hand lens and state the class with a reason						
	Class:		(1mk)			
	Reason		(1mk)			
2.	You are provided with specimen L, which is a	FOOD substance, and the following reag	ents:			

M(Iodine solution); N(Benedicts solution); Q(DCPIP) R(1% copper sulphate) and S(10% Sodium hydroxide) carry out tests to determine the food substances in specimen L. record your results in the table below

Food substance being	procedure	Observations	Conclusion
tested for			
Reducing sugar			
Starch			

