

**NAME:..... STREAM:.....**

**SIGNATURE:.....**

**553/2  
Biology  
Practical  
Paper 2  
2hours**

**Uganda Certificate of Education  
PRE - MOCK EXAMINATION  
BIOLOGY PRACTICAL  
PAPER 2  
2 HOURS**

**Instructions to Candidates;**

- *Answer all questions.*
- *Drawings should be made in the spaces provided.*
- *Use sharp pencils for your drawings.*
- *Work on additional sheets will not be marked.*

**FOR EXAMINER'S USE ONLY.**

<b>Question</b>	<b>Marks</b>	<b>Examiner's signature</b>
1		
2		
3		
<b>Total</b>		

1. You are provided with solution M and N. Solution M contains food nutrients. You are required to determine the food nutrients in solution M and investigate the action of solution N on M.

a) Carry out tests on solution M to identify the food nutrients. Record your tests, observations and deductions in the table below.

TESTS	OBSERVATIONS	DEDUCTIONS
i) <b>Iodine test</b>		
ii) <b>Benedict's test</b>		
iii) <b>Test for proteins</b>		
iv) <b>Vitamin C test</b>		

b) Add 1cm<sup>3</sup> of solution M to 1cm<sup>3</sup> of solution N in a test tube. Incubate in a water bath maintained at 35 – 40°C for 30minutes. After 30 minutes, remove the test tube and carry out a Benedict's test on the mixture. Record your name of test, observation and deduction in the table below. (4marks)

<b>NAME OF TEST</b>	<b>OBSERVATIONS</b>	<b>DEDUCTIONS</b>

c) Explain your results in (b) ( 1 ½ marks)

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

d) Giving a reason, suggest the identity of the active ingredient in solution N. (1½ marks)

Identity .....

Reason .....

.....

2. You are provided with specimens, **P**, **Q** and **S**. Open up **P** and **S** longitudinally

a) Giving a reason in each case, state the type of fruit each specimen is.

(6marks)

i) Specimen P

Reason .....

.....

ii) Specimen Q

Reason .....

.....

iii) Specimen S

Reason .....

.....

b) i) State the mode of dispersal for specimen P. (1mark)

.....

ii) Describe how each specimen is dispersed. (6marks)

P .....

.....

.....

Q .....

.....

.....

S .....

.....

.....

c) Draw and label a longitudinal section of P. State your magnification.  
(7marks)

3. You are provided with specimens X, Y and Z. Examine them carefully and use them to answer the following questions.

a) Identify each of the specimens giving reasons for your identity in each case.  
(4½ marks)

i) X .....

Reasons .....

.....

.....

ii) Y .....

Reasons .....

.....

.....

b) From which region of the body is each specimen obtained. (1½ marks)

X .....

Y .....

Z .....

c) State 2 adaptations of each of the specimens to its functions. (6marks)

Specimen X .....

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

Specimen Y .....

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

Specimen Z .....

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

d) Give 3 structural differences between specimen X and Y. (3marks)

X	Y
i)	
ii)	
iii)	

e) Draw and label the posterior view of specimen X in the space provided.

(5marks)

**END**