

Name.....

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P553/3

Biology practical

Paper 3

August 2023



**PEAS NETWORK MOCK EXAMINATIONS**  
**UGANDA CERTIFICATE OF EDUCATION**  
**BIOLOGY PRACTICAL**  
**PAPER 3**  
**2 HOURS**

**Instructions to candidates:**

- ❖ Answer all questions
- ❖ Drawings should be made in spaces provided.
- ❖ Use sharp pencils for your drawings.
- ❖ No additional sheets of writing paper are to be inserted in the booklet.

**FOR EXAMINERS USE ONLY.**

QUESTION	MARKS	EXAMINERS SIGNATURE
1		
2		
3		
TOTAL		

1. You are provided with solution A and B which contain food nutrients. Carry out the following tests to identify the food nutrients contained in A and B.(10 Marks)

a)

Tests	Observation	Deductions
(i)To 1cm <sup>3</sup> of A in a test tube add 2 drops of iodine solution.		
(ii)To 1 cm <sup>3</sup> of A in a test tube, add 1cm <sup>3</sup> of sodium hydroxide followed by 2 drops of copper (ii) sulphate.		
(iii)To 1 cm <sup>3</sup> of B in a test tube, add 1cm <sup>3</sup> of benedict's solution and boil.		
(iv)To 1 cm <sup>3</sup> of DCPIP in a test tube, add drop by drop of solution B until no further change.		

b) (i) state four natural sources of the food nutrients in A (2 marks)

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C) (i) state the function(s) of the food nutrients in ;( 6 marks)

(i) A

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(ii)B

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d) State two deficiency symptoms common on individuals lacking the food nutrients found in solution B (2 marks)

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2. You are provided with specimen Q and R observe the specimens and answer the questions that follow. (3 marks)

a) (i) which part of the plant were specimens Q and R obtained.

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(ii) Give three reasons for your answer in (a) (i) above.

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(b)(i) Identify specimen Q (1 mark)

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(ii) Using observable features, give three reasons for your answer in b) (i) above. (3 marks)

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(C) On the basis of identifying the features, state three functions both specimens Q and R can perform on the plants they were obtained. (6 marks)

Function 1

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Feature

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Function 2

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Feature

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Function 3

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Feature

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d) Make a well labelled drawing of specimen Q .state your magnification. (7 marks)

3. You are provided with specimen X and Y that are animals. Examine each specimen using a hand lens and answer the questions that follow.

(a)(i) State the phylum of the specimens giving reasons.

Phylum

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Reasons

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(ii) State the class of each specimen giving two reasons in each case.

Class of X

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Reasons

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Class of Y

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Reasons

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b) State the three structural differences between specimens X and Y (3 marks)

Specimen X	Specimen Y

(C) (i) specimen Y is a parasite. Using observable features, state whether it is an endo or ecto parasite (2 marks)

Reasons;

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(ii) State three ways in which specimen Y is adapted to its parasitic life. (3 marks)

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d) (i) state two roles performed by specimen X in its habitat. (2 marks)

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(ii) Cut off one hind limb of specimen X, make a drawing from femur up to the claw. Do not label. State your magnification. (4 marks)

END