

**NALUBAALE S.S NANKOMA**  
**END OF YEAR EXAMINATIONS**  
**S.5 BIOLOGY PAPER 3**

**P530/3**

**Time: 2 hours 30 minutes**

**Instructions:**

Answer **all** questions.

1. You are provided with specimen T which is freshly killed. (35 marks)

(a). Identify

(i). kingdom

(1 mark)

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Reasons.

(2 marks )

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(ii). Phylum

(1 mark)

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Reasons

(2 marks)

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(b)(i). Observe the head of specimen T and briefly describe the structures responsible for sensitivity. (3 marks )

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(ii). Pin the specimen ventral side upper most . observe the limbs of specimen T . State the structural differences between the fore and hind limbs. ( 4 marks

Hind limb	Fore limb

(iii). Draw and label the right hind limb.

(3 marks)

(d)(i). Open the abdominal cavity of specimen T . Draw and label the **visceral** structures in **situ**. (15 marks )

(ii). Outline the organs and structures in;  
left side. (4 marks )

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Right side.

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2. You are provided with solutions A and B and substance X . Carry out tests to identify food substances in A and B and the active substance in X . (15 marks )

Tests	Observations	Deductions
Iodine test	A	
Iodine test	B	
Benedict's test	A	
Benedict's test	B	
Biuret test	A	
Biuret test	B	

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(6 marks )

(b). Identify food substances in

(2 marks )

A

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B

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(C). Get 4 test tubes and add .

Test tube 1 - 1 cm<sup>3</sup> of B + 1cm<sup>3</sup> of X.

Test tube 2- 1cm<sup>3</sup> of B + 1cm<sup>3</sup> of X + 1cm<sup>3</sup> of NaOH.

Test tube 3- 1cm<sup>3</sup> of A + 1cm<sup>3</sup> of X .

Test tube 4- 1cm<sup>3</sup> of A + 1cm<sup>3</sup> of X + 1cm<sup>3</sup> of NaOH.

Incubate the 4 test tubes in warm water for 20 minutes between 35-40°C .

Then carry out the following tests.

Carry out Iodine and Benedict's tests.

Tests	observation	Deduction
Iodine test	A	
Iodine test	B	
Benedict's test	A	
Benedict's test	B	

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( 3 marks )

(ii). State the role of Active substance in X (0.5 mark)

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(iii). Identify substance X (0.5 mark)

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(d)(i). Outline the properties of X . (2 marks )

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(ii). State the factors that affect the rate of action of substance in X . (2 marks)

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**END**

**MERRY CHRISTMASS AND A HAPPY NEW YEAR 2023.**