

P535/1

PHISICS

Paper 1

23rd April 2024



TRINITY HIGH SCHOOL NYAKISI

Uganda certificate of education

S.1 PHYSICS

Paper 1

1 hour 30min

INSTRUCTIONS

- ✓ **Attempt all items in section A and any two items in section B.**
- ✓ **All items carry equal marks.**
- ✓ **Smartness earns you more scores.**

SECTION A

ITEM ONE (2)

(a) What is physics?

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(b) Give any three importance of studying physics

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(c) Give any three careers (jobs) related to physics

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ITEM TWO (2)

(a) Define the term volume and state its SI unit

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(b) John poured 40cm³ of water into a measuring cylinder and then gently lowered a stone in it which caused the volume of water to raise up to 95cm³ .

(i) Determine the volume of the stone in cm³

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(ii) What is this volume in m³?

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ITEM THREE (3)

(a) What is the difference between measurement and estimation?

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(b) State any two advantages and disadvantages of measurement over estimation.

Advantages:

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Disadvantages

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SECTION B

ITEM FOUR (04)

John has a welding workshop in wakiso district. One day the customers came in his workshop to buy windows and doors but one of the customers stepped onto a bare wire currying electricity which caused short circuit that resulted into fire outbreak and a lot of things were burnt.

It is also said that some days the customers steal materials causing John and the shop attendants to make loses.

Support material:



John is planning to set up his workshop again but this time with effective rules and regulations so that same issues does not happen again.

Task:

- (a) Help John by suggesting for him the possible rules and regulations that he can set on his workshop so that there is total safety.
- (b) Of what importance are such rules and regulations

ITEM FIVE (5)

Imagine you have your radio at home from which you heard news in the evening about the best schools in kyenjojo district and at night you switched it off and slept, but in the morning on switching it on you found your radio not working.

Support material:



Task:

Following steps of scientific investigation, show how you would carry a scientific investigation to explore the cause of the problem.

ITEM SIX (6)

The figure from (a) to (d) below illustrate applications of some branches of physics. Observe them clearly and perform the task that follows.



(a)



(b)



(c)



(d)

Task:

Identify the branches of physics indicated in figure (a) to (d) and explain them.

ITEM SEVEN (7):

Moses and Ritah have their land at home which they want to measure its area.

Moses just used his eyes and estimated the length to be 150m and the width 200m while Ritah used a stick which he estimates that it was 2m long and found out that the length was 135m and width 230m. The two were in disagreement because of the different measurements. This attracted the chairman to come with a tape measure and when he measured he found out that the length was 168.5m and width 238.2m. This caused more disagreement among the three.

Support material:

Names	Length (m)	Width (m)
Moses' measurements	150	200
Ritah's measurements	135	230
Chairman's measurements	168.5	238

Task :

- (a) Of the three people who had correct measurements and why?
- (b) Calculate the area of land obtained by Moses, Ritah and chairman.
- (c) Express the area obtained by chairman in:
 - (i) Km^2
 - (ii) Cm^2

END