

Namestream.....

S.1 TERM TWO MID TERM EXAMINATIONS 2023

PHYSICS

TIME: 1 hour 30 minutes

Instructions

Attempt all questions in this paper

Un tidy work shall not be marked

1(a) Write down any 4 branches of physics you know (04marks).

.....

.....

.....

.....

.....

(b) What is meant by the term laboratory? (01 mark)

.....

.....

.....

(c) Write down any 3 laboratory safety precautions taken while in the laboratory. (03 marks)

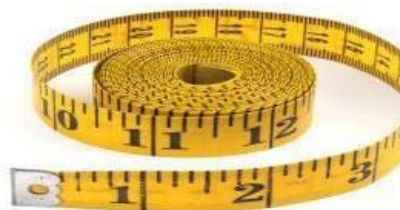
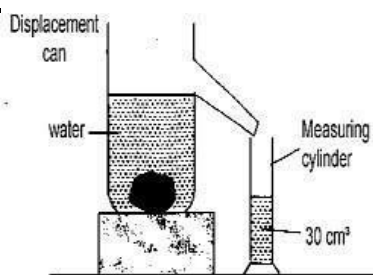
.....

.....

.....

.....

2. In a physics laboratory, there are various equipment used by teachers and students of physics to carry out experiments. Some of them are shown in the figure below.



the physics lab

(12 marks)

[illegible]

40cm and costs sh.4000. Make a budget for the administration and the total cost if the classroom has dimension of 4m by 4m.

(08 marks)

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

(i) Distinguish between a **fundamental** and **derived** physical quantity (02marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

(b) A cylindrical tin of mass 48g has a radius of 7cm and height of 4cm.

(i) Calculate the volume of the tin (03 marks)

.....

.....

.....

.....

.....

.....

(i) Density of the tin in kgm^{-3} (04 marks)

.....

.....

.....

.....

.....

.....

6. (a) Solids normally have higher density as compared to liquids however to my surprise ice floats on water. Explain why (01 mark)

.....

.....

(b) Why do you think among the three states of matter, gases have the least density? (01 mark)

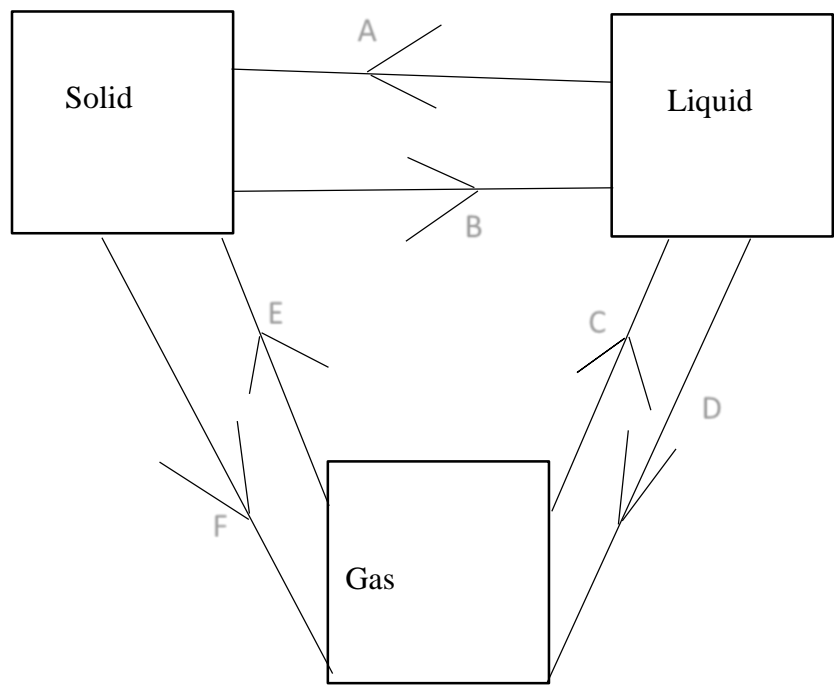
.....

.....

.....

(c) Identify the change of states below

(06 marks)



A....., B.....
C....., D.....
E..... E.....

7 (a) Express the following numbers in scientific notation

(i) 4378 (01mark)

(ii) 0.006107 (01mark)

(c) How many significant figures does each of the following measured quantities have? (04 marks)

5.72cm

0.068kg.....

137.0

920 m

(d). Convert 25 cm³ to m³(03 marks)

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

END

