

PHYSICS FORM ONE HOME PACKAGE

APRIL 2025

- 1 (a) What do you understand by the term derived quantities of measurement?
(b) Mention at least ten (10) derived quantities of measurement
- 2 (a) A volume of pure solid copper is 8.94 g/cm^3 . What volume does 5 kg of copper occupy?
(b) The volume of a brick is given as 60 cm^3 . Given that its breadth and height are 6 cm and 4 cm respectively, calculate its length.
- 3 What is meant by the density of a substance? A spring balance has a maximum reading of 10 N. A rectangular block measuring 10 cm by 3 cm by 2 cm is hung on the balance and it stretches a spring until the reading is 8 N. Calculate;
(a) The mass of the block.
(b) The density of the material making the block.
- 4 The water collected in a cylinder during an experiment using eureka can is 30 cm^3 . When the object that displaced this volume was dried and weighed, its mass was found to be 90 g. Calculate its density.