

SEPTEMBER 2023
 EBS 142P
 GENERAL PHYSICS PRACTICAL I
 45 MINUTES

Candidate's Index Number
Signature:

UNIVERSITY OF CAPE COAST
 COLLEGE OF EDUCATION STUDIES
 SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
 INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
 FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
 FIRST YEAR, SECOND SEMESTER MID-SEMESTER QUIZ, SEPTEMBER 2023

27TH SEPTEMBER 2023 GENERAL PHYSICS PRACTICAL I 5:30 PM – 6:15 PM

Answer ALL the questions.
 [20 MARKS]

- When carrying out experiments in a Physics laboratory, measurements are made of certain physical quantities. For each of the quantities listed below, mention the most appropriate instrument used for its measurement.
 - Length of a thread:
 - Diameter of a wire:
 - Time for a number of oscillations:
 - Inner diameter of a beaker:
 - Temperature of warm water:
- The time for 20 oscillations for a simple pendulum for four different lengths were recorded in an experiment as follows:

Length l/cm	Time for 20 oscillations, t/s	Period T = t/20	T ² /s ²
40	31.6		
50	39.5		
60	47.4		
70	55.2		

- a. Copy and complete the table for T and T². (6 marks)
- b. Plot a graph of T² on the vertical axis and l on the horizontal axis. (10 marks)
- c. Determine the slope of the graph (2 marks)
- d. State any **two** precautions needed to be taken in carrying out the experiment. (2 marks)