

Marking Scheme

NAME..... INDEX.....

ADM.....SCHOOL.....

SIGNATURE.....

232/ 1

PHYSICS

PAPER 1

TIME 2hrs

INSTRUCTIONS TO CANDIDATES

- ❖ write your name and your class in spaces provided
- ❖ This paper consists of two sections, section A and section B
- ❖ Answer **ALL** the questions in each section in the spaces provided.
- ❖ Mathematical tables and Electronic calculators may be used
- ❖ All working must be clearly shown where necessary.
- ❖ This paper consists of 12 printed pages

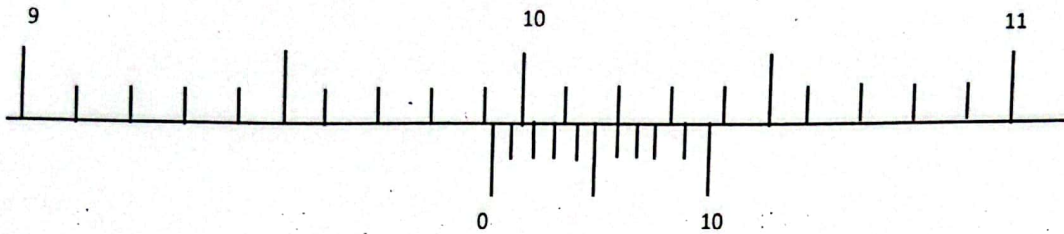
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SECTION	QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
A	1-14	25	
B	15	10	
	16	19	
	17	10	
	18	08	
	19	8	
	TOTAL		80

SECTION A [25MARKS]

Answer all questions in this section

1. The figure I below shows the reading of a Vernier calipers used to get the diameter of a cylindrical tin.



If the Vernier caliper had a negative error of 0.02 cm, what is the actual diameter of the tin? (2 marks)

$$\begin{aligned} \text{Reading} &= 9.90 \\ &+ 0.06 \\ \hline &= 9.96 \checkmark \end{aligned} \qquad \begin{aligned} \text{Diameter} &= 9.96 + 0.02 \\ &= 9.98 \text{ cm } \checkmark \end{aligned}$$

2. A body is projected vertically upwards from the top of a building. Assuming that it lands at the base of the building. Sketch the velocity time graph of the motion. (2marks)



3. When a mercury thermometer is used to measure the temperature of hot water, it is observed that the mercury level first drops before beginning to rise. Explain. (2marks)

Mercury level drops due to expansion of glass that received heat first, the level started rising as Mercury expands more than the glass

4. A uniform 120 cm metal rod is pivoted near one of its ends and kept in equilibrium by a spring balance as shown in figure 2.

