සියලුම All Rig	තිමිකම් ඇව්රිනි] [c] (hts Reserved]				
R	АМ ВАЛ	(RECALL ALL MEMORY)	10		
2 TH	අධ්නයන ෙෙ පොබාට ර General Ce IEORY	පොදු සහතික පතු (උසස් පෙළ) වි பொதுத் தராதரப் பத்திர(உயர் த ertificate of Education (Adv. Level) හොතික විදාහව I	ஸ்கை , 2023 சுலைீகீலு ர)ப் பரீட்சை, 2023 ஓசஸ்ற் Examination, August 2023		
		Physics I	Advanced Level Physics Amith Pussella		
Multiple Choice Questions					
1.					
	2 cm 	3 cm			
	Before taking a measure	ment Afte	r taking a measurement		
2.	If positions of scales, before and after taking a measurement by a Vernier Caliper having 9 units of 1mm in main scale coinciding with 10 Vernier scale units are as shown in the figure, that measurement would be equal to, (1) 14.1 cm (2) 14.3 cm (3) 1.42 cm (4) 1.41 cm (5) 1.40 cm The figure shows a part of a micrometer screw gauge, when the two jaws touch each other. The zero error of the gauge is, (1) 0.43 rnm and it should be added to the scale reading. (2) 0.43 mm and it should be subtracted from the scale reading. (3) 0.03 mm and it should be subtracted from the scale reading. (4) 0.03 mm and it should be subtracted from the scale reading. (5) 0.47 mm and it should be subtracted from the scale reading.				
3.	 Consider following statements regarding the zero error of a Vernier caliper (a) Zero error depends upon the value of the reading taken by the instrument. (b) Zero error could be removed by taking many reading for a certain measurement. (c) In order to correct a measurement, zero error should be added or substracted from the reading as suitable. 				
	 (1) Only (a) (4) Only (a) and (b) 	(2) Only (b) (5) Only (a) and (c)	(3) Only (c)		
4.	Movable jaw of a Vernier caliper	r doesn't belong,			
	(1) fixed internal jaw	(2) fixed exernal jaw			
	(3) Vernier scale	(4) main scale			
	(5) depth probe				

5.	The mass of a wire of volume 4 cm^3 is 12 g. When expressing mass of a portion of volume 1 cm^3 , using the material of this wire in kg it would be equal to,				
	(1) 3 kg	(2) $3 \times 10^3 \text{ kg}$	(3) 3 x 10 ⁻³ kg		
	(4) $\frac{1}{3} \times 10^3 \text{ kg}$	(5) 3 x 10 ⁶ kg			
6.	Consider the following facts about a micrometer screw gauge.		/		
	(a) If the scales are arranged as showns in figure (1) when the anwil and spindle are in contact, zero error should be added to the reading.		Figure (1)		
	(b) If the scales are a the anwil and sp be added to the r				
	(c) When the anwil and spindle are in contact or when the measuring object is trapped in between them, the spindle should be rotated from the ratchet head.		Figure (2)		
	True of the above,		``		
	(1) Only (a)	(2) Only (b)			
	(3) Only (c)	4) Only (a) and (c)	(5) Only (b) and (c)		
7.	In the equation given below V is the velocity, g is the acceleration due to gravity, γ is the surface tension and ρ is the density.				
		$V^2 = \frac{gA}{2\pi} + \frac{2\pi\gamma}{24}$	•		
	A has the dimensions (1) L. (2) LT	LT^{-1} (3) LT^{-1} . (4) LT^{-2} .	(5) L^2 .		
8.	Figure shows the main scale, M, and the vernier scale, V, of a measuring instrument. The least count of the instrument is (1) 0.05 mm (2) 0.10 mm (3) 0.15 mm (4) 0.20 mm (5) 0.25 mm $\frac{v}{15 \ 20 \ 25}$				
9.	The figure represents how measurement. The reading (1) 0.545 mm (2) 5.0 (3) 5.95 mm (4) 6.0 (5) 6.95 mm	a screw gauge is set to obtain a g indicated by it is, 5 mm 5 mm	5 mm 95		
10.	Consider the following statements. (A) Dimensions of pressure are ML ⁻¹ T ⁻² . (B) Dimensions of surface tension are MT ⁻² . (B) Dimensions of surface tension are MT ⁻² .				
	(1) Only A (3) Only C (5) All A, B and C	(2) Only B(4) Only A and C			