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Practice questions created by actual examiners and assessment experts

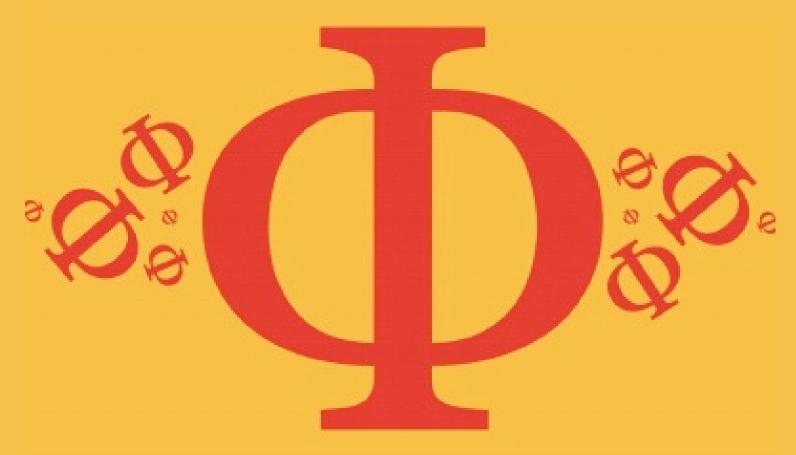
Detailed mark scheme

Suitable for all boards

Designed to test your ability and thoroughly prepare you

1.1 Measurements in Physics

Easy



PHYSICS

IB HL



1.1 Measurements in Physics

Question Paper

Course	DP IB Physics
Section	1. Measurement & Uncertainties
Topic	1.1 Measurements in Physics
Difficulty	Easy

EXAM PAPERS PRACTICE

Time allowed: 20

Score: /10

Percentage: /100



Which product-pair of metric multipliers has the greatest magnitude?

- A. pico x mega
- B. nano x kilo
- C. micro x giga
- D. milli x tera

[1 mark]

Question 2

Which of the following values is not given to 3 significant figures?

 $A.4.00 \times 10^{2}$

B. 5190

C.6230.00

D.50300



[1 mark]

Question 3

Which line in the table shows the metric multipliers in order of increasing value?

A.	μ	С	k	G	М
В.	G	Т	n	С	р
C.	k	n	М	Т	G
D.	р	n	С	G	Т



D. 0.0028935

Which of the following is not an SI base unit?		
A. volt		
B. kilogram		
C. kelvin		
D. mole		
		[1 mark]
Question 5		
What are the SI base units for frequency, f?		
A. s		
B. s ⁻¹		
C. s ⁻²		
D. s ⁻³		
		[1 mark]
Question 6 EXAM	PAPERS PRACTICE	
A physicist measured the reaction time of a p	person pushing a buzzer to be 0.00289354 s.	
Which answer gives the measurement to 4 si	ignificant figures?	
A. 0.0028		
B. 0.002893		
C. 0.003		



What are the SI base units for gravitational field strength, g	What:	are the S	lbase	units fo	gravitatio	nal field	strength, g
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A.N

 $B.ms^{-2}$

 $C.Nkg^{-1}$

D. J kg⁻¹

[1 mark]

Question 8

Some physical quantities can be measured directly, whereas others can only be estimated.

Which of the following rows in the table is correct?

	Physical Quantity	cal Quantity			Measurable or estimated			
A.	length of a football field			П	estimated			
В.	age of the universe				measurable			
C.	potential difference of a mains su	potential difference of a mains supply		estimated				
D.	speed of sound	APE	ERS	PR	measurable			

[1 mark]

Question 9

The length of a bacterium is approximately 2×10^{-6} m, and the distance from Earth to the Moon is approximately 3.8×10^{8} m.

How many orders of magnitude greater is the distance from Earth to the Moon than the length of a bacterium?

 $A.10^{2}$

B.10⁶

C.10¹⁴

D. 10²²



Cape Town is 9700 000 m from London.

What is the order of magnitude of this distance?

- A.106
- B. 10⁷
- C.108
- D.109

