

Unit 1

Physical Quantities and Measurements

Sr. No.	Questions	A	B	C	D
1	The instrument that is most suitable for measuring the thickness of a few sheets of cardboard is:	metre rule	measuring tape	Vernier Callipers	micrometer screw gauge✓
2	One femtometre is equal to:	$10^{-9} m$	$10^{-15} m$ ✓	$10^9 m$	$10^{15} m$
3	A light year is a unit of:	light	time	distance✓	speed
4	Which one is a non-physical quantity?	distance	density	colour✓	temperature
5	When using a measuring cylinder, one precaution to take is to:	check for the zero error	look at the meniscus from below the level of the water surface	take several readings by looking from more than one direction	position the eye in line with the bottom of the meniscus✓
6	Volume of water consumed by you per day is estimated in:	millilitre	litre✓	kilogram	cubic metre
7	A displacement can be used to measure:	mass of a liquid	mass of a solid	volume of a liquid	volume of a solid✓
8	Two rods with lengths 12.321 cm and 10.3 cm are placed side by side, the difference in their lengths is:	2.02 cm	2.0 cm	2 cm	2.021 cm ✓
9	Four students measure the diameter of a cylinder with Vernier Callipers. Which of the following readings is correct?	3.4 cm	3.475 cm	3.47 cm ✓	3.5 cm
10	Which of the following measures are likely to represent the thickness of a sheet of this book?	$6 \times 10^{-25} m$	$1 \times 10^{-4} m$ ✓	$1.2 \times 10^{-15} m$	$4 \times 10^{-2} m$
11	In a Vernier Callipers, ten smallest divisions of the Vernier scale are equal to nine smallest divisions of the main scale. If the smallest division of the main scale is half millimetre, the Vernier constant is equal to:	0.5 mm	0.1 mm	0.05 mm ✓	0.001 mm