

## Physical Quantities and Measurement

| Sr | Questions   | Answers Choice   |
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| 1  | In a vernier Calipers ten smallest divisions of the Vernier scale are equal to nine smallest divisions of the main scale. If the smallest divisions of the main scale is half millimeter, the Vernier constant is equal to. | A. 0.05 mm<br>B. 0.5 mm<br>C. 0.1 mm<br>D. 0.001 mm                                    |
| 2  | A light year is a unit of.  | A. Light<br>B. Time<br>C. Speed<br>D. Distance   |
| 3  | Two rods with length 12.321 m and 10.3 cm are placed side by side. the difference is their lengths is.  | A. 2.02 cm<br>B. 2 cm<br>C. 2.021 cm<br>D. 2.0 cm                                      |
| 4  | Ratio of millimeter to micrometer is  | A. 1000 m<br>B. 0.001 meter<br>C. 1000<br>D. 0.001                                     |
| 5  | Four students measure the diameter of a cylinder with vernier callipers. Which of the following readings is   | A. 3.4 cm<br>B. 3.47 cm<br>C. 3.5 cm<br>D. 3.475 cm                                    |
| 6  | One femtometre is equal to  | A. $10^{-15}$ m<br>B. $10^{15}$ m<br>C. $10^{-9}$ m<br>D. $10^9$ m                     |
| 7  | amount of substance in terms of numbers is measured in  | A. Gram<br>B. Mole<br>C. Kilogram<br>D. Newton   |
| 8  | Volume of water consumed by you per day is estimated in.  | A. Cubic metre<br>B. Litre<br>C. Millilitre<br>D. Kilogram                             |
| 9  | The Instrument that is most suitable for measuring the thickness of a few sheets on cardboard is a.   | A. Metre rule<br>B. Micrometer screw gauge<br>C. Measuring tape<br>D. Vernier calipers |
| 10 | Least count of screw gauge is 0.01 mm. If main scale reading of screw gauge is zero and third line of its circular scale coincides with datum line then the measurement on the screw gauge is.                              | A. 0.03 mm<br>B. 3 mm<br>C. 0.3 mm<br>D. 0.1 mm  |
| 11 | Micro meter can be used to measure.   | A. Current<br>B. Length<br>C. Force<br>D. Mass   |
| 12 | Which of following prefix represents largest value.   | A. Pico<br>B. Peta<br>C. Mega<br>D. Kilo   |
| 13 | The number of significant figures in 0.00650 s are  | A. 2<br>B. 3<br>C. 5<br>D. 6   |
| 14 | Which one is a non -physical quantity.  | A. Density<br>B. Colour<br>C. Time<br>D. Distance                                      |
| 15 | Which of the following numbers show 4 significant digits.   | A. 9000.8<br>B. 4<br>C. 0.001248<br>D. 5174.00   |

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| 16 | A displacement can is used to measure.                           | A. Mass of liquid<br>B. Mass of solid<br>C. Volume of a solid<br>D. Volume of a liquid  |
| 17 | The instrument best measures the internal diameter of a pipe is. | A. Screw gauge<br>B. Metre rule<br>C. Vernier caliper<br>D. Measuring tape  |
| 18 | 0.2 mm in units of meters is.                                    | A. $2 \times 10^4$ m<br>B. 0.0002 m<br>C. 0.002 m<br>D. None of these   |
| 19 | When using a measuring cylinder one precaution to take is to.    | A. Check for the zero<br>B. Position the eye in line with the bottom of the meniscus<br>C. Look at the meniscus from below the level of the water surface<br>D. Take several readings by looking from more than one direction |
| 20 | The numbers having one significant digit is.                     | A. 6.0<br>B. 1.1<br>C. $6 \times 10^2$<br>D. 7.1  |