

## CLASS-11-PHYSICS WORKSHEET-1

### UNITS AND MEASUREMENTS

1. What are fundamental and derived units?
2. Name the system of units which is internationally accepted at present .
3. Give the SI unit of measurement of Length. Also define the unit
4. The mass of a box measured by a grocer's balance is 2.300 kg. Two gold pieces of masses 20.15 g and 20.17 g are added to the box. What is (a) the total mass of the box, (b) the difference in the masses of the pieces to correct significant figures?
5. Which of the following measurements is most precise?
  - (a) 5.00 mm
  - (b) 5.00 cm
  - (c) 5.00 m
  - (d) 5.00 km.
6. Which measurement is most accurate? The mean length of an object is 5 cm. Which of the following
  - (a) 4.9 cm
  - (b) 4.805 cm
  - (c) 5.25 cm
  - (d) 5.4 cm
7. Which of the following pairs of physical quantities does not have same dimensional formula?
  - (a) Work and torque.
  - (b) Angular momentum and Planck's constant.
  - (c) Tension and surface tension.
  - (d) Impulse and linear momentum.
8. The numbers 2.745 and 2.735 on rounding off to 3 significant figures will give
  - (a) 2.75 and 2.74
  - (b) 2.74 and 2.73
  - (c) 2.75 and 2.73
  - (d) 2.74 and 2.74
9. A body accelerates at  $2 \text{ m/s}^2$ . After how many seconds will its velocity reach  $10 \text{ m/s}$ ?
  - a) 4 s

b) 20 s

c) 5 s

d) 8 s

10. In uniform motion, what is the slope of the velocity-time graph?

a) 1 m/s

b) Zero

c) Initial velocity

d) Final velocity

Answer: b) Zero