

D.  $1.0 \times 10^1$

7. The mass of a box is  $2.3 \text{ kg}$ . Two marbles of masses  $2.15 \text{ g}$  and  $12.39 \text{ g}$  are added to it. The total mass of the box to the correct number of significant figures is:

- A.  $2.340 \text{ kg}$
- B.  $2.3145 \text{ kg}$
- C.  $2.3 \text{ kg}$
- D.  $2.31 \text{ kg}$

8. The mass and volume of a body are  $4.237 \text{ g}$  and  $2.5 \text{ cm}^3$ , respectively. The density of material of the body in correct significant figures will be:

- A.  $1.6048 \text{ gcm}^{-3}$
- B.  $1.69 \text{ gcm}^{-3}$
- C.  $1.7 \text{ gcm}^{-3}$
- D.  $1.695 \text{ gcm}^{-3}$

9. The least count is  $0.01 \text{ mm}$ . Two wires of length  $L_1$  and  $L_2$  are measured and they are connected forming a single wire. Then the measurement is,

- A.  $(L_1 + L_2)m \pm 0.02 \text{ mm}$
- B.  $(L_1 - L_2)m \pm 0.02 \text{ mm}$
- C.  $(L_1 + L_2)m \pm 0.01 \text{ mm}$
- D.  $(L_1 - L_2)m \pm 0.01 \text{ mm}$

10. Precision pertains to all of the following except:

- A. Reproducibility of measurements.
- B. Agreement among numerical values.
- C. The sameness of measurements.
- D. The closeness of a measurement to an accepted value.

11. The  $[M^1L^1T^{-2}]$  is the dimensional formula of;

- A. Force
- B. Pressure
- C. Velocity
- D. Acceleration

12. The Dimension formula for relative density;

- A.  $[M^1L^1T^{-1}]$
- B.  $[M^0L^1T^{-1}]$
- C.  $[M^0L^0T^0]$