

Note:

Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer book. Cutting or filling two or more circles will result in zero mark in that question.

- 1.1** How many states of equilibrium:
- (A) 1 (B) 2
(C) 3 (D) 4
- 2** On Celsius scale, $300\text{ K} = ?$
- (A) 27°C (B) 24°C
(C) 25°C (D) 26°C
- 3** One horse power is equal to:
- (A) 746 W (B) 740 W
(C) 760 W (D) 700 W
- 4** Which one of the following unit is not a derived unit:
- (A) Pascal (B) Kilogram
(C) Newton (D) Watt
- 5** The work done will be zero when the angle between the force and the distance is:
- (A) 45° (B) 60°
(C) 90° (D) 180°
- 6** In solids heat is transferred by:
- (A) Radiation (B) Conduction
(C) Convection (D) Absorption
- 7** A body has translatory motion if it moves along a:
- (A) Straight line (B) Circle
(C) Line without rotation (D) Curved path
- 8** The number of forces that can be added by head to tail rule:
- (A) 2 (B) 3
(C) 4 (D) Any number
- 9** The orbital speed of a low orbit satellite is:
- (A) Zero (B) 8 ms^{-1}
(C) 800 ms^{-1} (D) 8000 ms^{-1}
- 10** The range of clinical thermometer is:
- (A) $20^\circ\text{C} - 42^\circ\text{C}$ (B) $25^\circ\text{C} - 42^\circ\text{C}$
(C) $30^\circ\text{C} - 42^\circ\text{C}$ (D) $35^\circ\text{C} - 42^\circ\text{C}$
- 11** Which one of the following is the smallest quantity:
- (A) 0.01 g (B) 2 mg
(C) $100\ \mu\text{g}$ (D) 8000 ng
- 12** SI unit of pressure is Pascal, which is equal to:
- (A) 10^4 Nm^{-2} (B) 1 Nm^{-2}
(C) 10^2 Nm^2 (D) 10^3 Nm^{-3}