

(Objective)

(Group-I)

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** The most sensitive balance for measuring mass of a light object is

- (A) electronic balance      (B) physical balance  
(C) beam balance              (D) lever balance

**2** According to first condition of equilibrium

- (A)  $\sum \tau = 0$                       (B)  $\sum P = 0$   
(C)  $\sum d = 0$                       (D)  $\sum F = 0$

**3** In gases, heat is mainly transferred by

- (A) molecular collision      (B) conduction  
(C) convection                (D) radiation

**4** The material with large specific heat is

- (A) copper                        (B) water  
(C) mercury                      (D) ice

**5** Normal human body temperature is

- (A)  $15^{\circ}\text{C}$                         (B)  $98.6^{\circ}\text{C}$   
(C)  $37^{\circ}\text{F}$                         (D)  $37^{\circ}\text{C}$

**6** The SI unit of stress is

- (A)  $\text{Nm}^{-1}$                         (B)  $\text{Nm}^{-2}$   
(C)  $\text{Nm}$                          (D)  $\text{N}^2\text{m}^2$

**7** The energy possessed by a body due to its motion is called

- (A) Kinetic energy              (B) Potential energy  
(C) Chemical energy            (D) Nuclear energy

**8** The equation to determine force of gravitation between two objects is

- (A)  $F = G \frac{m_1 m_2}{d}$               (B)  $F = G \frac{m_1 m_2}{d}$   
(C)  $F = G \frac{m_1 m_2}{r^2}$               (D)  $F = g \frac{m_1 m_2}{r^2}$

**9** A force of 10N is making an angle of  $30^{\circ}$  with x-axis. Its horizontal component will be

- (A) 4N                              (B) 5N  
(C) 10N                            (D) 8.7N

**10** Newton's first law of motion is valid only in the absence of

- (A) net force                      (B) force  
(C) friction                        (D) momentum

**11** The base unit is

- (A) Pascal                        (B) kilogram  
(C) Newton                      (D) watt

**12** The change in position is called

- (A) speed                         (B) velocity  
(C) displacement              (D) distance