

CHAPTER-7 | Motion

QUIZ
PART-01

1. An object is at rest if it does not change its:

- A. Shape
- B. Colour
- C. Position
- D. Mass (C)

Explanation: A body is at rest when its position does not change with respect to surroundings.

2. An object is in motion if it changes its:

- A. Position
- B. Size
- C. Temperature
- D. Density (A)

Explanation: Motion means change in position with time.

3. To describe motion, we need a:

- A. Magnet
- B. Frame of reference
- C. Thermometer
- D. Balance (B)

Explanation: Motion is defined with respect to a frame of reference.

4. Motion in a straight line is called:

- A. Rotational motion
- B. Oscillatory motion
- C. Linear motion
- D. Circular motion (C)

Explanation: Linear or rectilinear motion is motion along a straight line.

5. Motion around a fixed axis is:

- A. Linear motion
- B. Rotational motion
- C. Oscillatory motion
- D. Random motion (B)

Explanation: Rotational motion is motion about a fixed axis.

6. To and fro motion about a fixed point is:

- A. Linear motion
- B. Rotational motion
- C. Oscillatory motion
- D. Circular motion (C)

Explanation: Oscillatory motion is repeated to and fro motion.

7. Which is a scalar quantity?

- A. Displacement
- B. Force
- C. Velocity
- D. Distance (D)

Explanation: Distance has only magnitude, so it is scalar.

8. Distance is the:

- A. Shortest path
- B. Actual path length
- C. Directed path
- D. Final position only (B)

Explanation: Distance is the actual length of the path covered.

9. Displacement is the:

- A. Actual path length
- B. Total path covered
- C. Shortest distance between initial and final position
- D. Circular path only (C)

Explanation: Displacement is the shortest path from initial to final position in a given direction.

10. After one complete round in a circular path, displacement is:

- A. 0
- B. πr
- C. $2\pi r$
- D. $2r$ (A)

Explanation: On completing a full circle, initial and final positions are the same, so displacement is zero.