

CHAPTER-7 | Motion

QUIZ
PART-04

1. A distance-time graph for a body at rest is:
A. Vertical line
B. Curve
C. Line parallel to time axis
D. Zig-zag line (C)

Explanation: For a body at rest, distance does not change with time.

2. In a distance-time graph, uniform speed is shown by a:
A. Curve
B. Straight line
C. Circle
D. Vertical line (B)

Explanation: Equal distances in equal intervals give a straight line.

3. In a distance-time graph, non-uniform speed is shown by a:
A. Straight line
B. Curve
C. Horizontal line
D. Point only (B)

Explanation: Unequal distances in equal intervals produce a curve.

4. In a velocity-time graph, time is taken on the:
A. Vertical axis
B. Horizontal axis
C. Origin only
D. Slope only (B)

Explanation: Time is plotted on the horizontal axis.

5. In a velocity-time graph, velocity is taken on the:
A. Horizontal axis
B. Time axis
C. Vertical axis
D. Origin only (C)

Explanation: Velocity is plotted on the vertical axis.

6. For uniform velocity, the velocity-time graph is:
A. A curve
B. Parallel to x-axis
C. Vertical line
D. Parallel to y-axis (B)

Explanation: Uniform velocity remains constant with time.

7. Area under a velocity-time graph gives:
A. Speed
B. Acceleration
C. Distance or displacement
D. Time only (C)

Explanation: Area under v-t graph gives the magnitude of displacement.

8. If velocity increases uniformly with time, the velocity-time graph is a:
A. Horizontal line
B. Sloping straight line upward
C. Curve downward
D. Vertical line (B)

Explanation: Uniform increase in velocity gives a straight rising line.

9. If velocity decreases uniformly with time, the velocity-time graph is a:
A. Sloping straight line downward
B. Horizontal line
C. Upward curve
D. Circle (A)

Explanation: Uniform decrease in velocity gives a straight falling line.

10. In the assessment graph, a cyclist moving at constant 20 m/s has acceleration:
A. 0 m/s^2
B. 5 m/s^2
C. 10 m/s^2
D. 20 m/s^2 (A)

Explanation: Constant velocity means no change in velocity, so acceleration is zero.