

CHAPTER-7 | Motion

QUIZ
PART-02

1. Speed is the distance travelled in:

- A. Unit mass
- B. Unit area
- C. Unit time
- D. Unit force (C)

Explanation: Speed tells how much distance is covered in unit time

2. SI unit of speed is:

- A. m/s
- B. m/s^2
- C. km/h
- D. m^2/s (A)

Explanation: The SI unit of speed is metre per second

3. Speed is a:

- A. Vector quantity
- B. Scalar quantity
- C. Force
- D. Displacement (B)

Explanation: Speed has only magnitude, so it is a scalar quantity

4. Uniform speed means covering:

- A. Equal distance in equal intervals of time
- B. Unequal distance in equal intervals of time
- C. Equal distance in unequal intervals of time
- D. Zero distance always (A)

Explanation: In uniform speed, the object covers equal distances in equal times

5. Falling of an apple is an example of:

- A. Uniform speed
- B. Instantaneous speed
- C. Non-uniform speed
- D. Zero speed (C)

Explanation: A falling apple covers unequal distances in equal intervals of time

6. Speed at a particular instant is called:

- A. Average speed
- B. Uniform speed
- C. Instantaneous speed
- D. Relative speed (C)

Explanation: Speed measured at a specific instant is instantaneous speed.

7. Average speed is:

- A. Total time total distance
- B. Total distance total time
- C. Final speed - initial speed
- D. Total distance x total time (B)

Explanation: Average speed equals total distance travelled divided by total time taken

8. If a body moves with speeds v_1, v_2, v_3 for equal times, average speed is:

- A. $v_1 + v_2 + v_3$
- B. $(v_1 + v_2 + v_3) / 2$
- C. $(v_1 + v_2 + v_3) / 3$
- D. $v_1 v_2 v_3$ (C)

Explanation: For equal time intervals, average speed is the arithmetic mean of the speeds

9. To convert m/s into km/h, we multiply by:

- A. 5/18
- B. 18/5
- C. 1000
- D. 3600 (B)

Explanation: Multiply m/s by 18/5 to get km/h.

10. A car travels 400 km in 8 h. Its average speed is:

- A. 40 km/h
- B. 50 km/h
- C. 60 km/h
- D. 70 km/h (B)

Explanation: Average speed = $400/8 = 50$ km/h.