

## QUIZEN – Motion (9P01)

<b>Learning Level 1</b>	<b>Learning Level 2</b>	<b>Learning Level 3</b>
Q - Remembering (knowledge-based questions) U - Understanding (comprehension-based questions)	I - Applying (application-based questions) Z - Analyzing (analysis-based questions)	E - Evaluating (evaluation-based questions) N - Creating (creation-based questions)

### Learning Level 1

1. Define motion.
2. What is the SI unit of distance?
3. State the first equation of motion.
4. What is the difference between speed and velocity?
5. Draw a distance-time graph for an object moving with constant speed.

### Learning Level 2

6. A car travels a distance of 60 km in 2 hours. Calculate its average speed.
7. A cyclist covers a distance of 24 km in 3 hours. Calculate his average speed.
8. A ball is thrown upwards from a height of 10 m with an initial velocity of 20 m/s. How long will it take to reach the ground?
9. A train starts from rest and attains a speed of 54 km/h in 15 seconds. Calculate its acceleration.
10. A car is moving along a straight line with a constant acceleration of  $2 \text{ m/s}^2$ . If its initial velocity is 10 m/s, what is its velocity after 5 seconds?

### Learning Level 3

11. How is uniform circular motion different from linear motion?
12. A car is moving along a straight road with a speed of 36 km/h. It suddenly applies brakes and comes to rest after 10 seconds. Calculate its deceleration.
13. A ball is thrown upwards from the top of a building with an initial velocity of 20 m/s. It reaches a maximum height of 100 m above the ground. Calculate the time taken by the ball to reach the maximum height and the total time taken to hit the ground.
14. Explain the difference between distance and displacement.
15. A train starts from rest and attains a speed of 72 km/h in 20 seconds. Calculate its acceleration and the distance covered during this time.



**Learning Level 3**

Create  
Curve