QUIZEN – Motion CCP01

Learning Level 1	***Learning Level 2***	***Learning Level 3***
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 distance, displacement, speed, and velocity.
2. State the difference between speed and velocity.
3. A car travels 100 m in 20 seconds. Calculate its speed.
4. What is the SI unit of velocity?
5. A train travels a distance of 10 km in 20 minutes. Calculate its speed in m/s.

Learning Level 2:

1. A cyclist covers a distance of 30 km in 2 hours. Calculate his average speed.
2. A car travels at a constant speed of 50 km/h for 4 hours. What distance does it cover?
3. A car is moving at a speed of 30 m/s. It comes to a halt after covering a distance of 200 m. Calculate the time taken by the car to come to rest.
4. Define acceleration. How is it related to velocity?
5. A car accelerates uniformly from rest to a speed of 60 km/h in 10 seconds. Calculate its acceleration.

1. A particle is moving with uniform acceleration. Its initial velocity is 10 m/s and its final velocity is 30 m/s. If it covers a distance of 100 m in the process, find the acceleration of the particle.

2. A car is moving with a velocity of 20 m/s. It accelerates uniformly and covers a distance of 100 m in 5 seconds. Find its final velocity.

3. A body is thrown vertically upwards with an initial velocity of 20 m/s. Calculate the maximum height attained by the body. Take g = 10 m/s^2.

4. A train starts from rest and accelerates uniformly at the rate of 2 m/s^2 for 100 seconds. It then moves with a constant speed for 300 seconds and finally decelerates uniformly at the rate of 4 m/s^2 to come to a stop. Calculate the total distance covered by the train.

5. A car moves at a speed of 30 m/s. It comes to a stop within a distance of 500 m. Find the retardation of the car.