Class : IX
Subject: Physics Assignment
Chapter: Motion

1. Explain whether the walls of a room are at rest or in motion.

2. Distinguish between scalar and vector quantities. Give examples.

3. The school of a boy from his home is 2 km to the east. When he reaches back home, he says that he had traveled 4 km distance but his displacement is zero. Justify your answer.

4. Under what condition, the average speed is equal to the magnitude of the average velocity.

5. Can the average speed of a moving body be zero? Justify.

6. Can the average velocity of a moving body be zero? State examples.

7. A car covers a distance of 3 km in 20 mins. Find the velocity of the car in (a) km/min (b) m/s (c) m/min (d) km/hr.

8. A train is moving with a velocity of 50km/hr. calculate the distance traveled by it in 1 hr, 1 min, 1 second.

9. An object P is moving with a constant velocity for 10 mins. Another object Q is moving with changing velocity for 10 mins. Out of these two objects, which one has acceleration? Explain.

10. Can an object be accelerated if it is moving with constant speed? If yes, explain giving examples.

11. (i) When do you say that an object has positive acceleration?
    (ii) When do you say that an object has negative acceleration?

12. Name the 2 physical quantities which can be obtained from velocity-time graph.

13. An electric train is moving with a velocity of 150km/hr. how much distance will it cover in 80 sec?

14. Give differences between straight line motion and circular motion.