

CHAPTER -7 MOTION

CLASS – 9TH

Q.No-1-: Distinguish between speed and velocity ? (2Marks)

Q.No-2-: An object has moved through a distance. Can it have zero displacement? If yes, support your answer with an example ? (2Marks)

Q.No-3-: Write all three equations of motion ? (2Marks)

Q.No-4-: Starting from a stationary position, Rahul paddles his bicycle to attain a velocity of 6 m s^{-1} in 30 s. Then he applies brakes such that the velocity of the bicycle comes down to 4 m s^{-1} in the next 5 s. Calculate the acceleration of the bicycle in both the cases ? (3Marks)

Q.No-5-: A car accelerates uniformly from 18 km h^{-1} to 36 km h^{-1} in 5 s. Calculate (i) the acceleration and (ii) the distance covered by the car in that time ? (3Marks)

Q.No-6-: A train is travelling at a speed of 90 km h^{-1} . Brakes are applied so as to produce a uniform acceleration of -0.5 m s^{-2} . Find how far the train will go before it is brought to rest ? (3Marks)

Q.No-7-: Joseph jogs from one end A to the other end B of a straight 300 m road in 2 minutes 30 seconds and then turns around and jogs 100 m back to point C in another 1 minute. What are Joseph's average speeds and velocities in jogging (a) from A to B and (b) from A to C ? (5Marks)