**MOUNT LITERA ZEE SCHOOL, HARIDWAR**

 **Session- 2018-19**

**Subject**- Science **Revision Worksheet-1**

 **Topic**- Motion **Class-9** **Date :**

**Q-1** A cyclist covers a distance of 6 km in 10 minutes. Calculate his speed in:

(i) centimeter per sec (ii) meter per second (iii) kilometer per hour

**Q-2** A bus was moving with a speed of 54 km/h. On applying brakes it stopped in 8 seconds. Calculate the acceleration.

**Q-3** A body travels a distance from A to B its physical quantity is measured to be -15m/s. Is it speed or velocity? Give reason for the answer.

**Q-4** A car accelerates uniformly from 20km/h to 35km/h in 5s. Calculate (i) the acceleration and (ii) the distance covered by the car in that time.

**Q-5** An athletes runs on a circular tracks, whose radius is 50 m with a constant speed. It takes 50 m with a constant speed. It takes 50 seconds to reach point B from starting point A. Find

(i) the distance covered

(ii the displacement

(iii) the speed

**Q-6** Derive the equation for velocity time relation by graphical method.

**Q-8 Draw a velocity time graph to show the following motion :**

A car accelerates uniformly from rest for 5 s, then it travels at a steady velocity for 5 s.

**Q-9** What is uniform circular motion. Give some examples of it. Name the force which brings about uniform circular motion.

Q-10 A car is moving on a straight road with a uniform acceleration. The speed of the car varies with time as follows:

Time(s) : 0 2 4 6 8 10

Speed(m/s) : 4 8 12 16 20 24

Draw the speed time graph by choosing a convenient scale. From this graph :

(i) Calculate the acceleration of the car

(ii) Calculate the distance travelled by the car in 10 seconds.