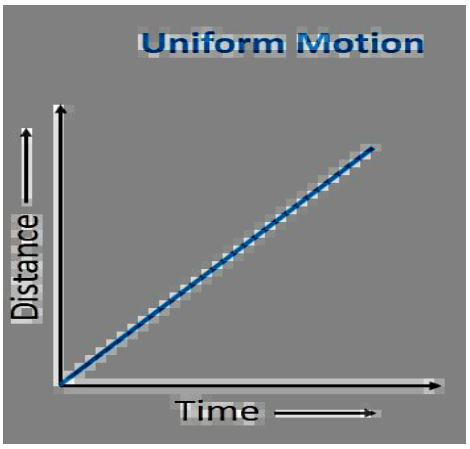
Uniform and Non-Uniform Motion

Uniform Motion:

This type of motion is defined as the motion of an object in which the object travels in a straight line, and its velocity remains constant along that line as it covers equal distances in equal intervals of time, irrespective of the duration of the time.



If a body is involved in rectilinear motion and the motion is consistent, then the acceleration of the body must be zero.

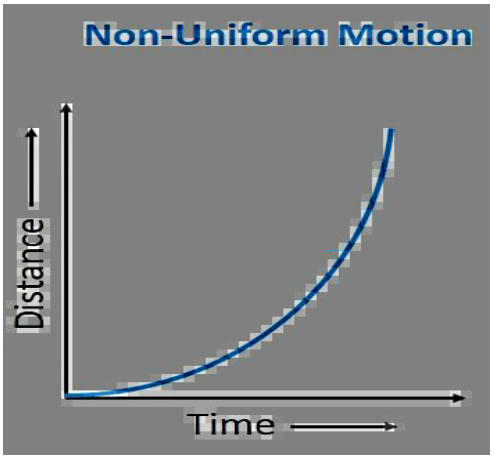
Example of Uniform Motion:

- If the speed of a car is 10 m/s, it means that the car covers 10 meters in one second. The speed is constant every second.
- Movement of blades of a ceiling fan.

Uniform and Non-Uniform Motion

Non Uniform Motion:

This type of motion is defined as the motion of an object in which the object travels with varied speed and it does not cover the same distance in equal time intervals, irrespective of the time interval duration.



If a body is involved in rectilinear motion, and if the motion is not consistent, then the acceleration of the body must be non-zero.

Example of Non Uniform Motion:

- If a car covers 10 meters in the first two seconds and 15 meters in the next two seconds.
- The motion of a train

Note:-

Now, people usually get confused between uniform motion and uniform acceleration. In the later phenomena, the object has a constant acceleration in rectilinear motion, which means the object has a different speed every second, which clearly defines that motion, is changing.