ODM EDUCATIONAL GROUP
Changing your Tomorrow

MOTION

CHAPTER NO.8

SUB: PHYSICS

MOTION

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LEARNING OBJECTIVE

Students will be able to

Define uniform circular motion

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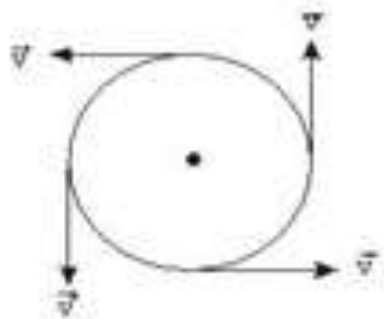
Uniform circular motion

When an object moves in a circular path at a constant speed then motion of the object is called **uniform circular motion**.

In our everyday life, we came across many examples of circular motion for example cars going round the circular track and many more. Also earth and other planets revolve around the sun in a roughly circular orbits

If the speed of motion is constant for a particle moving in a circular motion still the particles accelerates because of constantly changing direction of the velocity.



If an object moves in a circular path with uniform speed, its motion is called **uniform circular motion**

- Here in circular motion, we use angular velocity in place of velocity we used while studying linear motion. Force which is needed to make body travel in a circular path is called **centripetal force.**
- One thing we must keep in mind is that uniform linear motion is not accelerated but uniform circular motion is **accelerated motion**.
- Examples of uniform circular motion are
  (a) Motion of artificial satellites around the earth
  (b) Moon, the natural satellite of earth, moves in uniform circular motion round the earth.
  (c) Cyclist moving on a circular track with a constant speed exhibits uniform circular motion.

HOME ASSIGNMENT

What is circular motion ?

What is uniform circular motion?

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