

Motion and Measurement of Distances

Q1. Explain different types of motion. Write few example of each.

Ans. Types of motion:

Rectilinear motion – Motion along a straight path is called rectilinear motion. Example - motion of a vehicle on a straight road, march-past of soldiers in a parade or the falling of a stone.

Circular or Rotational motion – Motion along a curved path is called circular or rotational motion. Example: The motion of a point marked on the blade of an electric fan or the hands of a clock, moving wheel of a moving car.

Periodic motion – Motion that repeats after equal time interval is called periodic motion. Example: Motion of a pendulum, a branch of a tree moving to and fro, motion of a child on a swing, strings of a guitar or the surface of drums (tabla) being played.

Q2. What type of motion do the following objects have?

- i. the galloping of a horse – Linear motion/Rectilinear motion
- ii. the needle of sewing machine – Periodic motion
- iii. child sitting in a moving giant wheel – Circular and Periodic motion
- iv. surface of a drum being played - Periodic motion
- v. an artificial satellite orbiting the Earth at a constant height -
Circular motion
- vi. soldiers in a march past - Linear motion/Rectilinear motion