Type of Motion

1. Translatory Motion

The motion in which a body moves as a whole and every point on it moves the same distance is called **translatory motion**. Example: The motion of a car or that of a falling apple is called translatory motion.

Translatory motion is of three types:

(a) Linear motion: The moment of a body along the straight line is called **linear motion** leader motion is also called **rectilinear motion**. Example: The motion of a car along a straight road, etc.

(b) Curvilinear motion: The moment of a body along a curved part is called **curvilinear motion**. Example: The motion of a car along a curved road, etc.

(c) Random motion: The translator emotion of a body which keeps on changing its direction in a disorderly manner is called **random motion**. Example: Motion of an ant, etc.

2. Rotatory (or Rotational) Motion

The motion of body in which every particle on it moves along a circular path about a fixed axis is called **rotatory motion**. Example: motion of spinning top, etc.

3. Rolling Motion

The motion in which a body undergoes both translatory as well as rotatory motions is called **rolling motion.** Example- the motion of a bicycle wheel, etc.

4. Periodic Motion

The motion which repeats itself at a regular interval of time is called **periodic motion**. Example: motion of the moon around the earth, etc.

Type of Motion

5. Oscillatory and Vibratory Motions

The to- and -fro motion of a body along the same path is called **oscillatory motion.** Example- motion of the pendulum of a wall clock, etc.

Small and rapid oscillations are called **vibrations**. Small and rapid to- and – fro movement of a body or a part of it from its mean position is called vibratory motion. **Vibratory motion** produces sound.