

VIDYA BHAVAN, BALIKA VIDYAPEETH
SHAKTI UTTHAN ASHRAM, LAKHISARAI, PIN:-811311

SUBJECT:- PHYSICS

CLASS:- IXTH

DATE:-11/04/XXI

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 1. (MOTION)(BASED ON NCERT PATTERN)

Motion:- Movement of any object from one position to another position with respect to the observer is called as Motion.

Motion Along a Straight Line:- When an object moves along a straight line, the motion of the object is called rectilinear motion. For example; motion of a car on highway.

Vectors and Scalar Quantities:

- **Vector** is a quantity which has both magnitude and direction. For example, Force, position, etc.
- **Scalar** is a quantity with which direction is not associated. For example, Mass, temperature, time, etc.

Distance:- Length of path covered by a moving an object in the given time irrespective of the direction is called distance.

- It is a scalar quantity.
- Its SI unit is metre(m).

Displacement::- The shortest distance measured from initial to the final position of an object is known as the displacement.

- It is a vector quantity.

Uniform Motion: When an object covers equal distances in equal intervals of time, it is said to be in uniform motion.

Non-Uniform Motion:- When an object covers unequal distances in equal intervals of time, it is said to be in non-uniform motion.