

## **CLASS-7**

### **SUBJECT-PHYSICS**

#### **TOPIC-MOTION.**

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#### **(ANSWERS)**

##### **A.1) Rectilinear motion.**

4) An electric drill has both translatory and rotatory motion because as the drill rotates, its bit moves into the wood.

##### **5) Oscillatory motion.**

6) Revolution of earth around the Sun, motion of the needle of sewing machine etc. are the examples of periodic motion but they are not the examples of oscillatory motion as they do not move in to and fro direction where as the motion of a pendulum, the motion of a swing etc. are the examples of oscillatory motion which are also the examples of periodic motion.

7) It is the kind of motion in which a body covers equal distances in equal intervals of time.

**B.1) Rest and motion are relative terms. There is nothing like absolute rest. An object can be at rest and also in motion at the same time. Example all objects which are stationary on earth are said to be at rest with respect to each other, but with respect to Sun are making revolution that is they are in motion.**

##### **2)The factors are:-**

a)The distance of the body from a reference point.

b) The direction of motion of the body.

c) The time of motion.

3) In oscillatory motion the entire body moves to and fro about the mean position but in vibratory motion a part of a body undergoes oscillatory motion and remaining body stays at rest.

4) (1) Rectilinear

(2) curvilinear

(3) rotatory

(4) vibratory

(5) oscillatory

(6) rotatory

(7) oscillatory

9) Difference between mass and weight

( See page no.23).

D.1) rest

2) motion

3) rotatory

4) periodic

5) rotatory

6) translatory and rotatory

7) vibratory

8) distance

9) zero

10) velocity

E. 1) Rest--an object is said to be at rest, if it does not change its position with respect to the stationary surroundings, with the passage of time.

2) Motion—an object is said to be in motion if it changes its position with respect to the stationary surroundings, with the passage of time.

3) Speed—it is defined as the ratio of the distance travelled by a body to the time taken to do so.

5) Uniform motion --it is the kind of motion in which a body covers equal distances in equal intervals of time.

6) Non Uniform motion—it is the kind of motion in which a body covers unequal distances in equal intervals of time.

F. 1) false

2) true

3) false

4) false

5) false

6) false

7) false

I.1) rest

2) motion

3) translatory

4) rectilinear.

5) oscillatory.

6) periodic.

7) second pendulum.

H. 1) rectilinear.

- 2) periodic.
- 3) oscillatory.
- 4) rotatory.
- 5) periodic.
- 6) oscillatory.
- 7) oscillatory.
- 8) rectilinear.
- 9) curvilinear.
- 10) rotatory.

