

**CLASS-IX PHYSICS**  
**MOTION**

**Assignment-1**

**MULTIPLE CHOICE QUESTION - 1.1**

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1. A body whose position with respect to surrounding does not change, is said to be in a state of :  
(A) Rest                      (B) Motion                      (C) Vibration                      (D) Oscillation
2. In case of a moving body :  
(A) Displacement  $>$  Distance                      (B) Displacement  $<$  Distance  
(C) Displacement  $\geq$  Distance                      (D) Displacement  $\leq$  Distance
3. Vector quantities are those which have :  
(A) Only direction                      (B) Only Magnitude  
(C) Magnitude and direction both                      (D) None of these
4. What is true about scalar quantities ?  
(A) Scalars quantities have direction also.                      (B) Scalars can be added arithmetically.  
(C) There are special law to add scalars.                      (D) Scalars have special method to represent.
5. A body is said to be in motion if :  
(A) Its position with respect to surrounding objects remains same  
(B) Its position with respect to surrounding objects keep on changing  
(C) Both (A) and (B)  
(D) Neither (A) nor (B)
6. A distance is always :  
(A) shortest length between two points                      (B) path covered by an object between two points  
(C) product of length and time                      (D) none of the above
7. A displacement :  
(A) is always positive                      (B) is always negative  
(C) may be positive as well as negative                      (D) is neither positive nor negative
8. Examples of vector quantities are :  
(A) velocity, length and mass                      (B) speed, length and mass  
(C) time, displacement and mass                      (D) velocity, displacement and force
9. Which of the following is not characteristic of displacement ?  
(A) It is always positive.  
(B) Is has both magnitude and direction.  
(C) It can be zero.  
(D) Its magnitude is less than or equal the actual path length of the object.
10. S.I. unit of displacement is :

- (A) m                      (B)  $\text{ms}^{-1}$                       (C)  $\text{ms}^{-2}$                       (D) None of these
11. Which of the following is not a vector ?  
(A) Speed                      (B) Velocity                      (C) Weight                      (D) Acceleration
12. Time is an example of :  
(A) Scalar    (B) Vector  
(C) Scalar or vector    (D) Neither scalar nor vector
13. In five minutes distance between a pole and a car changes progressively. What is true about the car ?  
(A) Car is at rest    (B) Car is in motion  
(C) Nothing can be said with this information                      (D) None of the above
14. A distance :  
(A) Is always positive    (B) Is always negative  
(C) May be positive as well as negative                      (D) Is neither positive nor negative

#### SUBJECTIVE QUESTION - 1.2

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1. Is absolute rest possible ?
2. Are distance and displacement equal in magnitude ?
3. Is distance a vector quantity ?
4. Define scalar quantity and give two examples.
5. Define rest and motion and give two examples of each.
6. A runner running along a circle, runs the circle completely. What is his displacement ? What distance has he run ?
7. Distinguish between rest and motion.
8. Write difference between distance and displacement.
9. Can a body be at rest and motion at the same time ? Explain.
10. When do we say that body is at rest and when do we say that it is moving ? Explain.
11. Give two examples to explain that motion is relative.