1. When a body spins, the body is in

   (a) rectilinear motion (b) revolutionary motion

   (c) rotatory motion (d) periodic motion.

2. When a body covers equal distance in equal interval of time, then it is said to be in

   (a) average speed (b) speed

   (c) uniform motion (d) non-uniform motion.

3. If a simple pendulum completes 40 oscillations in 10 seconds, then the time taken by one complete oscillation is

   (a) 0.2 second (b) 0.25 second (c) 2 seconds (d) 1 second.

4. Which of the following is not matched correctly?

   (a) Anemometer : Wind speed (b) Speedometer : Speed

   (c) Odometer : Odour (d) Stopwatch : Time

5. A train leaves a station X at 5:00 pm and reaches to another station Y at 9 pm speed is $90 km/h$? What is the distance between X and Y?

   (a) 480km (b) 630km (c) 800km (d) 360 km

6. The speed of a bus is 50 km/h whereas the speed of a car is 20 m/s . Which one of these is moving faster?

   (a) Bus (b) Car

   (c) Both with same speed (d) Data insufficient

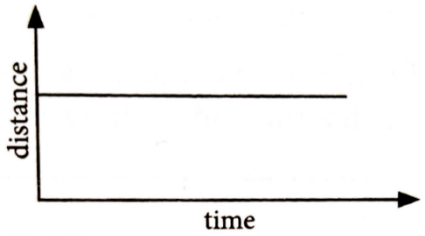
7. The given graph shows that the object is

   (a) in non-uniform motion

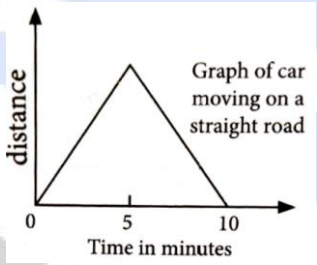
   (b) in uniform motion

   (c) at rest

   (d) in an oscillatory motion.



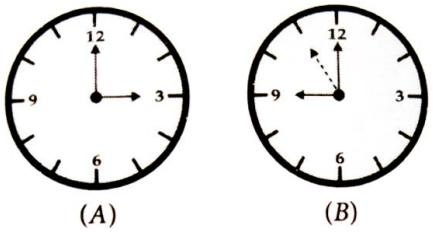
8. According to the following graph, what happens to the speed covered by the body from 0-10 minutes?



   (a) It goes on increasing. (b) It goes on decreasing.

   (c) It first increases and then decreases. (d) It first decreases and then increases.

9. Two clocks A and B are shown in figure. Clock A has an hour and a minute hand, whereas clock B has an hour hand, minute hand as well as a second hand. Which of the following statement is correct for these clocks?



(a) A time interval of 30 seconds can be measured by clock A.
(b) A time interval of 30 seconds cannot be measured by clock B.
(c) Time interval of 5 minutes can be measured by both A and B.
(d) Time interval of 4 minutes 10 seconds can be measured by clock A.

10. A bus travels 54 km in 90 minutes. The speed of the bus is

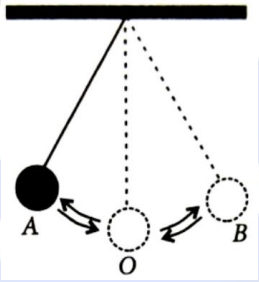
(a) $0.6\,m/s$ (b) $10\,m/s$ (c) $5.4\,m/s$ (d) $3.6\,m/s$

11. If we denote speed by S, distance by D and time by T, the relationship between these quantities is

(a) $S = D \times T$ (b) $T = \frac{S}{D}$ (c) $S = \frac{1}{T} \times D$ (d) $S = \frac{T}{D}$

12. Observe the given figure.

The time period of a simple pendulum is the time taken by it to travel from



(a) A to B and back to A. (b) O to A, A to B and B to A.
(c) B to A, A to B and B to O. (d) A to B.

Assertion-Reason Codes:

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(b) If both Assertion and Reason are true and Reason is not the correct explanation of Assertion.
(c) If Assertion is true but Reason is false.
(d) If both Assertion and Reason are false.

13. Assertion: In uniform motion, a body covers equal distances in equal interval of time.
Reason: Displacement is directly proportional to velocity.

14. Assertion: Speedometer records the speed of the vehicle generally in km/h.
Reason: Odometer measures the distance moved by the vehicle in one hour.

15. Assertion: The distance moved by an object in unit time is called its speed.
Reason: Faster vehicles have higher speeds.

16. Assertion: The time taken by the pendulum to complete one oscillation is called time period of pendulum.
Reason: The time period of the pendulum depends on the mass of the bob.