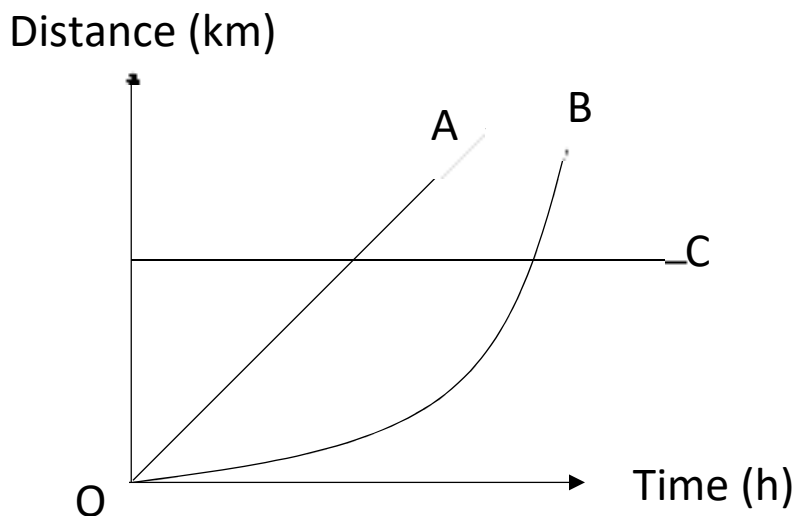


Chapter-3

Worksheet-2

Section 1

- Q1. Briefly explain how will decide which object is moving fast and which one is moving slow.
- Q2. If you did not have a clock, how would you decide what time of the day is?
- Q3. Determine the number of seconds there in a week.
- Q4. Name the different types of graphs. Explain each of them briefly.
- Q5. Differentiate between a uniform and non-uniform motion
- Q6. Briefly mention how many types of motion are there.
- Q7. Express your age in seconds.
- Q8. The following distance-time graph of three objects (A, B and C) are given. What can you say about the motion of the objects?



- Q9. Draw a distance time graph using the following data.

| Odometer Reading | Time |
|-------------------------|-------------|
| 45620 | 10:00 AM |
| 45640 | 10:30 AM |
| 45660 | 11:00 AM |
| 45680 | 11:30 AM |
| 45700 | 12:00 PM |
| 45720 | 12:30 PM |

Q10. How can we increase speed keeping distance constant?

Section 2

Q11. What is the relation between distance and speed?

- a) Distance = Speed \times Time
- b) Distance = Speed/Time
- c) Distance = Time/Speed
- d) None of the above

Q12. How will you convert the speed given in km/h to m/s?

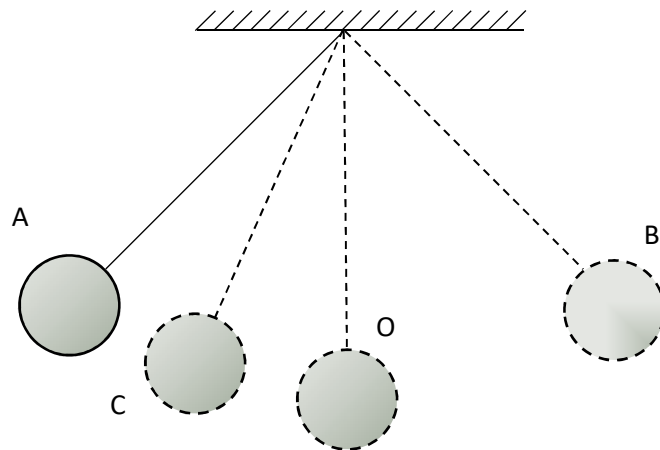
- a) By multiplying with 5/16
- b) By multiplying with 6/5
- c) By multiplying with 18/5
- d) By multiplying with 5/18

Q13. Which one records the distance travelled by a vehicle?

- a) Speedometer
- b) Manometer
- c) RPM meter

d) Odometer

Q14. Time taken by the bob to move from A to C is t_1 and from C to O is t_2 . The time period of this simple pendulum is



- a) $(t_1 + t_2)$
- b) $2(t_1 + t_2)$
- c) $3(t_1 + t_2)$
- d) $4(t_1 + t_2)$

Q15. With what speed should a car travel so that it can cover a distance of 10 km in 10 min?

- a) 1 kmph
- b) 5 kmph
- c) 12 kmph
- d) 60 kmph

Q16. Which of the following is the most suitable device for measuring the time the runners take in a 100 m marathon?

- a) Hourglass
- b) Stopwatch
- c) Pendulum
- d) Sun dial

Q17. Which of the following is given incorrectly?

- a) Speedometer: Speed
- b) Odometer: Odour
- c) Anemometer: Wind speed
- d) Stopwatch: Time

Q18. A person is seated in a train under motion. With reference to which of the following surroundings is he at rest?

- a) Person watching him from the front seat
- b) Person watching him from the ground
- c) Trees on the ground
- d) A car moving in the opposite direction to the train

Q19. In a 100 m race Sana and Arundhati ran at an average speed of 6.5 ms^{-1} and 15.5 ms^{-1}

respectively. If 12 seconds is the time taken in school records for 100 metre race, then which of the following can be true?

- a) Sana broke the record
- b) Arundhati broke the record
- c) Both Sana and Arundhati broke the record

d) Neither Sana nor Arundhati broke the record.

Q20. Melissa takes 20 minutes to reach his school with a speed of 4 ms^{-1} .

How far is his school from home?

- a) 3.6 km
- b) 4.8 km
- c) 4 km
- d) 3.4 km