## ACBSE Coaching for Mathematics and Science

## Class 07 Average speed distance and time Practice Paper - 1

- 1. Average height of a group of 8 students is 152 cm. Two more students of heights 144 cm and 155 cm joined the group. What will be the new average height of the group? Ans: 151.5 cm.
- 2. Average height of a group of 10 students is 160 cm. Three students of heights 140 cm, 142 cm and 155 cm left the group. What will be the new average height of the group?
- 3. A cricketer scored 25, 30, 12, 0, 0, 8, 55, 98, 1 15, 0, 20 in 11 innings in a season. What was his average score for the season?
- 4. Average height of 15 students of class 6 is 140 cm and average height of 10 students of class 7 is 145cm. What is the average height of the students of both the classes?
- 5. The numbers on five houses next to each other add up to 105. What are those five numbers?
- 6. In a 600 km trip, Aman's driving speed was 50 km/h for the two-third of the trip. If he completes the trip in 10 hours, find his driving speed for the rest of the journey.

  Ans: 100 km/h.
- 7. Mukesh's average driving speed of 4 hour journey was 60 km per hour. During the first 3 hours ofjourney, he drove at 55 km/h. What was his actual speed for the last hours?
- 8. A train running at a steady speed of 90 km/h. If the train was 250 m long, find:
- a) the time taken by the train to cross a signal. b) the time taken by the train to cross a 300 m long tunnel.
- 9. A train passes a 500 m long bridge in 26 s and another 350 m long bridge in 21 s. If the train is running at a uniform speed, find the speed of the train in km/h.
- 10. is driving his car at a speed of 42 km/h. Find the distance covered by him in 42 min.
- 11. A car travels first 100 km in 2—hours and next 30 km in hour. What is its average speed?
- 12. In a 1200 km journey, a man's driving speed was 60 km/h for the last ath of the journey. If he completed his journey in 17 hours, find his driving speed for the first th of the journey.
- 13. David's average driving speed for 5 hours journey was 55 km/h. During his first two hours Ofjourney, he drove at 60 km/h, and last two hours he drove at 50 km/h. What was his speed for the fifth hour of the journey?
- 14. A train 300 m long is travelling at 85 km/h. Find the time taken by it: (a) to cross a signal. (b) to go past the platform 500 m long.
- 15. A train passes 300 m long platform in 30 s and it crosses a signal on the station in 12 s. Find: (a) the speed of the train in km/h. (b) the length of the train.

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## Class 07 Average speed distance and time Practice Paper - 2

- 1. A train is running at a speed of 65 km/h on the track and a small car on the road is running at a speed of 47 km/h. How long will the train take to pass the car if the train is 300 m long and both are running in the same direction?
- 2. The speed of a boat in still water is 9 km/h and the speed of a stream is 2 km/h. Find the time taken by the boat to go: a) 14 km upstreamb) 1 1 km downstream
- 3. A driver leaves a city at 6 a.m. and another driver leaves the city from the same place at 1 1 a.m. in the same direction. If the average speed of the first driver was 55 km/h and the second driver was 62 km/h, find the time at which they will be together.
- 4. Two trains of lengths 300 m and 250 m are moving. Each train has a speed of 85 km/h and moving in the opposite direction. How long will it take them to pass each other?
- 5. Two bikers are 50 km apart. They start at the same time and drive towards each other. One biker travels at 55 km/h and another at 65 km/h. After how long will they meet?
- 6. The average monthly income of 6 members in a family is æl 7000. The average monthly income of 4 of them is t 15250. If the monthly income of 5th person is 07000, find the monthly income of the 6th person.
- 7. The average weight of a person in a group is 60 kg. If the total weight of persons of the group is 720 kg, find the number of persons in the group.
- 8. A car covers first 100 km of his journey at 50 km/h, next 50 km at 4() km/h and last 75 km in 1  $\frac{1}{4}$  hr . Find the average speed of the whole journey.
- 9. A boy leaves his home at 8:45 a.m. and walks to school 1.25 km away. He arrives at school at 9:20 a.m. What is his average speed?
- 10. A train passes through a tunnel 600 m long. A guard observed that it remains in the tunnel for a minute. If the train is 250 m long, calculate the speed of the train.
- 11. A jogger runs at the speed of 8 km/h and takes rest for half an hour at the end of every 3 km. How long will it take the jogger to cover 12 km?
- 12. The distance between two cities is 6()0 km. A train leaves from one city for another at the speed of 80 km/h and another train leaves the other city for the city at the speed of 7() km/h. If both trains start simultaneously at 6 a.m., when and where will both the trains meet?
- 13. The speed of a boat in still water is 8 km/h. If the boat covers a distance of 15.5 km downstream in  $1\frac{1}{2}$  hours, find the speed of the current.
- 14. Riya leaves her house to go to her friend's house. She walks at 4 km/h. At the same time, her friend Siya leaves her house for Riya's house and walks at 3 knvh. If they live 21 km apart, how long will it take to meet Riya and Siya on the way?
- 15. Ajay's driving speed for a 6 hour trip was 65 km/h. During his journey, for first 4 hours, he drove 60 km/h. What was his speed for the last 2 hours of the trip?