

## VISION IAS

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## TIME, SPEED AND DISTANCE-2\_CSAT\_QUESTIONS

A farmer travelled a distance of 61 km in 9 1. hours. He travelled partly on foot at the rate 4 kmph and partly on bicycle at the rate 9 kmph. The distance travelled on foot is:

(A) 16 km

(B) 14 km

(C) 17 km

(D) 15 km

2. Two girls move in opposite directions, one from A to B and other from B to A. The girl from A reaches the destination in 16 hrs and girl from B reaches her destination in 25 hrs, after having met. If former's speed is 25 km/hr, then what will be the speed of latter?

(A) 30 km/hr

(B) 31.25 km/hr

(C) 20 km/hr

(D) 31.5 km/hr

3. P and Q starting simultaneously from two different places proceed towards each other at a speed of 20 km/hour and 30 km/hour respectively. By the time they meet each other, Q has covered 36 km more than that of P. Then find the distance (in km) between the two places.

(A) 144

(B) 162

(C) 180

(D) 108

4. Buses start from a bus terminal with a speed of 20 km/hr at intervals of 10 minutes. What is the speed of a man coming from the opposite direction towards the bus terminal if he meets the buses at intervals of 8 minutes?

(A) 3 km/hr

(B) 4 km/hr

(C) 5 km/hr

(D) 7 km/hr

5. A driver of an auto rickshaw sees a scooter 60 meters ahead of him. After 30 seconds the scooter is 90 meters behind. If the speed of the auto rickshaw is 38 kmph, then what the speed the scooter?

(A) 30 km/hr

(B) 15 km/hr

(C) 20 km/hr

(D) 25 km/hr

6. One car starts from Rewari to Jaipur and at the same time another car starts from Jaipur to Rewari. They both arrive at their destination after 16 hours and 9 hours respectively after meeting each other. If the speed of the first car is 240 kilometers per hour, then find the speed of the second car.

(A) 320 km/hr

(B) 160 km/hr

(C) 200 km/hr

(D) 180 km/hr

7. The speed of a car increases by 5 kilometers after every hour. If the distance covered in the first hour is 40 km, then what was the total distance covered in 10 hours?

(A) 480 km

(B) 625 km

(C) 600 km

(D) 500 km

Kamal, Ajit and Rahul run around a circular track of length 3600 m with respective speeds of 72, 108 and 144 km/h. If they started at the same time from the same point and run in the same direction, then when will they all meet for the first time?

(A) 2 min

(B) 6 min

(C) 8 min

(D) 4 min

A bus driving in the morning fog passes a boy 9. walking at 5 km/h in the same direction. The boy can see the bus for 6 min and visibility is upto a distance of 800 m, then what is the speed of bus?

(A) 10 kmph

(B) 15 kmph

(C) 18 kmph

(D) 13 kmph

10. Two trains of equal length are running on parallel lines in the same direction at the rate of 46 km/hr and 36 km/hr. The faster train passes the slower train in 36 seconds. What is the length of each train?

(A) 50 m

(B) 72 m

(C) 80 m

(D) 82 m



- Malwa express of length 100 m runs at a speed of 60 km/hr. What will be the time taken to cross a platform of 150 meters long?
  - (A) 15 sec

(B) 18 sec

(C) 10 sec

(D) 12 sec

- 12. A train meets with an accident and moves at 3/4 of its original speed. Due to this, it is 30 minutes late. Find the original time for the journey beyond the point of accident.
  - (A) 90 minutes

(B) 60 minutes

(C) 75 minutes

(D) 120 minutes

A train covers a distance in 60 min, if it runs 13. at a speed of 60 kmph on an average. What will be the speed at which the train must run to reduce the time of journey to 20 min?

(A) 120 km/hr

(B) 150 km/hr

(C) 160 km/hr

(D) 180 km/hr

14. A passenger train takes two hours less for a journey of 300 km, if its speed is increased by 5 km/hr from its normal speed. The normal speed is:

(A) 30 km/hr

(B) 50 km/hr

(C) 25 km/hr

(D) 45 km/hr

**15.** A train travelling with uniform speed crosses two bridges of lengths 400 m and 250 m in 36 seconds and 30 seconds respectively. Then find the speed of the train.

(A) 90 km/hr

(B) 80 km/hr

(C) 45 km/hr

(D) 75 km/hr

Two trains can cross a pole in 5 sec and 7 sec 16. respectively whose speed are in the ratio 11: 23 respectively, then find in how much time will they cross each other if they are coming from same direction.

(A) 18 sec

(B) 25 sec

(C) 24 sec

(D) 20 sec

**17.** Points 'A' and 'B' are 70 km apart on a highway. A car starts from 'A' and another from 'B' at the same time. If they travel in the same direction, they meet in 7 hours, but if they travel towards each-other, they meet in one hour. Find the speed of the two cars (in km/hr).

(A) 20, 30

(B) 40, 30

(C) 30, 50

(D) 20, 40

18. A moving train, 66 m long, overtakes another train of 88 m long, moving in the same direction in 0.168 minutes. If the second train is moving at 30 km/hr, at what speed is the first train moving?

(A) 85 km/hr

(B) 50 km/hr

(C) 55 km/hr

(D) 25 km/hr

19. Two trains start at the same time from Aligarh and Delhi and proceed towards each other at the rate of 14 km and 21 km per hour respectively. When they meet, it is found that one train has travelled 70 km more than the other. The distance between two stations is:

(A) 350 km

(B) 210 km

(C) 300 km

(D) 140 km

20. Two trains of length 137 m and 163 m are running with speed of 42 km/hr and 48 km/hr respectively towards each other on parallel tracks. In how many seconds, will they cross each other?

(A) 30 sec

(B) 24 sec

(C) 12 sec

(D) 10 sec

A train passes two persons walking in the same direction at a speed of 3 km/hour and 5 km/ hour respectively in 10 seconds and 11 seconds respectively, then the speed of the train is:

(A) 28 km/hour

(B) 27 km/hour

(C) 25 km/hour

(D) 24 km/hour

22. A train, with a uniform speed, crosses a platform, 162 metres long, in 18 seconds and another platform, 120 metres long, in 15 seconds. The speed of the train is:

(A) 14 km/hr

(B) 42 km/hr

(C) 50.4 km/hr

(D) 67.2 km/hr

23. Two trains A and B are 110 km apart on a straight line. One train starts from A at 7 a.m. and travels towards B at 20km/h. Another train starts from B at 8 a.m. and travels towards A at a speed of 25km/h. At what time will they meet?

(A) 11:30 a.m

(B) 10 a.m

(C) 11 a.m

(D) 10:30 a.m



- 24. Two trains starting at the same time from 2 stations 200 km apart and going in opposite direction cross each other at a distance of 110 km from one of the stations. What is the ratio of their speeds?
  - (A) 11:9
- (B) 13:9
- (C) 5:3
- (D) 10:9
- 25. A man standing on a platform finds that a train takes 3 seconds to pass him and another train of the same length moving in the opposite direction, takes 4 seconds. The time taken by the trains to pass each other will be:
  - (A) 2  $\frac{3}{7}$  seconds
- (B)  $3 \frac{3}{7}$  seconds
- (C) 4  $\frac{3}{7}$  seconds (D) 5  $\frac{3}{7}$  seconds

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