

TIME AND DISTANCE

1. Two places P and Q are 150 km apart. A train leaves P for Q at the same time another train leaves from Q for P. Both the trains meet 5 hrs after they start moving. If the train travelling from P travels 10 kmph faster than the other train, what is the speed of faster train?

- (a) 25 kmph (b) 20 kmph (c) 5 kmph (d) 10 kmph (e) None

2. Khalid left for Kanpur from Aligarh at 9:30 am. He travelled at the speed of 60 kmph for 2 hrs 15 min. After that the speed was reduced to 40 kmph. If the distance between the two cities is 285 km, at what time did Khalid reach?

- (a) 3:30 pm (b) 3:00 pm (c) 2:30 pm (d) 4:00 pm (e) None

3. A monkey tries to ascend a pole, 21 m in length. He ascends 3 meters in first minute and slips down 2 meter in alternate minutes. If he continues to ascend in this fashion, how long will he take to reach to the top?

- (a) 36 min (b) 37 min (c) 42 min (d) 40 min (e) None

4. A thief is spotted by a policeman from a distance of 65 meters. When police starts the chase, the thief also starts running. If the speed of thief is 10 m/s and speed of policeman is 12.5 m/s, how far will have the thief run before he is overtaken?

- (a) 130 m (b) 260 m (c) 26 m (d) 13 m (e) None

5. A car covers the first 150 km in 3 hr, the next 100 km in 5 hr and the remaining 60 km in 2 hr. What is the average speed of the car?

- (a) 31 km/h (b) 33 km/h (c) 36 km/h (d) 39 km/h (e) None

6. The average speed of the car is $1\frac{4}{5}$ times the average speed of a bus. A tractor covers 575 km in 23 hr. How much distance will the car cover in 4 hr if the speed of the bus is twice speed of the tractor?

- (a) 340 km (b) 480 km (c) 360 km (d) 450 km (e) None

7. A train starts with the speed of 40 km/h with its speed increasing every hour by 10 km/h. In how many hours will it cover 185 km?

- (a) $3\frac{1}{8}$ hr (b) $3\frac{1}{4}$ hr (c) $3\frac{1}{2}$ hr (d) $3\frac{5}{6}$ hr (e) None

8. A certain distance is covered at a certain speed. If the double the distance is covered in $\frac{3}{4}$ of the time, the ratio of the two speeds is:

- (a) 3 : 8 (b) 3 : 5 (c) 1 : 4 (d) 4 : 5 (e) None

9. Two men starting from the same place walk at the rate of 5 km/h and 5.6 km/h, respectively. What time will they take to be 3 km apart, if they walk in same direction?

- (a) 3 hr (b) 4 hr (c) 5 hr (d) 6 hr (e) None

10. A walks 3 km/h and 4 hr after his start, B cycles after him at 5 km/h. How far from the start does B catch up with A?

- (a) 30 km (b) 34 km (c) 36 km (d) 38 km (e) None

11. Two car start from A and B respectively and travel towards each other at a speed of 50 km/h and 75 km/h, respectively. By the time they meet, the second car has travelled 40 km more than the first. The distance between A and B is:

- (a) 170 km (b) 180 km (c) 190 km (d) 200 km (e)None

12. A train starts from A to B and another from B to A at the same time. After crossing each other they complete their journey in $3\frac{1}{2}$ and $2\frac{4}{7}$ hrs respectively. If the speed of the first is 60 km/h, then find the speed of the second train.

- (a) 65 km/h (b) 50 km/h (c) 70 km/h (d) 75 km/h (e)None

13. If a person goes around an square shaped field at speed of 10, 20, 30 and 40 kmph on the first, second, third and fourth side respectively and reaches back to the starting point, then find his average speed during the journey.

- (a) 21.8 km/h (b) 25 km/h (c) 19.2 km/h (d) 22.2 km/h (e)None

14. A boy walking at $\frac{3}{5}$ of his usual speed, reaches his school 14 min late. Find his usual time to reach the school.

- (a) 15 min (b) 7 min (c) 28 min (d) 21 min (e)None

15. Starting with the speed of 30 km/h the speed of a car is increased by 4 km/h in every 2 hrs. How many hrs will it take to cover a distance of 288 km?

- (a) 4 (b) 6 (c) 12 (d) 8 (e)None

16. There are 20 poles with a constant distance between each pole. A car takes 24 sec to reach the 12th pole. How much time will it take to reach the last pole?

- (a) 25.25 sec (b) 17.45 sec (c) 35.75 sec (d)41.45sec (e)None

17. A man is walking with the speed of 10 km/h. After every km, he takes rest for 5 min. How much time will be taken to cover a distance of 5 km?

- (a) 48 min (b) 50 min (c) 45 min (d) 55 min (e)None

18. On a journey across Bombay, a tourist bus averages 10 km/h for 20% of the distance, 30 km/h for 60% of it and 20 km/h for the remainder. The average speed for the whole journey was:

- (a) 10 km/h (b) 30 km/h (c) 5 km/h (d) 20 km/h (e)None

19. Without stoppages, a train travels certain distance with an average speed of 80 km/h, and with stoppages, it covers the same distance with an average speed of 60 km/h. How many minutes per hour the train stops?

20.Rohit and Mohit starts at same time from A to B. After reaching their destination they turned to their starting point and they met 1st time at 15 km from B. if the difference between their speed is 60 km/hr, then find the speed of faster if A & B are 60 km apart ?

- (a)160km/hr (b)150km/hr (c)135km/hr (d)90km/hr (e)None of these