**Time, Speed and Distance**

Q1 : In travelling a certain distance, one person takes 20 minutes more than the other in covering the same distance. If their speeds are in the ratio 5:3, find the time taken by the slower person to cover the distance?

a. 20 mins b. 50 mins c. 30 mins d. Cannot be Determined

Q2 : A person starts from point A and is moving at 25 m/sec. After 4 seconds, B starts in the same direction at a speed of X m/sec. If B overtakes A 14 seconds after he started, find the ratio of the speeds of B to A?

a. 7:3 b. 5:3 c. 5:1 d. 7:5

Q3 : A Train travelling at 72 kmph overtakes a man standing on a platform in 10 seconds. How much more time would be required if the man is moving in the same direction as the Train at 18 kmph?

a. 3.33 sec b. 13.33 sec c. 15 sec d. 6.66 sec

Q4 : A man has to cover a distance of 360 km in 30 kmph. Everyday, he reaches his destination at 6pm. One day, he started 2 hours late but still reached at 6pm. By what % did he increase the speed of his journey?

a. 6% b. 20% c. 36% d. 10%

Q5 : A man is moving inside a train in the same direction as the train. The speed of the train is 54 kmph while the speed of the man is 5 m/sec. When he is exactly in the middle of the 250 m long train, another train 200 m long coming from the opposite direction passes him in 5 seconds. Find the speed of the 2nd train in kmph?

a. 72 kmph b. 54 kmph c. 18 kmph d. 36 kmph

Q6 : A train starts from A to B at 6 am and reaches it’s destination at 3 pm. One day, it met with an accident after covering 40% of the distance from A to B. After the accident, it travelled at half of it’s normal speed. How many minutes late will the train reach B?

a. 3 hrs 24 min b. 5 hrs 24 min c. 6 hrs 30 min d. 5 hrs 30 min

Q7 : 2 people A and B start from the opposite ends of a Corridor. They first meet 45 m from one of the ends. They continue their journey reach the other end and turn back. If they now meet 25 m from the other end, find the length of the corridor?

a. 70 m b. 90 m c. 110 m d. None of These

Q8 : 2 people start from the opposite ends of a swimming pool towards each other. If they take 25 seconds and 36 seconds respectively to reach the other end after they cross each other which among the following can represent the ratio of their speeds?

a. 25:36 b. 4:5 c. 6:5 d. 9:8

Q9 : 2 Trains start from A and B and move towards B and A respectively. Train from A starts at 5 am and reaches B at 3 pm while the train from B starts at 8 am and reaches A at 2 pm. At what time will the 2 trains meet?

a. 21/8 hrs after 8 am

b. 3 hrs after 8 am

c. 3.5 hrs after 8 am

d. None of These

Q10 : A person covers a journey in 3 parts. One third of the journey is covered at 20 kmph, half of the remaining distance at 30 kmph and the remaining distance is travelled at 40 kmph. Find the average speed of the journey?

a. 40 kmph b. 360/11 c. 35 kmph d. 360/13

Q11 : A man takes 5 hrs and 45 mins in walking to a certain place and riding back. He would have gained 2 hours by riding both ways. The time he would take to walk both ways is

a. 3 hrs 45 min b. 7 hrs 30 min c. 7 hrs 45 min d. 11 hrs 45 min

Q12 : A Train 150 m long passes a km stone in 15 seconds and another train of the same length travelling in the opposite direction in 8 seconds. Find the speed of the second train?

a. 60 kmph b. 66 kmph c. 72 kmph d. 99 kmph

Q13 : Two trains running in the opposite directions cross a man standing on a platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is?

a. 1:3 b. 3:2 c. 3:4 d. None of These

Q14 : A boat goes 2 km against the current in 1 hr and along the current in 10 minutes. How long will it take to go 7 km in stationary water?

a. 40 minutes b. 60 minutes c. 75 minutes d. 90 minutes

Q15 : A man can row at 5 kmph in still water. If the speed of the stream is 1 kmph and it takes 1 hour to row to a place and come back, how far is the place?

a. 2.4 km b. 2.5 km c. 3 km d. 3.6 km

Q16 : A boat covers 24 km upstream and 36 km downstream in 6 hours while it covers 36 km upstream and 24 km downstream in 6.5 hrs. The speed of the stream is

a. 1 kmph b. 1.5 kmph c. 2 kmph d. 2.5 kmph

Q17 : A boat running downstream covers a distance of 16 km in 2 hours while for covering the same distance upstream, it takes 4 hours. What is the speed of the boat in still water?

a. 4 kmph b. 6 kmph c. 8 kmph d. Data Inadequate

Q18 : 2 cyclists start from the same place in the opposite direction. One goes towards north at 18 kmph while the other goes towards south at 20 kmph. What time will they be 47.5 km apart?

a. 1 hr 15 min b. 2 hr 15 min c. 2 hr 23 min d. 2 hr 30 min

Q19 : Two trains start from P and Q respectively and travel toward each other at a speed of 50 kmph and 40 kmph respectively. When they meet, the 1st train has travelled 100 km more than the second train. The distance between P and Q is

a. 500 km b. 630 km c. 660 km d. 900 km

Q20 : A is twice as fast as B and B is twice as fast as C. The journey covered by C in 56 minutes will be covered by A in

a. 18 min b. 27 min c. 14 min d. 9 min

Q21 : The speed of a man increases by 14.28% as compared to his normal speed. If he is covering the same distance, by what % does the time taken decrease?

a. 14.28% b. 12.5% c. 15% d. 17.5%

Q22 : 2 people start from the opposite ends of a road 100 m long at speeds of 15 m/sec and 10 m/sec respectively. When they meet for the 5th time, what is the total distance covered by the slower person?

a. 540 m b. 240 m c. 180 m d. 360 m

Q23 : If the upstream speed of a man in a boat is 40% of the downstream speed and the man covers 18 km upstream in 3 hours, how much distance will the man cover in 5 hours while travelling downstream?

a. 75 Km b. 54 Km c. 60 Km d. 45 Km

Q24 : A man is going upstream in a boat such that the speed upstream is 5 kmph while the speed of the stream is 2 kmph. At a particular point the man passes a log of wood moving in the opposite direction. After going upstream for 5 hours, he turns back to reach the log. After how much time since passing the log will the man be able to reach it again?

a. 7 hrs b. 4 hrs c. 5 hrs d. 8 hrs

Q25 : A can beat B by 12 m or 3 seconds in a 100 m race. Running at the same speed, how much time can A finish a 200 m race?

a. 44 sec b. 22 sec c. 11 sec d. 15 sec

Q26 : 2 people A and B are running a km race. A runs at the speed of 54 kmph for the first 40 seconds and then increases his speed by 20%. B runs at a speed of 72 kmph for 30 seconds and decreases his speed by 10%. What is the difference between the time taken by A and B to finish the race?

a. 20 sec b. 10 sec c. 15 sec d. 30 sec

Q27 : 2 people A and B start at the same point of a 400 m circular track at speeds of 40 m/sec and 25 m/sec and move in the same direction. After how much time since the start will they meet for the first time?

a. 20 sec b. 35 sec c. 26.66 sec d. None of These

Q28 : 2 people are running a race of 5000 m around a circular track of 500 m . If their speeds are 50 m/sec and 20 m/sec. and they are moving in the opposite direction, how many times will they meet during the race?

a. 35 b. 10 c. 14 d. 20

Q29 : The speed of A is 40 m/sec . Also, the ratio of the speeds of A and B is 2:3 while the ratio of the speeds of C and B is 3:4. What is the distance covered by C in 10 seconds?

a. 450 m b. 360 m c. 300 m d. 250 m

Q30 : A is 50% faster than B and 20% faster than C. By what % is C faster than B?

a. 30% b. 20% c. 10% d. 25%