

Time speed distance, Time & work

- Q1. Shyam will complete work in 60 days. If Ram is 25% more efficient than Shyam, then how many days he will take to complete the work?
- (a) 42 (b) 48 (c) 54 (d) None of these
- Q2. A train moves past a telegraph post and a bridge of length 264 m in 8 seconds and 20 seconds respectively. What is the speed of the train?
- (a) 79.2 km/hr (b) 79 km/hr (c) 70 km/hr (d) 69.5 km/hr
- Q3. Walking at the rate of 4 kmph a man cover certain distance in 2 hr 45 min. Running at a speed of 16.5 kmph the man will cover the same distance in.
- (a) 20 (b) 30 (c) 40 (d) 60
- Q4. A person says that their speed while going to a city was 10mph however while returning as there is no much traffic they came with a speed of 15mph. what is their average speed?
- (a) 10 mph (b) 12 mph (c) 12.5 mph (d) None of these
- Q5. Sam can do work in 40 days. He worked at it for 5 days, then Annie can finish it in 21 days. In how many days both can finish the work together?
- (a) 12 (b) 13 (c) 15 (d) 19 (e) 17
- Q6. Two persons A and B start moving at each other from point P and Q respectively which are 1400 Km apart. Speed of A is 50 Km/hr and that of B is 20 Km/hr. How far is A from Q when he meets B for the 22nd time, if they continuously moving after meeting each other?
- (a) 1000 km (b) 800 km (c) 400 km (d) 1400 km
- Q7. Manoj can do a work in 20 days, while Chandu can do the same work in 25 days. They started the work jointly. A few days later Suresh also joined them and thus all of them completed the whole work in 10 days. All of them were paid a total of Rs.1000. What is the share of Suresh?
- (a) 100 (b) 200 (c) 400 (d) 300
- Q8. A certain number of men take 45 days to complete work. If there are 10 men less then they will take 60 days to complete the work. Find the original number of men.
- (a) 50 (b) 60 (c) 30 (d) 40
- Q9. A Boat takes a total 16 hours for traveling downstream from point A to point B and coming back to point C which is somewhere between A and B. If the speed of the Boat in Still water is 9 Km/hr and the rate of stream is 6 Km/hr, then what is the distance between A and C?
- (a) 60 Km (b) 90 Km (c) 30 Km (d) Cannot be determined

- Q10. A Boat going upstream takes 8 hours 24 minutes to cover a certain distance, while it takes 5 hours to cover $\frac{5}{7}$ of the same distance running downstream. Then what is the ratio of the speed of the boat to the speed of water current?
(a) 11:5 (b) 11:6 (c) 11:1 (d) 6:5
- Q11. A Boat takes 128 min less to travel 48 Km downstream than to travel the same distance upstream. If the speed of the stream is 3 Km/hr. Then Speed of Boat in still water is?
(a) 12 Km/hr (b) 15 Km/hr (c) 6 Km/hr (d) 9 Km/hr
- Q12. 4 women and 5 men working together can do 3 times the work done by 2 women and one man together. Calculate the work of a man to that of a woman.
(a) 1 : 1 (b) 2 : 1 (c) 3 : 2 (d) 1 : 2
- Q13. In a group of 8 boys, 2 men aged at 21 and 23 were replaced, two new boys. Due to this the average cost of the group increased by 2 years. What is the average age of the 2 new boys?
(a) 17 (b) 30 (c) 28 (d) 23
- Q14. 30 men complete $\frac{1}{7}$ the work in 2 days. How many more men should join in now, if the work has to be completed in 10 more days?
(a) 2 (b) 4 (c) 5 (d) 6 (e) 7
- Q15. A person sets out to cross a forest. On the first day, he completes $\frac{1}{10}$ th of the total distance. On the second day he covers $\frac{2}{3}$ rd of the distance already traveled on the first day. He continues in this manner, alternating the days in which he travels $\frac{1}{10}$ th of the distance still to be covered on one day, with days on which he travels $\frac{2}{3}$ rd of the total distance already covered, on the next day. At the end of the seventh day, he finds $\frac{45}{2}$ km more will see the end of his journey. What is the total distance that he has to cover?
(a) $\frac{200}{3}$ km (b) 100 km (c) 120 km (d) 150 km
- Q16. A pump can fill a tank with water in 1 hour. Because of a leak, it took 1.5 hours to fill the tank. The leak can drain all the water of the tank in:
(a) 2 hours (b) 2.5 hours (c) 3 hours (d) 3.5 hours
- Q17. 2 pipes A and B can fill a tank in 20 minutes and 30 minutes respectively. Both pipes are opened. The tank will be filled in just 15 minutes, if the B is turned off after:
(a) 5 min (b) 6.5 min (c) 7 min (d) 7.5 min
- Q18. A train sets off at 2 p.m. at the speed of 70 kmph. Another train starts at 3:30 p.m. in the same direction at the rate of 85 kmph. At what time the trains will meet?
(a) 9.30 p.m. (b) 8.30 p.m. (c) 10.30 p.m. (d) 10.45 p.m.

Q19. A man walks at a speed of 3 km/hr and runs at a speed of 7 km/hr. How much time will the man require to cover a distance of $10\frac{1}{2}$ km, if he completes half of the distance, i.e., $5\frac{1}{4}$ km on foot and the other half by running?

- (a) $1\frac{3}{4}$ hrs (b) $2\frac{1}{4}$ hrs (c) 2 hrs (d) $3\frac{1}{2}$ hrs (e) None of these

Q20. A person takes 20 minutes more to cover a certain distance by decreasing his speed by 20%. What is the time taken to cover the distance at his original speed?

- (a) 1 hour 30 minutes (b) 1 hour 15 minutes (c) 1 hour 20 minutes
(d) 2 hours (e) 1 hour 45 minutes

Q21. John is traveling on his cycle and has calculated to reach point A at 2 p.m. if he travels at 10 km/hr; he will reach there at 12 noon if he travels at 15 km/hr. At what speed must he travel to reach A at 1 p.m.?

- (a) 8 kmph (b) 11 kmph (c) 12 kmph (d) 14 kmph

Q22. Two trains A and B start simultaneously in the opposite direction from two points A and B and arrive at their destinations 9 and 4 hours respectively after their meeting each other. At what rate does the second train B travel if the first train travels at 80 km per hour.

- (a) 60 kmph (b) 100 kmph (c) 120 kmph (d) 80 kmph

Q23. Three pipes A, B, and C are connected to a tank. Out of the three, A is the inlet pipe and B and C are the outlet pipes. If opened separately, A fills the tank in 10 hours, B empties the tank in 12 hours and C empties the tank in 30 hours. If all three are opened simultaneously, how much time does it take to fill / empty the tank?

- (a) 60 hours (b) 50 hours (c) 70 hours (d) None of these

Q24. X, Y and Z can do a piece of work in 20, 30 and 60 days respectively depending on their capacity of doing work. If X is assisted by Y and Z on every third day, then in how X will complete the work?

- (a) 12 days (b) 15 days (c) 16 days (d) 18 days

Q25. A garrison is provided with ration for 90 soldiers to last for 70 days. For how much more time would the whole ration last if 10 additional soldiers join them after 20 days?

- (a) 40 days (b) 36 days (c) 30 days (d) $56\frac{1}{4}$ days (e) 45 days

Q26. A train of length 150 m passes a km stone in 30 seconds and another train of the same length is travelling in opposite direction train is 10 seconds. The speed of the second train is

- (a) 25 km/hr (b) 75 km/hr (c) 90 km/hr (d) 125 km/hr

Q27. A cistern can be filled by a tap in 4 hours while it can be emptied by another tap in 9 hours. If both the taps are opened simultaneously, then after how much time cistern will get filled?

- (a) 7 hours (b) 7.1 hours (c) 7.2 hours (d) 7.3 hours

Q28. In a 100 m race, Aman takes 36 seconds to complete the race and Bijay takes 45 seconds. By what distance Aman beats Bijay in the race?

- (a) 20 meters (b) 25 meters (c) 22.5 meters (d) 9 meters

Q29. 20 men can do a job in 10 days, working 8 hours a day. If women are 33.33% more efficient than men, how many women will it take to finish the same job in 10 days, working 6 hours a day?

- (a) 10 (b) 12 (c) 15 (d) 20

Q30. The tremors of the earthquake were felt at intervals of 15 seconds. The first tremor was felt at 08:54:57 am and the last tremor was felt at 10:45:12 am. How many times were the tremors felt?

- (a) 484 (b) 485 (c) 441 (d) 525

Q31. A, B, and C can alone complete a work in 10, 12 and 15 days respectively. All started the work but B left the work 3 days before completion. How much work was then done by A and B together in the total work?

- (a) $\frac{2}{3}$ (b) $\frac{3}{4}$ (c) $\frac{1}{3}$ (d) $\frac{3}{5}$ (e) $\frac{2}{5}$

Q32. Three pipes A, B and C can fill a cistern in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 6 hours. The number of hours taken by C alone to fill the cistern is

- (a) 12 hours (b) 10 hours (c) 18 hours (d) 8 hours (e) None of these

Q33. Two pipes A and B can fill a tank in 6 hours and 5 hours respectively. If they are turned on alternatively for 1 hour each, find the time in which the tank is full.

- (a) 4hrs 30min (b) 5hrs (c) 6hrs 25min (d) 5hrs 30min (e) None of these

Q34. A train travelling at 48 km/hr crosses another train, having half its length and travelling in opposite direction at 42 km/hr in 12 seconds. It also passes a railway platform in 45 seconds. The length of the railway platform is

- (a) 400 m (b) 350 m (c) 300 m (d) 200 m

Q35. A motor boat covers a certain distance downstream in a river in 3 hours. It covers the same distance upstream in 3 hours and a half. If the speed of water is 1.5 km/h, then the speed of the boat in still water is:

- (a) 17 km/h (b) 19.5 km/h (c) 17.5 km/h (d) 19 km/h

Q36. A boat takes half time in moving a certain distance downstream than upstream. The ratio of the speed of the boat in still water and that of the current is:

- (a) 2 : 1 (b) 1 : 2 (c) 4 : 3 (d) 3 : 1

Q37. In a 100 m race, A beats B by 10 m and C by 13 m. In a race of 180 m, B will beat C by:

- (a) 5.4 m (b) 4.5 m (c) 5 m (d) 6 m

Q38. At a game of billiards, A can give B 15 points in 60 and A can give C to 20 points in 60. How many points can B give C in a game of 90?

- (a) 30 points (b) 20 points (c) 10 points (d) 12 points

Q39. Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:

- (a) 60 gallons (b) 100 gallons (c) 120 gallons (d) 180 gallons

Q40. A person can row a distance of one km upstream in ten minutes and downstream in four minutes. What is the speed of the stream?

- (a) 4.5 km/h (b) 4 km/h (c) 9 km/h (d) 5.6 km/h

Answer key

1	B	9	D	17	D	25	E	33	D
2	A	10	C	18	C	26	C	34	A
3	C	11	A	19	E	27	C	35	B
4	B	12	A	20	C	28	A	36	D
5	C	13	B	21	C	29	D	37	D
6	B	14	D	22	C	30	C	38	C
7	A	15	C	23	A	31	A	39	C
8	D	16	C	24	B	32	C	40	A