Time, Speed and DistanceSpeed Distance and Time questions are the very popular type of questions in competitive exams. These questions carry a weightage of 2-3 questions (4-6 marks) in SSC exams and 1-2 questions in bank exams. To get a good rank in competitive exams, it is important to be know the distance speed time formula quickly and accurately.

Here are some tips for solving Speed Distance and Time questions: Know the formulas and relationships, be careful with units, work with the given information to find the unknown, use a diagram or table to help visualize the problem.

So, we have attached 10 questions of Speed Distance and Time for you to practice with. You should aim to solve these questions in less than half a minute for each.

Practice Questions on Speed Distance and Time

You can also download the Speed Distance and Time questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

Q:1 A train crosses a bridge of length 600 m in the 40 s, another train of the same length crosses a pole in 10s running at a speed of 20m/s. What is the speed of the first train?

1. 54 km/h

2. 108 km/h

3. 90 km/h

4. 72 km/h

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) It was very easy, right?

Q:2 Amar has to travel from Bikaner to Delhi but due to short of time, he managed to get the train ticket from Jaipur to Delhi only. He traveled by local transport from Bikaner to Ajmer 120 km in 7 hours, Ajmer to Jaipur in bus 80 km in 5 hours, and Jaipur to Delhi by train 240 km in 10 hours. What is the average speed of Amar?

1. 20 km/h

2. 25 km/h

3. 6 m/s

4. 8 m/s

(**Difficulty:** 4, **Estimated Time:** 30 Seconds) Try decreasing your time used in calculations!

Q:3 Anil beats Shyam by 20 m in a 100 m race. If the speed of Shyam is 16 km/h then how much time Anil takes to cover 10km distance?

1. 180 Minutes

2. 60 Seconds

3. 90 Minutes

4. None of these

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This was quite easier than the previous one but not that much easy.

Q:4 A dog is sleeping at 75 meters away from the car. As the car starts, the dog runs behind the car whose speed is 36 kmph and catches it after 10 seconds. Find the speed (in kmph) of dog.

1. 35

2. 60

3. 45

4. 63

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Now you have a good practice of such questions.

Q:5 The ratio of the speed of a man, going from his house to the office and coming back from the office to the house is 6 : 5. If he takes 1 hour more to come back from the office, find the initial speed of that man if the distance between his house and office is 180 km.

1. 30 km/hr

2. 36 km/hr

3. 18 km/hr

4. 25 km/hr

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) We're halfway through. We will increase the difficulty level from now.

Q:6 A boy walking at a speed of 20 km/hr reaches his school 30 minutes late. Next time he increases his speed by 5 km/hr but still reaches 10 minutes late. What is the distance of the school from his house?

1. 100/3 km

2. 50/3 km

3. 100/7 km

4. 2/5 km

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Have you got all your questions correct so far?

Q:7 Two stations A & B are 1250 km apart. A train starts from station A and another train starts from station B moving towards each other. If the sum of their speed is three-fifth of the total distance then, how much time will they take to cross each other?

1. 1 hour

2. 1 hour and 15 minutes

3. 1 hour and 40 minutes

4. 1.5 hours

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This was a piece of cake!

Q:8 Bharatpur and Dhooppur are 550 kms apart. Two trains A and B leave Bharatpur and Dhooppur at 10:00 a.m. and 12:00 noon respectively. Speeds of trains A and B are 50 km/hr and 40 km/hr respectively. If train A is going from Bharatpur to Dhooppur, and B from Dhooppur to Bharatpur, at what time will these train meet?

1. 4:15 p.m.

2. 5:00 p.m.

3. 4:30 p.m.

4. 6:00 p.m.

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) You might have wrapped it up in 10 seconds!

Q:9 The ratio of speed of A and B in still water is 2 : 3. A and B start their journey from the same point but in opposite directions. A goes in the direction of flow of the river. After 2 hours both of them stop and reverse their direction with half of their previous speed. They meet after 4 hours. Speed of the river is 10 m/s. Find the initial speed of A in still water.

1. 30 m/s

2. 50 m/s

3. 20 m/s

4. Cannot be determined

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) It is different type of question. But you'll get these type of questions in the exam too. So, prepare yourself!

Q:9 The ratio of speed of A and B in still water is 2 : 3. A and B start their journey from the same point but in opposite directions. A goes in the direction of flow of the river. After 2 hours both of them stop and reverse their direction with half of their previous speed. They meet after 4 hours. Speed of the river is 10 m/s. Find the initial speed of A in still water.

1. 30 m/s

2. 50 m/s

3. 20 m/s

4. Cannot be determined

Q:10 A 200 meters long train passes a 400 meters long platform in 8 seconds. If a girl is walking at a speed of 2 m/sec along the track and the train is 3 km and 850 meters away from her, how much time will it take to reach the girl?

1. 50 minutes

2. 95 seconds

3. 45 minutes

4. 50 seconds

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Did you guess them all correctly?

Answer Key

Let's check out your score in this test.

1. (4)	**2.** (1)	**3.** (4)	**4.** (4)	**5.** (2)
6. (1)	**7.** (3)	**8.** (2)	**9.** (4)	**10.** (4)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

Answers and Solutions

Q:1 The correct answer is **option 4** i.e. **72 km/h**

Let the length of the train be T and the speed of the first train is S.

⇒ T + 600 = S(40)

⇒ 40S = T + 600

⇒ T = 10 × 20

⇒ 200 m

⇒ 40S = T + 600

⇒ 40S = 200 + 600

⇒ 40S = 800

⇒ S = 20m/s or 20 × (18/5)

⇒ 72 km/h

Q:2 The correct answer is **option 1** i.e. **20 km/h**

Total distance covered = 120 + 80 + 240

⇒ 440 km

Total time taken = 7 + 5 + 10

⇒ 22 hours

Average speed = total distance covered/Total time taken

⇒ 440/22 = 20 km/h

Q:3 The correct answer is **option 4** i.e. **None of these**

Anil beats Shyam by 20 m

When Anil covers 100 m Shyam will cover 80 m

Ratio of speeds of Anil and Shyam = 5 : 4

Speed of Anil = (5/4) × 16

⇒ 20 km/h

Time taken = Distance/Speed

⇒ 10/20 = 1/2 hour = 30 minutes

Q:4 The correct answer is **option 4** i.e. **63**

Given:

Speed of car = 36 × 5/18 = 10 m/s

Suppose speed of dog = x m/s

Since, dog is chasing the car:

Relative speed = (10 – x) m/s

Given: The dog is at 75 meters away from the car

and dog catches it after 10 seconds.

Hence, 75/(x – 10) = 10

x – 10 = 7.5

x = 17.5 m/s

Hence, Speed of dog = 17.5 m/s

= 17.5 × 18/5

= 63 kmph

Q:5 The correct answer is **option 2** i.e. **36 km/hr.**

Let the initial speed of man i.e the speed at which he goes from house to office 6x km/hr

A/Q,

Total distance/speed = time

⇒ 180/5x - 180/6x = 1

⇒ 36/x - 30/x = 1

⇒ x = 6

So, initial speed = (6 × 6) = 36 km/hr

Q:6 The correct answer is **Option 1** i.e **100/3 km**.

Given,

x = 20 km/hr

y = 5 km/hr

t_1= 30 minutes = 1/2 hr

t_2= 10 minutes = 1/6 hr

Required distance = $(t_1 - t_2)(x + y)(x/y)$ = (1/2 - 1/6)(20 + 5)(20/5) = 100/3 km

Q:7 The correct answer is **option 3** i.e. **1 hour and 40 minutes.**

The relative speed is the sum of their speed if they are moving toward each other

Meeting time = Distance between them/Relative speed

Given, the sum of the speed of the two trains = (3/5) × 1250 = Their relative speed

Distance between stations = 1250 km

Meeting time = 1250/{(3/5) × 1250} = 5/3 hour

⇒ (1 + 2/3) hour = 1 hour and 40 minutes

Q:8 The Correct answer is **Option 2** i.e. **5:00 p.m.**

Relative speed when (trains are travelling in opposite direction) = Sum of speeds

Distance between villages = 550 km.

Distance covered by A from 10:00 to 12:00 = 50 × 2 = 100 km

Remaining distance to be covered between the villages = 550 – 100 = 450 km

Relative speed between train A and B

= 50 + 40 = 90 km/hr

Time required = 450/90 = 5 hours.

Time of meeting = 12.00 + 5 hours

= 5:00 p.m.

Q:9 The correct answer is **option 4** i.e. **cannot be determined**.

A goes downstream, so B will go upstream.

Let the speed of A and B be '2x' m/s and '3x' m/s respectively.

Distance travelled by A after 2 hours = 2 × (2x + 10) = 4x + 20

Distance travelled by B in 2 hours = 2 × (3x - 10) = 6x - 20

Total distance between them after 2 hours = (4x + 20) + (6x -20) = 10x

Now, they reverse their direction. So, B will go downstream and A will go upstream.

Speed of B in downstream = 3x/2 + 10

Speed of A in upstream = 2x/2 - 10 = x - 10

According to the question,

⇒ (3x/2 + 10 + x - 10) × 4 = 10x

⇒ 10x = 10x

Therefore, it cannot be determined.

Q:10 The correct answer is **option 4** i.e. **50 seconds**

Given:

Speed of girl = 2 m/sec

Length of train = 200 m

Length of platform = 400 m

Total distance = 200 + 400 = 600 m

Time = 8 sec

Distance between girl and train = 3 km and 850 meters

= (3000 + 850) m = 3850 m

Speed of train = D/t = 600/8 = 75 m/s

Now, Time = [3850/(75 + 2)] sec

= 3850/77 = 50 seconds

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Speed Distance and Time.