

# Time Speed And Distance Questions Overview

Time Speed And Distance Questions have a good weightage in the Banking Exam and the type of question asked in Banking exam is similar to the question mentioned below. It has been solved and explained by Gargi.ai Experts and they have tried to elaborate the concept used in Time Speed And Distance Questions.

## Question

A car of length 4 m wants to overtake a trailer truck of length 20 m travelling at 36 km/hr within 10 seconds. At what speed should the car travel?

Difficulty : Moderate

Average Time : 34 Seconds

Options :

1. 10 m/s
2. 12.4 m/s
3. 11.6 m/s
4. 12 m/s
5. 11.8 m/s

## Solution

The correct answer is **Option 2** i.e. **12.4 m/s**.

Total distance to be covered by the car 'd' =  $(20 + 4) = 24$  m

Let the speed of the car be  $S_1$  m/s

Speed of truck  $S_2 = 36$  km/hr = 10 m/s

Both the car and the truck are traveling in the same direction and we know that to overtake the truck, the speed of the car should be more than that of the truck

Hence, relative speed =  $|S_1 - S_2|$

Time to overtake = 10s

Now, Speed = Distance/ Time

$$|S_1 - 10| = 24/10$$

$$S_1 - 10 = 2.4$$

$$S_1 = 10 + 2.4 = 12.4 \text{ m/s}$$

