

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

Two cars A and B were coming towards each other at the speed of 50 km/hr and 60 km/hr respectively. At one point both cars collided, Car A started moving in the direction of Car B with a speed of 20 km/hr and the speed of Car B decreased by 10%. What is the difference between the relative speed of both cars before and after collision?

Difficulty : Moderate

Average Time : 44 Seconds

Options :

1. 54 km/hr
2. 66 km/hr
3. 72 km/hr
4. 76 km/hr
5. None of these

Solution

The correct answer is **Option 4** i.e. **76 km/hr**.

Since both the car were moving in the opposite direction,

Relative speed before collision = $50 + 60 = 110$ km/hr

After the collision, both cars started moving in the same direction

Speed of car A after collision = 20 km/hr

Speed of car B after collision = $0.9 \times 60 = 54$ km/hr

Relative speed = $54 - 20 = 34$ km/hr

Difference in relative speed = $110 - 34 = 76$ km/hr