

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

Rahul and Saket are running on a circular track with radius 28 meters. They both start from the same point in the same direction. Speed of Rahul is 4 m/sec and Speed of Saket is 5.5 m/sec. In how much time, Saket will be able to cross Rahul 4 times?

Difficulty : Moderate

Average Time : 39 Seconds

Options :

1. 7 minutes 17 seconds
2. 6 minutes 40 seconds
3. 7 minutes 49 seconds
4. 6 minutes 52 seconds
5. 7 minutes 28 seconds

Solution

The correct answer is **option 3** i.e. **7 minutes 49 seconds**

Given, the radius of the track = 28 meter

Hence, Circumference of the track = $2\pi r = 2 \times \frac{22}{7} \times 28 = 176$ meters

Now, In order to cross Rahul 4 times, Saket will have to make 4 extra rounds of the court.

Hence, extra distance needs to be covered by Saket = $176 \times 4 = 704$ meters

Now, speed of the Saket = 5.5 m/sec

Speed of Rahul = 4 m/sec

Hence, time needed to cover 704 meter extra distance by Saket = $704 / (5.5 - 4) = 704 / 1.5 = 469.3$ seconds

That is equal to 7 minutes 49 seconds.

