

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 and B start running in the same direction on a circular track of a diameter 112 m but their starting points were diametrically opposite. The ratio of the speed of A and B is 4 : 3. Find the distance B covers, when A reaches the starting point of B.

Difficulty : Moderate

Average Time : 39 Seconds

Options :

1. 132 m
2. 352 m
3. 90 m
4. 105 m
5. 220 m

Solution

The correct answer is **Option 1** i.e. **132 m**

The total distance of the track = $2r$

$$= 2 \times \frac{22}{7} \times 56$$

$$= 352 \text{ m}$$

Let speeds of A and B be $4x$ and $3x$ respectively

Time is taken by A to reach the starting point of B

$$= \frac{r}{4x}$$

$$= \frac{352}{(2 \times 4)x}$$

$$= 176/4x$$

$$= 44/x$$

Now

Total distance covered by B in $44/x$ time

$$= 3x \times 44/x$$

$$= 132 \text{ m}$$

