

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

The difference between downstream speed and upstream speed is 3 km/hr and the total time taken during upstream and downstream is 3 hours. What is the downstream speed, if the downstream and upstream distance are 3 km each?

Difficulty : Moderate

Average Time : 36 Seconds

Options :

1. 3.3 km/hr
2. 2.5 km/hr
3. 2.4 km/hr
4. 4.3 km/hr
5. 3.5 m/hr

Solution

The correct answer is **Option 4** i.e. **4.3 km/hr**

Speed = (distance/time)

Let speed downstream = a km/hr

and speed upstream = b km/hr

Then,

$$(a - b) = 3$$

$$\text{Now, } (3/a) + (3/b) = 3$$

$$a + b = ab$$

$$(a + b)^2 = (a - b)^2 + 4ab$$

$$(a + b)^2 = 9 + 4(a + b)$$

solving the above quadratic equation we get,

$$a + b = 5.6$$

and hence, $a = 4.3$ and $b = 1.3$

