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 ratio of speed of a boat in still water to speed of the current is 10 : 1. If ratio of the time taken by the boat to travel D km downstream to the time taken to travel (D – 45) km upstream is 3 : 2. Find the value of D.

Difficulty : Moderate

Average Time : 38 Seconds

Options :

1. 88
2. 54
3. 110
4. 99
5. 66

Solution

The correct answer is **Option 4** i.e. **99.**

Understanding	Application

Suppose speed of boat in still water and speed of the current are 10x and x km/hr respectively.	Hence, Time taken by the boat to travel D km downstream $= D/(10x + x) = D/11x$ And Time taken by the boat to travel (D – 45) km upstream $= (D – 45)/(10x – x)$ $= (D – 45)/9x$
Since the ratio = 3 : 2	Hence, $(D/11x)/((D – 45)/9x) = 3 : 2$ $9D/11(D – 45) = 3 : 2$ $18D = 33D – 1485$ $15D = 1485$ $D = 99$