

Mixtures And Alligations Questions Overview

Mixtures And Alligations 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 Mixtures And Alligations Questions.

Question

In 48 liter of water, 40 liter of juice is mixed and then 50% of the mixture is taken out and then 'a' liter of juice is added again the ratio of water to that of juice becomes 4 : 5. Find the value of a?

Difficulty : Moderate

Average Time : 37 Seconds

Options :

1. 10
2. 8
3. 12
4. 6
5. 9

Solution

The correct answer is **Option 1** i.e. **10**

Understanding

Application

Initially,

So,

In 48 liter of water, 40 liter of juice is mixed.

The ratio of water to that of juice in the

Total quantity = $48 + 40 = 88$ liter

initial mixture

= $48 : 40 = 6 : 5$

50% of the
mixture = 44
liter

So,

$$\frac{48}{2} : \left(\frac{40}{2} + a\right) = 4 : 5$$

$$120 = 80 + 4a$$

$$4a = 40$$

$$a = 10$$

50% of the mixture is taken out and then 'a' liter of juice is added again then ratio of water to that of juice becomes 4 : 5

