

# Pipes And Cistern Questions Overview

Pipes And Cistern 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 Pipes And Cistern Questions.

## Question

Tanks A and B have two outlet pipes. They can empty the tank in 10 minutes and 15 minutes respectively. When the tank is full, both outlet pipes open simultaneously. After some time, it was found that another outlet pipe C was also open. Due to this, it took 4 minutes more to fill the tank. In how many minutes can pipe C empty the tank?

Difficulty : Moderate

Average Time : 42 Seconds

Options :

1. 5 min
2. 13 min
3. 11 min
4. 7 min
5. 15 min

## Solution

The correct answer is **option 5** i.e. **15 min**.

A can fill the tank = 10 min

B can fill the tank = 15 min

Let's assume C can empty the tank = x min

So, the capacity of the tank = 30x

Efficiency of A, B, and C = 3x, 2x, and -30.

If only Pipe A and B are open then total time =  $30x / (3x + 2x) = 6$  min

Due to pipe C, total time = 6 + 4 = 10 min

$$30x/(3x + 2x - 30) = 10$$

$$3x = 5x - 30$$

$$x = 15$$

So, Pipe C can empty the tank = 15 min

