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

Two pipes A and B can fill a tank in 48min and 60min respectively. A pipe C can empty the tank in 40 min. First A and B are opened. After 8 minutes, C is also opened. In how much time the tank will get filled?

Difficulty : Moderate

Average Time : 38 Seconds

Options :

1. 56 min
2. 46 min
3. 36 min
4. 60 min
5. 48 min

Solution

The correct answer is **Option 1** i.e. **56 min.**

If a pipe can fill
a tank in p hours, then:
part filled in 1hour = (1/p)

Part filled in 8 mins = (1/48 + 1/60) × 8 = (3/10)

Remaining part = 1 - (3/10) = (7/10)

Net part filled in 1 min when A, B, and C are opened

= (1/48 + 1/60 - 1/40) = (1/80)

Now, (1/80) part filled in 1min.

(7/10) part filled in (80 × 7/10) = 56 min.