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

Pipes P can fill the tank in 40 hours and pipe Q can empty the tank 120 hours. If pipe Q is situated in the middle of the tank. Find the total time taken to fill the tank.

Difficulty : Moderate

Average Time : 35 Seconds

Options :
1. 60 hour
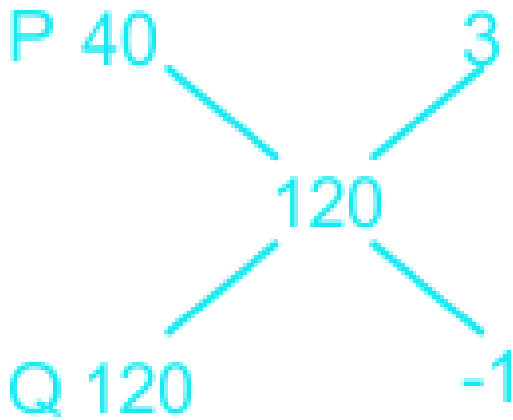
2. 50 hour

3. 80 hour

4. 40 hour

5. 70 hour

Solution

The correct answer is **option 2** i.e. **50 hour.**

Time taken by P and Q

40 hour and 120 hour

Now

P 40   3

        120

Q 120   -1

Time taken by P until tank is filled half = 60/3 = 20 hour

After it,

Total capacity = 3 + (-1) = 2 unit/hour

Time to fill the remaining tank = 60/2 = 30 hour

Total time = 20 + 30 = **50 hour**