

### **Q.39 - Page 195**

**Query :** Each machine can produce 40 bottles per hour and we have 5 machines. It means, we can product 200 bottles per hour (i.e. 40 bottles x 5 machines). But you have considered only 40 bottles per hour in your solution.

**Solution :**

It you read the question again, I had told to underline the sentence "The Company has a Total Capacity of 10,000 hours". This is the total capacity of the Company and not each machine.

If you divide the total capacity of 10,000 hours by 5 machines, you will get the capacity of each machine as 2,000 hours.

Now each machine can produce 40 bottles per hour i.e.  $(2,000 \times 40) = 80,000$  bottles per machine.

Now multiply this by 5 machines i.e.  $(80,000 \times 5) = 4,00,000$  bottles for the entire company.

**OR**

You can consider 200 bottles per hour for all 5 machines together. Then the total production shall be = 2,000 hours x 200 bottles per hour = 4,00,000 bottles for the entire company.

Either way, you will get the same answer.

**Note :** Out of 5 machines, you can use some machines for manufacture of bottles and some machine for manufacture of toys.

Or on the same machine, we can manufacture bottles for some time and toys for some time.

**Suggestion :** You may watch the same lecture again using 80% extra views, for better understanding.