

# Mathematics

(www.tiwariacademy.net)

(Chapter – 3) (Pair of Linear Equations in Two Variables)(Exemplar Problems)  
(Class – X)

## Exercise 3.1

Choose the correct answer from the given four options:

### Question 12:

Aruna has only Re 1 and Rs 2 coins with her. If the total number of coins that she has is 50 and the amount of money with her is Rs 75, then the number of Re 1 and Rs 2 coins are, respectively

(A) 35 and 15

(B) 35 and 20

(C) 15 and 35

(D) 25 and 25

### Answer 12:

(D) 25 and 25

### Solution:

Let the number of coins of ₹ 1 =  $a$

Let the number of coins of ₹ 2 =  $b$

As total number of coins are 50, so we have

$$a + b = 50 \quad \dots(i)$$

and the amount of money with her is ₹ 75, so we have

$$\text{and } 1 \times a + 2 \times b = 75$$

$$\text{or } a + 2b = 75 \quad \dots(ii)$$

Subtracting equation (i) from (ii), we get

$$b = 25$$

Putting the value of  $b$  in equation (i), we get

$$a + 25 = 50 \text{ or } a = 25.$$

Hence, the option (D) is correct.

