

Answer no: 1

Given that,

$$A = \{x \mid x^2 - 4x + 3 = 0\} \quad D = \{x \mid x \in \mathbb{N}, x \text{ is odd and } x < 4\}$$

$$B = \{x \mid x^2 - 3x + 2 = 0\}$$

$$C = \{x \mid x \in \mathbb{N}, x < 3\}$$

$$E = \{1, 2\} \quad G = \{3, 1\}$$

$$F = \{1, 2, 1\} \quad H = \{1, 1, 3\}$$

Solving the quadratic equation of set A,

$$x^2 - 4x + 3 = 0$$

$$\Rightarrow x^2 - 3x - x + 3 = 0$$

$$\Rightarrow x(x-3) - 1(x-3) = 0$$

$$\Rightarrow (x-3)(x-1) = 0$$

$$A = \{1, 3\}$$

Again for B,

$$x^2 - 3x + 2 = 0$$

$$\Rightarrow x^2 - 2x - x + 2 = 0$$

$$\Rightarrow x(x-2) - 1(x-2) = 0$$

$$\Rightarrow (x-2)(x-1) = 0$$

$$\therefore x = 1, 2$$

$$B = \{1, 2\}$$