

Q1) Pg No. 86 - 2

i) $5 \in B$ - Wrong

Ans $\rightarrow 5 \notin B$

ii) ~~12~~ $12 \in B$ - Correct

iii) $14 \in B$ - Correct

iv) $9 \in B$ - Wrong

Ans $\rightarrow 9 \notin B$

Q2) Pg. n

v) B is the set of even numbers between 2 and 16 - Correct

vi) 4, 6 and 10 are the members of set B - Correct

Exercise 10 (B)

- 3.4)
3.1) Sets $\{4, 9, 6, 2\}$ and $\{6, 2, 4, 9\}$ are not the same. False
- ii) Sets $\{0, 1, 3, 9, 4\}$ and $\{4, 0, 1, 3, 9\}$ are the same. True
- iii) Sets $\{5, 4\}$ and $\{5, 4, 4, 5\}$ are not the same. False
- iv) Sets $\{8, 3\}$ and $\{3, 3, 8\}$ are the same. True
- v) Collection of vowels used in the word 'ALLAHABAD' form a set. True
- vi) If P is the set of letters in the word 'ROOP'; then $P = \{p, o, r\}$. True
- vii) If M is the set of letters used in the word ~~'MUMBAI'~~ 'MUMBAI', then:
 $M = \{m, u, b, a, i\}$. True

Exercise 10 (C)

4.1) Rooster form

$$A = \{1, 2, 3, 4, 6, 8, 12, 24\}$$

Set-builder form

$$A = \{x : x \text{ is a natural number that divides } 24 \text{ completely.}\}$$

ii) Roster form

$$B = \{23, 29, 31\}$$

Set-builder form

$$B = \{x : x \text{ is an odd number between } 20 \text{ and } 35\}$$

iii) Roster form

$$C = \{C, A, L, U, T, T, A\}$$

Set-builder form

$$C = \{x : x \text{ is a letter of the word 'CALCUTTA'}\}$$

iv) Roster form

$$D = \{\text{January, February, March, April, May}\}$$

Set-builder form

$$D = \{x : x \text{ is a name of the first five months of a year}\}$$

v) Roster form

$$E = \{16, 25, 36, 49, 64, 81\}$$

Set-builder form

$$E = \{x : x \text{ is a two digit number which is a perfect square as well}\}$$

5. i) $A = \{5, 15, 20, 25, 35\}$

ii) $G = \{18, 24, 30\}$

iii) $H = \{\text{Friday, Saturday, Sunday}\}$

iv) $I = \{\text{September, October, November, December}\}$