

Exercise 10(B)

1. i) $2 \in A$ True

ii) $56 \in A$ True

iii) $3, 4, 7 \in A$ False

iv) $2, 8 \in A$ False

2. i) $5 \in B$ Wrong

Ans $\rightarrow 4 \in B$

ii) $12 \in B$ Correct

iii) $14 \in B$ Correct

iv) $9 \in B$ Wrong

Ans $\rightarrow 8 \in B$

v) B is the set of even numbers between 2 and 16.
Wrong

Ans \Rightarrow B is the set of even numbers between 4 and 14.

vi) 4, 6 and 10 are the members of 10. Correct

7107121 PREVIOUS KNOWLEDGE TEST

1. Write the set containing:

i) the first five counting numbers.

Ans $\Rightarrow A = \{1, 2, 3, 4, 5\}$

ii) the three types of angles.

Ans $\Rightarrow B = \{\text{right angle, acute angle, obtuse angle}\}$

iii) the three types of triangles.

Ans $\Rightarrow C = \{\text{right angled, acute angled, obtuse angled}\}$

iv) the members of your family.

Ans $\Rightarrow D = \{\text{Father, Mother, Me, Grandmother}\}$

v) the first six consonants of the English alphabet.

Ans $\Rightarrow E = \{B, C, D, F, G\}$

vi) the first four vowels of the English alphabet.

Ans $\Rightarrow F = \{A, E, I, O\}$

vii) the names of any three Prime Ministers of India.

Ans $\Rightarrow G = \{\text{Narendra Modi, Manmohan Singh, Atal Bihari Vajpayee}\}$

3. State whether true or false.

i) 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' forms a set. True

vi) If P is the set of letters in the word 'ROOP', then $P = \{p, o, r\}$.

vii) If M is the set of letters in the word 'MUMBAI', then: $M = \{m, u, b, a, i\}$.

5a) i) $\{3, 8, 5, 15, 12, 7\}$

Ans \rightarrow Elements = 3, 8, 5, 15, 12, 7

ii) $\{c, m, n, o, s\}$

Ans \rightarrow Elements = c, m, n, o, s

b) i) 2, 4, 8, 16, 64 and 128

Ans \rightarrow Set = C = $\{2, 4, 8, 16, 64, 128\}$

ii) 3, 5, 15, 45, 75 and 90

Ans \rightarrow Set = F = {3, 5, 15, 45, 75, 90}

6.i) Write the set of letters used in the word 'BHOPAL':

Ans \rightarrow D = {B, H, O, P, A, L}

ii) Write the set of vowels used in the word 'BENGAL':

Ans \rightarrow E = {E, A}

iii) Write the set of consonants used in the word 'HONG-KONG':

Ans \rightarrow G = {H, N, G, K}