

H.W

## Exercise 10(D)

1. i)  $\{3, 5, 7, \dots\}$

Ans  $\rightarrow$  It is a infinite set.

ii)  $\{1, 2, 3, 4\}$

Ans  $\rightarrow$  It is a finite set.

iii)  $\{\dots, -3, -2, -1, 0, 1, 2\}$

Ans  $\rightarrow$  It is a infinite set.

iv)  $\{20, 30, 40, 50, \dots, 20\}$

Ans  $\rightarrow$  It is a finite set.

2. i) Set of counting numbers between 5 and 6.

Ans  $\rightarrow$  It is a empty set.

ii) Set of odd numbers between 7 and 19.

Ans  $\rightarrow$  It is not a empty set.

iii) Set of odd numbers between 7 and 9.

Ans → It is a empty set.

iv) Set of even numbers that are not divisible by 2.

Ans → It is a empty set.

v)  $\{0\}$

Ans → It is not a empty set.

3-i)  $\{3, 5, 7\}$  and  $\{5, 3, 7\}$

Ans → It is a equal set.

ii)  $\{8, 6, 10, 12\}$  and  $\{3, 2, 4, 6\}$

Ans → As the number of elements is same it is a equivalent set.

iii)  $\{7, 7, 2, 1, 2\}$  and  $\{1, 2, 7\}$

Ans → It is a equal set.

iv)  $\{2, 4, 6, 8, 10\}$  and  $\{a, b, d, e, m\}$

Ans → As the number of elements is same it is a equivalent set.

4.i) Set of integers.

Ans → It is a infinite set.

ii)  $\{\text{Multiples of } 5\}$

Ans → It is a infinite set.

iii)  $\{\text{Fractions between } 1 \text{ and } 2\}$

Ans → It is a infinite set.

v) Set of trees in the world.

Ans → It is an infinite set.

iv) Number of people in India.

Ans → It is a finite set.

vi) Set of leaves on a tree.

Ans → It is a finite set.

vii) Set of children in all the schools of Delhi.

Ans → It is a finite set.

viii)  $\{\dots, -4, -2, 0, 2, 4, 6, 8\}$

Ans → It is an infinite set.

ix)  $\{-12, -9, -6, -3, 0, 3, 6, \dots\}$

Ans → It is an infinite set.

x) {Number of points in a line segment 4 cm long}

Ans → It is a finite set.

5.i) {Prime numbers divisible by 2}

Ans → It is an empty set.

ii) {Negative natural numbers}

Ans → It is not an empty set.

iii) {Women with height 5 metres}

Ans → It is an empty set.

iv) {Integers less than 5}

Ans → It is not empty set.

v)  $\{ \text{Prime numbers between 17 and 23} \}$

Ans  $\rightarrow$  It is not an empty set.

vi) Set of even numbers not divisible by 2.

Ans  $\rightarrow$  It is an empty set.

vii) Set of multiples of 3 that are more than 9 and less than 15.

Ans  $\rightarrow$  It is not an empty set.