

# CARDINALITY OF SETS

45

$$A = \{a, b, c, d\}$$

$$n(A) = 4$$

$$B = \{1, 5, 7\}$$

$$n(B) = 3$$

$$Q = \{\}$$

Q. 10 (a)  
A = { Natural nos. between 15 and 20 }

$$A = \{16, 17, 18, 19, 20\}$$

$$n(A) = 4$$

## Ex-10 (c)

Q. 1. Given:

Q. 1 (i) A = {0, 2, 4}

(ii)  $n(A) = 4$

(iii) B = { -3, -1, 3, 5, 7 }

$n(B) = 6$

(iv) C = { }

$n(C) = \emptyset$

(v) D = { 3, 2, 2, 1, 3, 1, 2 }

~~$n(D) = 6$~~  D = { 3, 2, 1 }

$n(D) = 3$

(vi) E = { Natural nos. between 15 and 20 }

E = { 16, 17, 18, 19 }

~~$n(E) = 4$~~

vi)  $F = \{ \text{Whole nos. from 8 to 14} \}$

$F = \{ 8, 9, 10, 11, 12, 13, 14 \}$

$$n(F) = 7$$

Q2.) i)  $A = \{ \text{Natural nos less than 10} \}$

~~$n(A)$~~   $A = \{ 9, 8, 7, 6, 5, 4, 3, 2, 1 \}$

$$n(A) = 9$$

ii)  $B = \{ \text{Letters in the word 'PUPPET'} \}$

$B = \{ P, U, E, T \}$

$$n(B) = 4$$

iii)  $C = \{ \text{Squares of the first four whole nos.} \}$

$C = \{ 0, 1, 4, 9 \}$

$$n(C) = 4$$

iv)  $D = \{ \text{odd nos, divisible by 2} \}$

$D = \{ \}$

$$n(D) = 0$$

Q.3) i) If  $A = \{0\}$ , then  $n(A) = 0$ . True

ii)  $n(\emptyset) = 1$ . False

True statement =  $n(\emptyset) = 0$

iii) If  $T = \{a, l, a, h, b, d, h\}$ ; then  $n(T) = 5$ . False

True statement = If  $T = \{a, l, a, h, b, d, h\}$ ; then  $n(T) = 5$ .

iv) If  $B = \{1, 5, 5, 15, 5, 1\}$ ; then  $n(B) = 6$ . False

True statement = If  $B = \{1, 5, 15, 5, 1\}$ ; then

$n(B) = 4$ .