

EX - 10 (E)

1. Write the cardinal number

$$i) A = \{0, 1, 2, 4\}$$

$$\text{ans} = n(A) = 4$$

$$ii) B = \{-3, -1, 1, 3, 5\}$$

$$\text{ans} = n(B) = 6$$

$$iii) C = \{\}$$

$$\text{ans} = n(C) = 0$$

$$iv) D = \{3, 2, 2, 1, 3, 1, 2\}$$

$$\text{ans} = D = \{3, 2, 1\}$$

$$n = n(D) = 3$$

$$v) E = \{ \overset{\text{nat.}}{\text{Natural between 15 and 20}} \}$$

$$\text{ans} = E = \{16, 17, 18, 19\}$$

$$= n(E) = 4$$

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

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

$$= n(F) = 7$$

2. Given :

$A = \{ \text{Natural nos. less than } 10 \}$
ans = i) $A = \{ 1, 2, 3, 4, 5, 6, 7, 8, 9 \}$
 ~~$n(A) = 9$~~

$B = \{ \text{Letters of the word 'PUPPET'} \}$
ans = ii) $B = \{ P, U, E, T \}$
 $= n(B) = 4$

$C = \{ \text{Squares of the first four whole nos.} \}$
ans = iii) $C = \{ 0^2, 1^2, 2^2, 3^2 \} = \{ 0, 1, 4, 9 \}$
 $= n(C) = 4$

$D = \{ \text{Odd nos. divisible by } 2 \}$
ans = iv) $D = \{ \}$
 $= n(D) = 0$

3. True or false. Correct the wrong statements

i) If $A = \{ 0 \}$, then $n(A) = 0$, False
Correct ans - $n(A) = 1$

ii) $n(\emptyset) = 1$, False correct ans - $n(\emptyset) = 0$

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

iv) If $B = \{ 1, 5, 5, 1, 5, 1 \}$, then $n(B) = 6$
False correct ans : $n(B) = 4$

x