

### EXERCISE - 10 (E)

- 1) (i)  $A = \{0, 1, 2, 4\}$   
 $\therefore$  Cardinal number of set  $A = 4$ , i.e.  $n(A) = 4$
- (ii)  $B = \{-3, -1, 1, 3, 5, 7\}$   
 $\therefore$  Cardinal number of set  $B = 6$ , i.e.  $n(B) = 6$
- (iii)  $C = \{3\}$   
 $\therefore$  Cardinal number of set  $C = 1$ , i.e.  $n(C) = 1$
- (iv) Cardinal number of set  $D = 3$ , i.e.  $n(D) = 3$
- (v)  $E = \{ \text{Natural numbers between } 15 \text{ and } 20 \}$
- (vi)  $F = \{ \text{whole number from } 2 \text{ to } 7 \}$   
 $\therefore$  Cardinal number of set  $F = 7$ , i.e.  $n(F) = 7$
- 2) (i) Given  $A = \{ \text{Natural numbers less than } 10 \} = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$   
 $\therefore n(A) = 9$
- (ii) Given  $B = \{ \text{letters of the word 'PUPPET'} \} = \{P, U, P, P, E, T\}$   
 $\therefore n(B) = 6$
- (iii) Given  $C = \{ \text{Squares of the first four whole numbers} \} = \{0, 1, 4, 9\}$   
 $\therefore n(C) = 4$
- (iv) Given  $D = \{ \text{odd numbers divisible by } 2 \} = \{ \}$   
 $\therefore n(D) = 0$
- 3) i) If  $A = \{0\}$ , then  $n(A) = 0$  (False)
- ii)  $n(\emptyset) = 1$  (False)
- iii) If  $T = \{a, d, a, h, b, d, h\}$  then  $n(T) = 5$  (True)
- iv) If  $B = \{1, 5, 5, 1, 5, 5\}$  then  $n(B) = 6$  (False).

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