Exercise 10(E)

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

Ans⇒ $A = \{0, 1, 2, 4\}$
$= n(A) = 4$

ii) $B = \{-3, -1, 1, 3, 5, 7\}$

Ans⇒ $B = \{-3, -1, 1, 3, 5, 7\}$
$= n(B) = 6$

iii) $C = \{\ \}$
Ans⇒ $C = \{\ \}$
$= n(C) = 0$

iv) $D = \{3, 2, 2, 1, 3, 1, 2$
Ans⇒ $D = \{3, 2, 2, 1, 3, 1, 2\}$
$= \{3, 2, 1\}$
$= n(D) = 3$

v) $E = \{$ Natural numbers between 15 and 20$\}$
Ans⇒ $E = \{$ Natural numbers between 15 and 20$\}$
$= \{16, 17, 18, 19\}$
$= n(E) = 4$

vi) $F = \{$ whole numbers from 8 to 14 $\}$
Ans⇒ $F = \{$ Whole numbers from 8 to 14$\}$
$= \{8, 9, 10, 11, 12, 13, 14\}$
$= n(F) = 7$

2. A = {Natural numbers less than 10}
= {1, 2, 3, 4, 5, 6, 7, 8, 9}
= n(A) = 9

B = {Letters of the word 'PUPPET'}
= {P, U, E, T}
= n(B) = 4

C = {Squares of the first ~~that~~ four whole numbers}
= {0, 1, 4, 9}
= n(C) = 4

D = {Odd numbers divisible by 2}
= { }
= n(D) = 0

3. i) If A = {0}, then n(A) = 0. False

ii) n(∅) = 1. False

iii) If I = {a, l, g, a, h, b, d, h}; then n(I) = 5. True

iv) If B = {1, 5, 15, 51, 5, 1}, then n(B) = 6. False