Exercise- 10 (E)

1. Write the Cardinal number of each of the following sets :-

i) $A = \{0, 1, 2, 4\}$ — 4

ii) $B = \{-3, -1, 1, 3, 5, 7\}$ — 6

iii) $C = \{\}$ — 0

iv) $D = \{3, 2, 2, 1, 3, 1, 2\}$ — 3

v) $E = \{$Natural numbers between 15 and 20$\}$ — 4

vi) $F = \{$whole numbers from 8 to 14$\}$ — 7

2. Given : $A = \{$Natural numbers less than 10$\}$
$B = \{$Letters of the word 'PUPPET'$\}$
$C = \{$Squares of the first four whole numbers$\}$
$D = \{$Odd numbers divisible by 2$\}$

Find :—

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

ii) $n(B)$ · $B = \{P, U, E, T\}$

iii) $n(C)$ · $C = \{0, 1, 4, 9\}$

iv) $n(D)$ · $D = \{\}$ or $\emptyset$

3. State True / False for each of the following. Correct the wrong statement :—

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

ii) $n(\emptyset) = 1$ False
Correct statement — $n(\emptyset) = 0$

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

iv) If $B = \{1, 5, 51, 15, 5, 1\}$; then $n(B) = 6$
False
Correct statement — $n(B) = 4$.