Ex. 10 E

1) Write the cardinal number of each of the following sets:

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

Ans → $n(A) = 4$.

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

Ans → $n(B) = 6$.

iii) $C = \{\}$

Ans → $n(C) = 0$.

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

3, 2, 1

CW
Thursday

Date 15.7.21
Page 32

Ans → ~~n(D) n(D)~~ n (D) = 3.

v) E = { Natural numbers between 15 and 20 }

Ans → n(E) = 4.

vi) F = { Whole numbers from 8 to 14 }.

Ans → n(F) = 7.

2) 1) A = { Natural number less than 10 }

Ans → n(A) = 9.

2) B = { Letters of the word 'PUPPET' }

Ans → n(B) = 4.

3) C = { Squares of the first four whole numbers }

Ans → n (C) = 4.

4) D = { Odd numbers divisible by 2 }

Ans → n(D) = 0.

3) State True or False for each of the following. Correct the wrong statement.

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

Aw Thursday

Date 15/1/22
Page 33

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

Ans → As $\emptyset$ represents Empty set and Empty set does not have any element that's why it is wrong. It would be $n(\emptyset) = 0$.

iii) If $Y = \{a, 1, a, h, b, d, h\}$; then $n(Y) = 5$. True

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

Ans → As 5 is repeated two times in the set it would be consider only once. If the element 5 will be considered only once then the set would have 5 elements and it would be $n(B) = 5$.