Fri 20/9/21

Ex 10(1)

Q1) i) Infinite = {3, 5, 2 ....}

ii) Finite = {1, 2, 3, 4}

iii) Infinite = {x : ..., -3, -2, -1, 0, 1, 2}

iv) Finite = {20, 30, 40, 50, ..., 200}

Q2) i) Empty = (set of Counting nos between 5 and 6)

ii) Not empty = (set of odd nos between 7 and 9)

iii) Empty = (Set of odd nos between 7 and 9)

iv) Empty = (Set of even nos that are not divisible by 2)

v) Not empty = {0}

Q3) i) Equal and equivalent = {3, 5, 7} and {5, 3, 7}

ii) Equivalent = {8, 6, 10, 12} and {3, 2, 4, 6}

iii) Equal = {7, 7, 2, 1, 2} and {1, 2, 7}

iv) ~~Equivalent~~ Equivalent {2, 4, I, 8, 10} and {a, b, d}

Q4) i) Infinite = Set of integers

ii) Infinite = {Multiples of 5}

iii) Infinite = {Fraction between 1 and 2}

iv) Finite = {Number of people in India}

For example ... can be ...

v) Finite = Set of trees in the world

vi) Finite = Set of leaves on a tree.

vii) Finite = Set of children in all the School of Delhi

viii) Infinite = $\{\ldots, -4, -2, 0, 2, 4, 6, 8\}$

ix) Infinite = $\{-12, -9, -6, -3, 0, 3, 6, \ldots\}$

x) ~~Finite~~ Infinite. (No of points in a line segment 4 cm long)

10 - E

2 ~~i) A =~~

Given - A = {Natural nos. less than 10}

B = {Letters of the word 'PUPPET'}

C = {Squares of the first four whole nos.}

D = {odd nos. divisible by 2}

Find

i) ~~n(A)~~ |A| = ~~89~~ 9

ii) |B| = 4

iii) |C| = 4

iv) |D| = $\emptyset$

3. state true or false,

(i) If $A = \{0\}$; then $|A| = 0$ ~~True~~ False.

(ii) $|\phi| = 1$ False

(iii) If $T = \{a, 1, a, h, b, d, h\}$; then $|T| = 5$ True

(iv) If $B = \{1, 5, 51, 15, 5, 1\}$; then $|B| = 6$ False

HW: Ex. 1.8 (A)