9/7/21

EX:-10(c)

Date
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1) i) The set of whole numbers each of which is divisible by 3.

A) {3, 6, 9, 12, 15}

ii) The set of integers between -4 and 4.

A) {-3, -2, -1, 0, +1, +2, +3}

iii) {X : X is a letter in the word 'SCHOOL'}

A) {S, C, h, O, L}

iv) {X : X is an odd natural number between 10 and 20}

A) {11, 13, 15, 17 and 19}

v) {Vowels used in the word 'AMERICA'}

A) {a, e, i}

vi) {Consonants used in the word 'MADRAS'}

A) {M, d, r, S}

2) i) All prime numbers between 1 and 20

A) {2, 3, 5, 7, 11, 13, 17, 19}

ii) The squares of first four natural numbers

A) $\{1^2, 2^2, 3^2, 4^2\} = \{1, 4, 9, 16\}$

iii) Even numbers between 1 and 9

A) $\{2, 4, 6, 8\}$

iv) The first eight letters of the English alphabet.

A) $\{a, b, c, d, e, f, g, h\}$

v) The letters of the word 'BASKET'

A) $\{b, a, sk, e, t\}$

vi) Four cities of India whose names start with the letter J.

A) {Jaipur, Jodhpur, Jhansi, Jalandhar}

vii) Any four closed geometrical figures.

A) $\{\square, \Delta, O, \square\}$

viii) Vowels used in the word 'MONDAY'

A) $\{o, a\}$

Ix) Single digit numbers that are perfect squares as well.

A) $\{0, 1, 4, 9\}$ as $0 = 0^2$, $1 = 1^2$, $4 = 2^2$, $9 = 3^2$

EX:- 10(c)

3) i) $\{2, 4, 6, 8, 10\}$

$A = \{x : x$ is a even natural number less than $12\}$

$A = \{x : x \in N, 2 < n < 12\}$

3(ii) {2, 3, 5, 7, 11}

A→ {x : x is a prime number less than 12}

{x : x ∈ N, 2 < n < 12}

(iii) {January, June, July}

A→ {x : x is a month whose name starts with letter J}

(iv) {a, e, i, o, u}

A→ {x : x is a vowel in English alphabet}

(v) {Tuesday, Thursday}

A→ {x : x is a day of the week whose name starts with letter T}

(vi) {1, 4, 9, 16, 25}

A→ {x : x is a perfect square natural number upto 25}

(vii) {5, 10, 15, 20, 25, 30}

A→ {x : x is a natural number upto 30 and divisible by 5}

Ex - 1.0 - (C)

9.7.23

(4) i) Set of all numbers that can divide 24 completely.

A> Roster form = {1, 2, 3, 4, 6, 8, 12, 24}
Set-Builder form = {x : x is the natural number which divides 24 easily}

ii) Set of odd numbers between 20 and 35.

A> Roster form :- {21, 23, 25, 27, 29, 31, 33}
Set-Builder form = {x : x is the odd number used between 20 and 35}

iii) Set of letters used in the word 'CALCUTTA'.

A> Roster form :- {C, a, l, u, t}
Set-Builder form = {x : x is the letters used in the word 'CALCUTTA'.}

iv) Roster form :- Set of names of the first three

months of a year.

A) Roster form :- {January, February, March, April, May}

Set-Builder form :- {x : x is the name of first half months of a year}

V) Set of all perfect two-digit numbers that are perfect squares as well.

A) Roster form :- {16, 25, 36, 49, 64, 81}

Set-builder form :- {x : x is the two digit number that are perfect squares as well}

i) A) {5, 15, 25, 35}

ii) A) {18, 24, 30, 30}

iii) A) {Friday, Saturday, Sunday}

iv) A) {September, November, October, December}

EX :- 10 (D)

1. i) {3, 5, 7, ...} I

ii) {1, 2, 3, 4} F

iii) {...., -3, -2, -1, 0, 1, 2} I

iv) {20, 30, 40, 50, ..., 200} I