

EXERCISE - 10(C)

- 1/ (i) The set of five numbers each of which is divisible by 3 =  $\{3, 6, 9, 12, 15\}$   
(ii) The set of integers between -4 and 4 =  $\{-3, -2, -1, 0, 1, 2, 3\}$   
(iii)  $\{x: x \text{ is a letter in the word, 'SCHOOL'}\}$  =  $\{S, C, H, O, L\}$   
(iv)  $\{x: x \text{ is an odd natural number between 10 and 20}\}$  =  $\{11, 13, 15, 17, 19\}$   
(v)  $\{\text{Vowels used in the word 'AMERICA'}\}$  =  $\{A, E, I\}$   
(vi)  $\{\text{Consonants used in word 'MADRAS'}\}$  =  $\{M, D, R, S\}$

2/

- (i) All prime numbers between 1 and 20 =  $\{2, 3, 5, 7, 11, 13, 17, 19\}$   
(ii) The squares of the first four natural numbers =  $\{1^2, 2^2, 3^2, 4^2\} = \{1, 4, 9, 16\}$   
(iii) Even numbers between 1 and 9 =  $\{2, 4, 6, 8\}$   
(iv) The first eight letters of the English alphabet =  $\{a, b, c, d, e, f, g, h\}$   
(v) The letters of the word 'BASKET' =  $\{b, a, s, k, e, t\}$   
(vi) Four cities of India whose names start with the letter J. =  $\{Jaipur, Jodhpur, Jalandhar, Jhansi\}$   
(vii) Any four closed geometrical figures =  $\{O, \square, \triangle, \text{and } \diamond\}$   
(viii) Vowels used in the word '~~MONDAY~~ MONDAY' =  $\{O, A\}$   
(ix) Single digit numbers that are perfect squares as well =  $\{0^2, 1^2, 2^2, 3^2\} = \{0, 1, 4, 9\}$   
(x)  $\{2, 4, 6, 8, 10\} = \{x: x \text{ is an even natural number less than } 12\}$

(ii)  $\{2, 3, 5, 7, 11\} = \{x : x \text{ is a prime number less than } 12\}$

(iii)  $\{\text{January, June, July}\} = \{x : x \text{ is a month whose name starts with the letter J}\}$

(iv)  $\{a, e, i, o, u\} = \{x : x \text{ is a vowel in English Alphabet}\}$

(v)  $\{\text{Tuesday, Thursday}\} = \{x : x \text{ is a day of the week whose name starts with letter T}\}$

(vi)  $\{1, 4, 9, 16, 25\} = \{x : x \text{ is a perfect squares natural number upto } 25\}$

(vii)  $\{5, 10, 15, 20, 25, 30\} = \{x : x \text{ is a natural number upto } 30 \text{ and divisible by } 5\}$

4/ (i) Set of all natural numbers that can divide 24 completely:—

— Roster (tabular) Form:—  $\{1, 2, 3, 4, 6, 8, 12, 24\}$  Set-Builder form

—  $\{x : x \text{ is a natural number which divides } 24 \text{ completely}\}$

(ii) Set of odd numbers between 20 and 35:— Roster (tabular) form

—  $\{21, 23, 25, 27, 29, 31, 33\}$  Set-Builder form:—

—  $\{x : x \text{ is an odd number between } 20 \text{ and } 35\}$

(iii) Set of letters used in the word 'CALCUTTA':— Roster form

—  $\{c, a, l, u, t\}$  Set-Builder form  $\{x : x \text{ is a letter in word}$

(iv) Set of names of the first five ~~months~~ months of a year <sup>CALCUTTA</sup>

— Roster form —  $\{\text{January, February, March, April, May}\}$  Set-Builder

Form —  $\{x : x \text{ is name of first five months of a year}\}$

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

Roster Form —  $\{16, 25, 36, 49, 64, 81\}$  Set-Builder form —

—  $\{x : x \text{ is a perfect square two digit number}\}$

5/ (i) The first four odd natural numbers each divisible by 5 —  $\{5, 15, 25, 35\}$

(ii) The counting numbers between 15 and 35; each of which is divisible by 6 —  $\{18, 24, 30\}$

(iii) The names of the last three days of a week —

—  $\{\text{Friday, Saturday, Sunday}\}$

(iv) The names of the last four months of a year:—

—  $\{\text{September, October, November, December}\}$

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