$A = \{2, 3, 4, 5\}$

or

$A = \{x : x \in N, 2 \leq x < 6\}$

$A = \{x : x \text{ is a natural no. less than } 6\}$

## Exercise-10(C)

(1) Write each of the following sets in the Roster Form:

i) The set of five no.s 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) $\{\text{Vowels used in the word 'AMERICA'}\}$

$\{a, e, i\}$

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

{m, d, r, s}

② Write each given set in Roster Form :

i) All prime no.s between 1 and 20.

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

ii) All squares of the first four natural no.s.

{1, 4, 9, 16}

iii) Even no.s between 1 and 9.

{2, 4, 6, 8}

iv) The first eight letters of 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, Jamshedpur, Jamnagar, Jaisalmer}

vii) Any four closed geometrical figures.

$\{\triangle, \square, \bigcirc, \hexagon\}$

viii) Vowels used in the word 'MONDAY'.

$\{o, a\}$

ix) Single digit numbers that are squares as well.

$\{0, 1, 4, 9\}$

(3) Write each given set in the Set-Builder form:

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

$\{x : x \in \mathcal{E}, 2 \leq x \leq 12\}$

OR

$\{x : x$ is an even natural no. less than $12\}$

ii) $\{2, 3, 5, 7, 11\}$

$\{x : x$ is a prime no. less than $13\}$

iii) {January, June, July}

$\{x : x$ is month whose name starts with the letter J.$\}$

iv) $\{a, e, i, o, u\}$

{x : x is a vowel in English Alphabet}

~~Sunday , Thursday~~.

v) {Tuesday, Thursday}

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

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

{x : x is the square of a natural no. upto 25 ~~less than 36~~}

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

{x : x is the multiple of 5 upto ~~less than~~ 30}

(4) Write each of the following sets in Roster Form and also in Set-Builder Form :-

i) Set of all natural no.s that can divide 24 completely.

{1, 2, 3, 4, 6, 8, 12, 24} [Roster Form]

{x : x is a natural no. which divides 24 completely}. [Set-Builder Form]

ii) Set of Odd no.s between 20 and 35.

{21, 23, 25, 27, 29, 31, 33,} [Roster Form]

{x : x is an odd no. between 20 and 35} [Set-Builder Form]

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

$\{c, a, l, u, t\}$ [Roster Form]
$\{x : x$ is the letter used in the word 'CALCUTTA'$\}$ [Set-Builder form]

iv) Set of names of the first five months of a year.

{January, February, March, April, May} [Roster form]
$\{x : x$ is the first five months of a year$\}$ [Set-Builder form]

v) Set of all two-digit no.s that are perfect squares as well

$\{16, 25, 36, 49, 64, 81\}$ [Roster Form]
$\{x : x$ is the perfect square of two digit no.s$\}$ [Set-Builder form]

(5) write, in Roster form, the set of :

i) The first four odd no.s each divisible by 5.

$\{5, 15, 25, 35\}$

ii) the counting no.s 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.

{Friday, Saturday, Sunday}

iv) the names of the last four months of a year.

{September, October, November, December}.