

Name - SUBHASHREE PANIGRAHI
CLASS: 6, SEC: D, SCHOOL NO: 4658



EXERCISE - 10(c)

1/ i) The set of five numbers each of which 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 number = $\{1^2, 2^2, 3^2, 4^2\} = \{1, 4, 9, 16\}$

iii) Even numbers between 1 and 9 = $\{2, 4, 6, 8\}$

iv) Four cities of India whose names start with the letter J = $\{Jaipur, Jodhpur, Jalandhar, Jhansi\}$

v) The letters of the word 'BASKET' = $\{b, a, s, k, e, t\}$

- vi) The first eight letters of the English alphabet = $\{a, b, c, d, e, f, g, h\}$
 - vii) Any four closed geometrical figures = $\{O, \square, \Delta \text{ and } \square\}$
 - viii) Vowels used in the word 'MONDAY' = $\{O, A\}$
 - ix) Single digit numbers that are perfect squares as well = $\{0^2, 1^2, 2^2, 3^2\} = \{0, 1, 4, 9\}$
- 3) i) $\{2, 4, 6, 8, 10\} = \{x : x \text{ is a even natural number less than } 12\}$
- ii) $\{2, 3, 5, 7, 11\} = \{x : x \text{ is a prime number less than } 12\}$
- iii) $\{\text{January, June, July}\} = \{x : x \text{ is a month whose name starts with letter J}\}$
- 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) $\{5, 10, 15, 20, 25, 30\} = \{x : x \text{ is a natural number upto } 30 \text{ and divisible by } 5\}$

9) 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 - $\{c, a, l, u, t, t, a\}$

Set - Builder Form - $\{x : x \text{ is a letter in word 'CALCUTTA'}\}$

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

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

form - $\{x : x \text{ is name of first five months of a year}\}$.

v) Set of all two - digit numbers that are perfect squares a swell 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 - $\{Friday, Saturday, Sunday\}$

iv) The names of the last four months of a year - $\{September, October, November, December\}$

