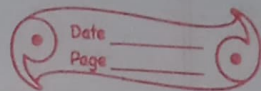


HW  
29/9/24

## Ch-10. SETS



HW Questions -

Exercise - 10 'B'

Q.2 If set  $B = \{4, 6, 8, 10, 12, 14\}$

i)  $5 \in B$  wrong

Correct statement:  $5 \notin B$

ii)  $12 \in B$  Correct

iii)  $14 \in B$  Correct

iv)  $9 \in B$  wrong

Correct statement:  $9 \notin B$

v)  $B$  is a set of even nos between 2 and 16. Correct

vi) 4, 6 and 10 are the members of Set  $B$ . Correct

Q.3 True or false.

i) Sets  $\{4, 9, 2\}$  and  $\{6, 2, 4, 9\}$  are ~~not~~ same.  
False

ii) Sets  $\{0, 1, 3, 9, 4\}$  and  $\{4, 0, 1, 3, 9\}$  are the same.  
True

iii) Sets  $\{5, 4\}$  and  $\{5, 4, 4, 5\}$  are not same. False

iv) Sets  $\{8, 3\}$  and  $\{3, 3, 8\}$  are the same. True

vii) If  $P$  is the set of letters in the word 'ROOF';  
the  $P = \{r, o, f\}$  True

viii) Collection of vowels used in word 'ALLAHABAD'  
forms a set. True

ix) If  $M$  is the set of letters used in the  
word 'MUMBAI', then:  $M = \{m, u, b, a, i\}$   
True

### Exercise - 10 'C'

1) i) Set of all natural nos that can divide 24  
completely.

Roster form:  $\{1, 2, 3, 4, 6, 8, 12, 24\}$

Set-Builder form:  $\{x \mid x \text{ is a natural no. that can divide 24 completely}\}$

ii) Set of odd nos between 20 and 35.

Roster form:  $\{21, 23, 25, 27, 29, 31, 33\}$

Set-Builder form:  $\{n \mid n \text{ is an odd natural nos between 20 and 35}\}$

OR

$\{x \mid x \in \mathbb{O}, 20 < x < 35\}$

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

Roster Form:  $\{c, a, l, u, t\}$

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

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

Roster Form:  $\{\text{January, February, March, April, May}\}$

Set-Builder Form:  $\{n : n \text{ is a name of first of five months of a year}\}$

v) Set of all two-digit nos. that are perfect squares as well.

Roster Form:  $\{16, 25, 36, 49, 64, 81\}$

Set-Builder Form:  $\{n : n \text{ is a two-digit perfect square}\}$

(5) i) the first four odd natural numbers that are perfect squares as well, divisible by 5.

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

ii) the counting nos. 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.

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

Q. The names of the last four months of a year.

{ September, October, November, December }