

9.  $U = \{x: x \in \mathbb{N}, 10 \leq x \leq 35\}$   
 $A = \{x \in \mathbb{N}: x \leq 16\}$   
 $B = \{x: x > 29\}$

Ans)  $U = \{10, 11, 12, 13, \dots, 35\}$

$A = \{10, 11, 12, 13, 14, 15, 16\}$

$B = \{30, 31, 32, 33, 34, 35\}$

i) Ans)  $A' = \{17, 18, 19, \dots, 35\}$   
 $= \{x \in \mathbb{N}: 17 \leq x \leq 35\}$

ii) Ans)  $B' = \{10, 11, 12, \dots, 29\}$   
 $= \{x: 10 \leq x \leq 29\}$

10.  $U = \{x \in \mathbb{Z}: -6 < x \leq 6\}$   
 $N = \{n: n \text{ is a non-negative number}\}$   
 $P = \{x: x \text{ is a non-positive number}\}$

Ans)  $U = \{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$

$N = \{0, 1, 2, 3, 4, 5, 6\}$

$P = \{-5, -4, -3, -2, -1\}$

i) Ans)  $N' = \{-5, -4, -3, -2, -1\}$

ii) Ans)  $P' = \{1, 2, 3, 4, 5, 6\}$

11.  $M = \{\text{letters of the word REAL}\}$   
 $N = \{\text{letters of the word LARE}\}$

i) Ans)  $M = \{R, E, A, L\}$

$$N = \{L, A, R, E\}$$

i) ~~Ans)~~  $M \subseteq N$  is true.

Ans) True

ii)  $N \subseteq M$  is true

Ans) True

iii)  $M = N$  is true

Ans) True