(8) $A = \{T, R, I, G, O, N, M, E, Y\}$

(9) $A = \{x : x \text{ is an odd natural number}\}$

(OR) $A = \{x : x = 2n-1, n \in N\}$

(10) $A = \{x : x \text{ is a divisor of } 18\}$

— x —

Ans 3 → (1) $A = \{1, 2, 3, 4\}$

(2) $A = \{-3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$

(3) $A = \{-2, -1, 0, 1, 2\}$

(4) $A = \{\text{Feb, April, June, Sept, Nov}\}$

(5) $A = \{\frac{2}{5}, \frac{3}{7}, \frac{4}{9}\}$

(6) $A = \{17, 71, 26, 62, 35, 53, 44, 80\}$

(7) $A = \{2, 3, 5\}$

(8) $A = \{\} = \phi$ Null set Since $x^2 \neq -25$ for any real number

(9) $A = \{-5, 5\}$

(10) $A = \{0\}$

— x —

Ans 4 → (1) False (2) True (3) True (4) False (5) True (6) False (7) True (8) False (9) False (10) False

— x —

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Chapter SETS

← SOLUTION → of 5-1

Q.N: 1 (i) Null set $= \phi$

(2) Null set $= \phi$

(3) $A = \{2\} \neq \phi$ (Not a Null set)

(4) $x^2 + 5x + 6 = 0 \Rightarrow (x+2)(x+3) = 0 \Rightarrow x = -2$ (or) $x = -3$

but $-2, -3 \notin N$

$\therefore A = \{\}$ = Null set

(5) $x^2 - 25 = 0 \Rightarrow (x+5)(x-5) = 0 \Rightarrow x = -5, x = 5$

Since $x \in N$

$\therefore A = \{5\} \neq \phi$ (Not a Null set)

— x —

Q.N: 2 → (1) $A = \{x : x = 5^n, n \in N, n \leq 4\}$

(2) $A = \{x : x = 3n, n \in N\}$

(3) $A = \{x : x \in Z, -3 \leq x \leq 3\}$

(4) $A = \{x : x \in Z, x^2 - 1 = 0\}$

(5) $A = \{x : x = \frac{n}{n+1}; n \in N, n \leq 5\}$

(6) $A = \{x : x = n^2; n \in N, 2 \leq n \leq 9\}$

(7) $A = \{x : x = \frac{n}{n^3+1}; n \in N, n \leq 6\}$