SETS

SUB SETS

EXERCISE

Q.1 If every element of set X is in set Y then_____

(a) $X \subset Y$ (b) $Y \subset X$

(c) $X = Y$ (d) $X \neq Y$

Q.2 If set A is equal to set B then _____

(a) $A \subset B$ (b) $B \subset A$

(c) $A \subset B$ and $B \subset A$ (d) neither $A \subset B$ nor $B \subset A$

Q.3 Let X= {1,2,3}, Y= {}, Z= {1,2,3}, then which of the following is true?

(a) $X \subset Y$ (b) Only $Y \subset X$ and $Y \subset Z$

(c) $Z \subset Y$ (d) $Y \subset X$ and $Y \subset Z$ and $X \subset Z$

Q.4 Let A= {2,3,5} and B= {3,5,7}. Which of the following is true?

(a) $A \subset B$ (b) $B \subset A$

(c) $A = B$ (d) $A \subset A$

Q.5 Let X be set of rational numbers. Which of the following is superset of X?

(a) Set of real numbers

(b) Set of natural numbers

(c) Set of whole numbers

(d) Set of integers

Q.6 Let X be set of rational numbers. Which of the following is not subset of X?

(a) Set of real numbers

(b) Set of natural numbers

(c) Set of whole numbers

(d) Set of integers

Q.7 Let $A = \{1, 3\}$, $B = \{1, 5, 9\}$, $C = \{1, 3, 5, 7, 9\}$. Then _____

(a) $A \subset B$ (b) $B \subset A$

(c) $C \subset B$ and $A \subset C$ (d) $B \subset C$ and $A \subset C$

Q.8 If an element $x \in A$ and $A \subset B$ then $x \in B$.

(a) True

(b) False

Q.9 If $X \in A$ and $A \subset B$ then $X \subset B$.

(a) True

(b) False

Q.10 Let $A = \{1, 2, \{3, 4\}, 5\}$. Which of the following is true?

(a) $\{3, 4\} \subset A$ (b) $\{3, 4\} \in A$

(c) $\{\{3, 4\}\} \subset A$ (d) $\{1, 2, 5\} \subset A$

ANSWER KEY

1. (a)

2. (c)

3. (d)

4. (d)

5. (a)

6. (a)

7. (d)

8. (a)

9. (b)

10. (a)