SETS

SUB SETS

EXERCISE

Q.1 If all elements of set X belong to set Y, then _____.

(a) X⊂Y (b) Y⊂X

(c) X=Y (d) X≠Y

Q.2 If set A is identical to set B, then _____.

(a) A⊂B (b) B⊂A

(c) A⊂B and B⊂A (d) neither A⊂B nor B⊂A

Q.3 Consider X= {1,2,3}, Y= {}, Z= {1,2,3}, Which of the following statements is accurate?

(a) X⊂Y (b) Only Y⊂X and Y⊂Z

(c) Z⊂Y (d) Y⊂X and Y⊂Z and X⊂Z

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

(a) A⊂B (b) B⊂A

(c) A=B (d) A⊂A

Q.5 Consider the set X to be the set of rational numbers. Which of the following sets is a superset of X?

(a) Set of real numbers (b) Set of natural numbers

(c) Set of whole numbers (d) Set of integers

Q.6 Consider the set X as the set of rational numbers. Which of the following sets is not included in X as a subset?

(a) Set of real numbers (b) Set of natural numbers

(c) Set of whole numbers (d) Set of integers

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

(a) A⊂B (b) B⊂A

(c) C⊂B and A⊂C (d) B⊂C and A⊂C

Q.8 If an element x ∈ A and A⊂B then x ∈ B is this statement true.

(a) True

(b) False

Q.9 If X is an element of set A and A is a subset of B, then X is also a subset of B.

(a) True

(b) False

Q.10 Consider A = {1, 2, {3, 4}, 5}. Which of the following statements is correct?

(a) {3, 4} ⊂ A (b) {3, 4} ∈ A

(c) {{3, 4}} ⊂ A (d) {1, 2, 5} ⊂ A

ANSWER KEY

1. (a)

2. (c)

3. (d)

4. (d)

5. (a)

6. (a)

7. (d)

8. (a)

9. (b)

10. (a)