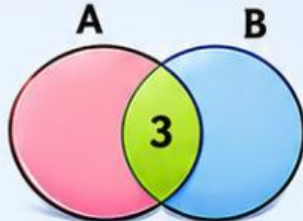


Class 10 SETS

10 MCQs

1 If $A = \{1, 2, 3\}$ and $B = \{3, 4, 5\}$, then $A \cap B$ is:

- A {1, 2}
- B {3}
- C {4, 5}
- D $\emptyset$



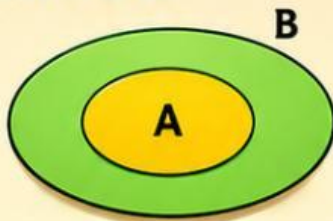
2 The number of subsets of an empty set is:

- A 0
- B 1
- C 2
- D 4



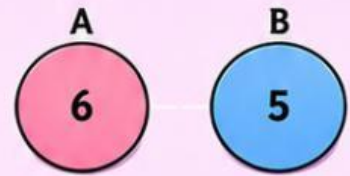
3 If $A \subset B$, then $A \cap B$ is:

- A A
- B B
- C $\emptyset$
- D U



4 If sets A and B are disjoint and $n(A) = 6$, $n(B) = 5$, then $n(A \cup B)$ is:

- A 5
- B 6
- C 11
- D 30



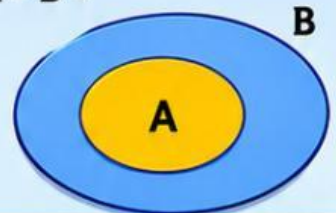
5 Which of the following is true?

- A $\phi = 0$
- B $\phi = \{0\}$
- C $\phi = \{ \}$
- D Both A and B



6 If $A \subset B$, then $A - B =$

- A A
- B B
- C $B - A$
- D $\emptyset$



7 The number of subsets of a set is 32. The number of elements in the set is:

- A 2
- B 3
- C 4
- D 5

$$2^n = 32$$

$$n = \log_2 32$$

$$n = 5$$

8 Which statement is false?

- A Every set is a subset of itself
- B Empty set is a subset of every set
- C Intersection of two disjoint sets is an empty set
- D Cardinal number of an infinite set is zero



9 If $A \subset B$, $n(A) = 12$ and $n(B) = 20$, then $n(B - A)$ is:

- A 8
- B 12
- C 20
- D 32

$$n(B - A)$$

$$= n(B) - n(A)$$

$$= 20 - 12$$

$$= 8$$

10 If $A = \{x : x^2 - 16 = 0\}$ and $B = \{x : x^2 - 5x + 6 = 0\}$, then $A \cup B$ is:

- A Singleton set
- B Infinite set
- C Null set
- D Finite set

