SET THEORY CONTINUED

Choose the Correct options:

1 Which of the following statements denote an empty set?
   A. { }
   B. set ()
   C. [0].
   D. (<>)

2. The Cardinality of the set of even natural numbers less than 10 is
   A. 2
   B. 4
   C. 8
   D. None of these

3: If A and B are sets and A∪B= A ∩ B, then
   A.A = Φ
   B.B = Φ
   C.A = B
   D. none of these

4: Let S be an infinite set and S1, S2, S3,… Sn be sets such that S1 ∪S2 ∪S3∪ ....Sn = S then
   A. at least one of the sets Si is a finite set
   B. not more than one of the set Si can be finite
   C. at least one of the sets Si is an infinite set
   D. none of these

5: If X and Y are two sets, then X ∩ (Y ∪ X) equals
   A. X
   B. Y
   C. Ø
   D. None of these

6: Which of the following sets are null sets?
   A. {0}
   B. ø
   C. { }
   D. **Both (b) & (c)**

7. If A ∩ B^c =∅
   A. A = B
   B. B A
   C. A is proper subset of B
   D. None of these

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8. A^c- B^c is equal to
   - A. B-A
   - B. A-B
   - C. A= B
   - **D. None of these**

9. If A =∅ then total number of elements in {A} are
   - A. No element
   - B. Zero
   - C. two
   - **D. one**

10 The smallest set A such that A∪{4,5}= {1,2,3,4,5} is
   - A. {3,4,5}
   - **B. {1.2.3}**
   - C. {1,2}
   - D. { 1,2,3,4,5}

11. If A= { 1,2,3} & B= { 4,5,6} then , n(A∪B) is equal to
   - **A. 6**
   - B. 9
   - C. 27
   - D. None of these

12. If A & B are two sets such that n(A)= 15, n(B)= 21, & n(A∪B) = 36 then n(A∩B) equal to
   - A. 2
   - **B. 0**
   - C. 4
   - D. 15

13. If P & Q are two sets such that P ∪ Q has 20 elements , P has 9 elements & Q has 16 elements . How many elements does P∩Q have ?
   - **A. 5**
   - B. 4
   - C. 3
   - D. 0

14 If A & B are sets and n(A∩ B - A ∪ B) =∅, then
   - A. A =∅
   - B. B =∅
   - **C. A = B**
   - D. None of these

15. Which of the following are equal sets?
A. {B,E,A,R} and {D,E,A,R}
B. {R, I, D, E} and {D, I, R,E}
C. {1,2,3,4} and {12, 23, 34,41}
D. {11, 12, 13} and {14, 15, 16}

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