

## Sets and Functions

Sr	Questions	Answers Choice
1	If $f: A \rightarrow B$ and range of $f = B$ , then $f$ is an.....	A. into function B. onto function C. bijective function D. function
2	A set with no element is called:	A. Subset B. Empty set C. Singleton set D. Super set
3	$(A \cap B)' =$ _____	A. $A' \cup B'$ B. $A' \cap B'$ C. $A \cap B$ D. $A \cup B$
4	The point $(-5, -7)$ lies in ..... quadrant.	A. I B. II C. III D. IV
5	If union and intersection of two sets are equal then sets are.....sets.	A. Disjoint B. Overlapping C. Equal D. Super
6	A collection of well-defined distinct object is called:	A. Subset B. Power set C. Set D. None of these
7	Which of the following is commutative law?	A. $A \cup (B \cap C) = (A \cup B) \cap C$ B. $A \cap (B \cup C) = (A \cap B) \cup C$ C. $A \cup B = B \cap A$ D. $(A \cup b) \cap (A \cup c) = A \cup (b \cap c)$
8	If A has two elements and B has 3 elements, then number of binary relations in $A \times B$ is _____	A. $2 \times 3$ B. $2^3$ C. $2^6$ D. $2^2$
9	If $x \in U$ and $x \notin A$ , then $\{x\}$ is equal to .....	A. $U$ B. $A^c$ C. $\emptyset$ D. $A - U$
10	A set with no element is called.	A. Subset B. Empty set C. Singleton set D. Super set
11	A subset of $A \times A$ is called..... in A.	A. Set B. Relation C. Function D. Info function.
12	$(A \cup B) \cap C =$ _____	A. $A \cap (B \cup C)$ B. $(A \cup B) \cap C$ C. $A \cup (B \cap C)$ D. $A \cap (B \cap C)$
13	If $A = \{0, 1, 2\}$ , $B = \{2, 3, 4, 5\}$ , then $A \cup B$ are:	A. Empty sets B. Equal sets C. Overlapping sets D. Disjoint set
14	Which of the following is distributive property intersection over union?	A. $A \cup (B \cap C) = A \cup (B \cap C)$ B. $A \cap (B \cup C) = (A \cap B) \cup C$ C. $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ D. $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$
15	Number of elements in power set of $\{1, 2, 3\}$	A. 4 B. 6 C. 8 D. 2

- 
- 16 The formula of grouped data of the arithmetic mean is:
- A.  $\bar{X} = \sum X/n$   
B.  $\bar{X} = A + \sum fX/\sum X$   
C.  $\bar{X} = \sum fX/n$   
D.  $\bar{X} = l + n/f (n/2 - c)$
- 
- 17  $A \subseteq B$  then  $A - B =$  \_\_\_\_\_
- A. A  
B. B  
C.  $\emptyset$   
D.  $B - A$
- 
- 18 Power set of empty set.
- A.  $\emptyset$   
B. {a}  
C. { $\emptyset$ , {a}}  
D. { $\emptyset$ }
- 
- 19 If number of elements in set A is 3 and in set B is 2, then number of binary relations in  $A \times B$  is.
- A. 3  
B. 4  
C. 7  
D. 12
- 
- 20 The range of {(a,a),(b,b),(c,c)} is .....
- A. {a,b}  
B. {a,b,c}  
C. {a}  
D.  $\emptyset$
-