

ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian Minority Institution

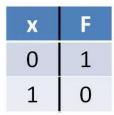
WORKSHEET - 20 (ANSWER KEY)

<u>Topic – Introduction to Boolean Algebra</u>

Topic – Introduction to boolean Algebra		
Subject: COMPUTER SCIEN	ICE Class - 11	F.M:15
Chapter: Boolean Algebra		Date: 08/08/2020
Choose the correct answer for each question:		<u>:</u> [5 X 1 = 15]
1. The fo	bllowing truth table belongs to :	
x	y xy	
0	0 0	
0	1 0	
1	0 0	
1	1 1	
	D operation	
	operation	
c) NOT operation		
	ne of these	
	blowing truth table belongs to :	
x	y x+y	
0	0 0	
0	1 1	
1		
1		
	1 1	
a) AND operation		
	operation	
	T operation	
· · · · ·	ne of these	mod by which proportion?
	 In boolean algebra, the OR operation is performed by which properties? a) Associative properties 	
•	mmutative properties	
c) Distributive properties		
d) <u>All of the Mentioned</u>		
	The expression for Absorption law is given by	
	a) A + AB = A	
	AB = B	
c) AB	+ AA' = A	
d) A +	B = B + A	

5. According to boolean law: A + 1 = ? a) <u>1</u> b) A c) 0 d) A' 6. Which law states : A + B = B + A? a) Associative properties b) Commutative properties c) Distributive properties d) All of the Mentioned 7. The involution of A is equal to _____ a) <u>A</u> b) A' c) 1 d) 0 8. (A + B)(A' * B') = ?a) 1 b) <u>0</u> c) AB d) AB' 9. DeMorgan's theorem states that ______ a) (AB)' = A' + B' b) (A + B)' = A' * B c) A' + B' = A'B'd) (AB)' = A' + B10. A(A + B) = ?a) AB b) 1 c) (1 + AB) d) <u>A</u> 11. Complement of the expression A'B + CD' is _____ a) (A' + B)(C' + D)b) (A + B')(C' + D) c) (A' + B)(C' + D)d) (A + B')(C + D')12. Simplify Y = AB' + (A' + B)C. a) AB' + C b) AB + AC c) A'B + AC'd) AB + A 13. Which law states (A, B). $C = A \cdot (B, C)$? a) Associative properties b) Commutative properties

- c) Distributive properties
- d) All of the Mentioned
- 14. The boolean function A + BC is a reduced form of ______
 - a) AB + BC
 - b) <u>(A + B)(A + C)</u>
 - c) A'B + AB'C
 - d) (A + C)B
- 15. The following truth table belongs to :



- a) AND operation
- b) OR operation
- c) NOT operation
- d) None of these

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