

## ECAT Computer Science Chapter 5 Boolean Algebra

Sr	Questions	Answers Choice
1	The 'Boolean Algebra' is based on the premise that	A. there are two states B. differential equations can be solved by analog circuits. C. either a statement is true or false D. arithmetic operations can be carried out
2	Boolean description for the exclusive OR gate for two inputs x and y can be written as.	A. x <u> +</u> y Bx _y C. x <u> y </u> + <u> x</u> . y D. x . y + x .y
3	In a three input NAND gate, if all the inputs are 1, the output is.	A. 0 B. 1 C. 3 D. indeterminate
4	Question Image	A. 0 B. 1 C. x
5	According to Idempotent law , x + y =	A. 1 B. 0 C. x D. x . x
6	Question Image	A. 0 B. 1 C. x
7	Pick up wrong logical expression	
8	Boolean algebra is also known as.	A. logical algebra B. control algebra C. switching algebra D. programming algebra
9	Question Image	A. x + y
10	Boolean <u>expre</u> ssion for NOR gate with t <u>wo inp</u> uts x and y can be written as.	A. <u>x</u> + y B. x. y C. <u>x + </u> y
10	Boolean <u>expre</u> ssion for NOR gate with t <u>wo inp</u> uts x and y can be written as.  Question Image	B. x. y
		B. x. y C. <u>x + </u> y  A. <u>A</u> + <u> B</u> + <u> C</u> + D C. <u>A</u> <u>B</u> <u>C</u> <u>C</u>
11	Question Image	B. x. y C. <u>x + </u> y  A. <u>A</u> + <u> B</u> + <u> C</u> + D C. <u>A</u> <u>B</u> <u>C</u> <u>C</u> <u>D</u> <u>D</u> B C. A + B + C + D  A. comparator B. pulse generator C. voltage source
11	Question Image  The heart of analog to digital converter (ADC) is	B. x. y C. <u>x + </u> y  A. <u>A</u> + <u> B</u> + <u> C</u> + D C. <u>A</u> <u>B</u> <u>C</u> <u>D</u>
11 12 13	Question Image  The heart of analog to digital converter (ADC) is  Boolean algebra use which of the following to represent arithmetic quantities.	B. x. y C. <u>x + </u> y A. <u>A</u> + <u>B</u> + <u>C</u> + D C. <u>A</u> <u>B</u> <u>C</u> - <u>C</u> - <u>D</u> D. A + B + C + D  A. comparator B. pulse generator C. voltage source D. current source A. decimal digits B. exponents C. binary bits D. fractions  A. used for arithmetical operation is ALU B. an aid for binary conversion C. useful for error detection and error correction D. used to describe the behavior and structure of logic networks and as an

16	Which of the following gate is two level logic gate.	B. AND gate C. EXCLUSIVE OR gate D. NAND gate
17	NAND gates are preferred over others because these.	A. have lower fabrication area B. can be used to make any gate C. consume least elctronic power D. provide maximum density in a chip
18	According to Boolean algebra A+A++A is	A. A B. n A C. 0 D. 1
19	Logical addition refers to operation of	A. OR gate B. AND gate C. NOT gate D. invertr gate
20	Odd parity of a word can be conveniently tested by.	A. OR gate B. XOR gate C. NOR gate D. NAND gate