ECAT Computer Science Chapter 5 Boolean Algebra

Sr	Questions	Answers Choice
1	An AND gate will function as OR if.	A. all the inputs to the gates are "I" B. all the inputs are "O" C. a Not gate is added to it D. all the inputs and outputs are complemented
2	Boolean expression for NOR gate with two inputs x and y can be written as.	A. <u>x</u> + y__ B. x. y C. <u>x + </u>y
3	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
4	Question Image	A. 0 B. 1 C. x
5	According to Boolean algebra x + 1 = _____	A. 0 B. 1 C. x
6	Boolean algebra is also known as.	A. logical algebra B. control algebra C. switching algebra D. programming algebra
7	If A and B are two 1-bit numbers, what logic gates will be required to test for A=B?	A. NOR gate B. EXCLUSIVE OR gate C. EXCLUSIVE NOT gate D. OR gate
8	Which of the following function is referred as the complementary.?	A. OR function B. NOT function C. NAND function D. AND function
9	According to aborption law x+x.y=	A. x B. y C. 1 + x D. 1 + y
10	In Boolean algebra A.A.A.A.A	A. 5A B. A C. A⁵ D. 1
11	Question Image	A. x . y B. <u>x + y</u> C. <u>x</u> . <u>y</u> D. x . y
12	According to Boolean algebra A+A+.....+A is	A. A B. n A C. 0 D. 1
13	Boolean algebra use which of the following to represent arithmetic quantities.	A. decimal digits B. exponents C. binary bits D. fractions
14	Which of the following statement is true in the case of AND gate with input A and B.	A. If A and B are applied, there will not be any output B. If neither input is applied, there will be an output C. If one input is applied there will not be any output D. If one input is applied there will be an output

15	The heart of analog to digital converter (ADC) is	A. comparator B. pulse generator C. voltage source D. current source
16	Question Image	A. <u>A + B</u> +<u> C + D</u> C. <u>A</u> + <u>B</u> C<u> + D</u>
17	In Boolean algebra A.0 is	A. 0 B. 1 C. A+0 D. A+1
18	Boolean description for the exclusive OR gate for two inputs x and y can be written as.	A. x<u> +</u> y __ B. _x _y C. x.<u> y </u>+<u> x</u>. y D. x . y + x .y
19	Boolean algebra is.	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 aid in the design of logic system
20	The commutative law in Boolean Algebra, where a, b and c are binary number is.	A. a+0=a B. a+1=1 C. a+b=b+a D. a. (b+c) = a.b +a.c.