ECAT Computer Science Chapter 5 Boolean Algebra

Sr	Questions	Answers Choice
1	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
2	Logical addition refers to operation of	A. OR gate B. AND gate C. NOT gate D. invertr gate
3	Which of the following gate is two level logic gate.	A. OR gate B. AND gate C. EXCLUSIVE OR gate D. NAND gate
4	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
5	According to Idempotent law , x + y = _____	A. 1 B. 0 C. x D. x . x
6	The output will be one in case any input is one in the case of.	A. OR gate B. AND gate C. NAND gate D. NOT gate
7	According to aborption law x+x.y=	A. x B. y C. 1 + x D. 1 + y
8	Question Image	A. x . y B. <u>x + y</u> C. <u>x</u> . <u>y</u> D. x . y
9	Which of the following operations are used by Boolean algebra.?	A. Boolean addition B. Boolean multiplication C. Boolean complementation D. All of the above
10	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
11	Logical multiplication refers to operation of.	A. OR gate B. AND gate C. NOT gate D. inverter gater
12	According to absorption law x. (x+y) =	A. x B. y C. 1+x D. 1+y
13	The logic device that perform Boolean multiplication is.	A. AND gate B. OR gate C. Inverter D. None of these
14	In a three input NAND gate, if all the inputs are 1, the output is.	A. 0 B. 1 C. 3 D. indeterminate

15	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
16	Question Image	A. <u>A + B</u> +<u> C + D</u> C. <u>A</u> + <u>B</u> C<u> + D</u>
17	According to Boolean algebra A+A+.....+A is	A. A B. n A C. 0 D. 1
18	The circuit that is used for parallel to serial conversion is	A. decoder B. encoder C. multiplexer D. demultiplexer
19	The half adder circuit has	A. one input B. two inputs C. three inputs D. always more than two inputs
20	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