

ECAT Computer Science Chapter 5 Boolean Algebra

Sr	Questions	Answers Choice
1	Which of the following operations are used by Boolean algebra.?	A. Boolean addition B. Boolean multiplication C. Boolean complementation D. All of the above
2	An OR gate has 6 input. The number of input words in its truth table are.	A. 6 B. 32 C. 64 D. 128
3	The heart of analog to digital converter (ADC) is	A. comparator B. pulse generator C. voltage source D. current source
4	An AND gate will function as OR if.	A. all the inputs to the gates are "1" B. all the inputs are "0" C. a Not gate is added to it D. all the inputs and outputs are complemented
5	According to Idempotent law , $x + y =$ _____	A. 1 B. 0 C. x D. $x \cdot x$
6	NAND gates are preferred over others because these.	A. have lower fabrication area B. can be used to make any gate C. consume least electronic power D. provide maximum density in a chip
7	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
8	In a three input NAND gate, if all the inputs are 1, the output is.	A. 0 B. 1 C. 3 D. indeterminate
9	Which of the following function is referred as the complementary.?	A. OR function B. NOT function C. NAND function D. AND function
10	The half adder circuit has	A. one input B. two inputs C. three inputs D. always more than two inputs
11	Odd parity of a word can be conveniently tested by.	A. OR gate B. XOR gate C. NOR gate D. NAND gate
12	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
13	The circuit that is used for parallel to serial conversion is	A. decoder B. encoder C. multiplexer D. demultiplexer
14	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

15	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
16	Question Image	A. 0 B. 1 C. x
17	Which of the following gate is two level logic gate.	A. OR gate B. AND gate C. EXCLUSIVE OR gate D. NAND gate
18	In Boolean algebra $A \cdot 0$ is	A. 0 B. 1 C. $A+0$ D. $A+1$
19	According to Boolean algebra $A+A+\dots+A$ is	A. A B. n A C. 0 D. 1
20	Question Image	A. $x + y$