

## ECAT Computer Science Chapter 5 Boolean Algebra Online Test

Sr	Questions	Answers Choice
1	According to absorption law $x+x.y=$	A. x B. y C. $1 + x$ D. $1 + y$
2	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. $a.(b+c) = a.b + a.c$
3	Question Image	A. $x.y$ B. $\langle u \rangle x + y \langle u \rangle$ C. $\langle u \rangle x \langle u \rangle . \langle u \rangle y \langle u \rangle$ D. $x.y$
4	Question Image	A. $x + y$
5	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
6	Boolean expression for NOR gate with two inputs x and y can be written as.	A. $\langle u \rangle x \langle u \rangle + y \_$ B. $x.y$ C. $\langle u \rangle x + \langle u \rangle y$
7	Boolean description for the exclusive OR gate for two inputs x and y can be written as.	A. $x \langle u \rangle + \langle u \rangle y \_$ B. $\_x\_y$ C. $x \langle u \rangle y \langle u \rangle + \langle u \rangle x \langle u \rangle . y$ D. $x.y + x.y$
8	Question Image	A. $\langle u \rangle A + B \langle u \rangle + \langle u \rangle C + D \langle u \rangle$ C. $\langle u \rangle A \langle u \rangle + \langle u \rangle B \langle u \rangle C \langle u \rangle + D \langle u \rangle$
9	Question Image	A. $\langle u \rangle A \langle u \rangle + \langle u \rangle B \langle u \rangle + \langle u \rangle C \langle u \rangle + D$ C. $\langle u \rangle A \langle u \rangle \langle u \rangle B \langle u \rangle \langle u \rangle C \langle u \rangle \langle u \rangle D \langle u \rangle$ D. $A + B + C + D$
10	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
11	Odd parity of a word can be conveniently tested by.	A. OR gate B. XOR gate C. NOR gate D. NAND gate
12	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
13	An OR gate has 6 input. The number of input words in its truth table are.	A. 6 B. 32 C. 64 D. 128
14	Which of the following function is referred as the complementary.?	A. OR function B. NOT function C. NAND function D. AND function
15	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

