

ECAT Computer Science Chapter 5 Boolean Algebra

Sr	Questions	Answers Choice
1	The logic device that perform Boolean multiplication is.	A. AND gate B. OR gate C. Inverter D. None of these
2	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
3	Question Image	A. $\langle u \rangle A + B \langle /u \rangle + \langle u \rangle C + D \langle /u \rangle$ B. $\langle u \rangle A \langle /u \rangle + \langle u \rangle B \langle /u \rangle C \langle u \rangle + D \langle /u \rangle$
4	Pick up wrong logical expression	
5	Which of the following operations are used by Boolean algebra.?	A. Boolean addition B. Boolean multiplication C. Boolean complementation D. All of the above
6	Question Image	A. 0 B. 1 C. x
7	The circuit that is used for parallel to serial conversion is	A. decoder B. encoder C. multiplexer D. demultiplexer
8	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
9	According to Boolean algebra $x + 1 =$ _____	A. 0 B. 1 C. x
10	Which of the following gate is two level logic gate.	A. OR gate B. AND gate C. EXCLUSIVE OR gate D. NAND gate
11	Boolean algebra use which of the following to represent arithmetic quantities.	A. decimal digits B. exponents C. binary bits D. fractions
12	Which of the following function is referred as the complementary.?	A. OR function B. NOT function C. NAND function D. AND function
13	Logical multiplication refers to operation of.	A. OR gate B. AND gate C. NOT gate D. inverter gater
14	An OR gate has 6 input. The number of input words in its truth table are.	A. 6 B. 32 C. 64 D. 128
15	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. $a \cdot (b+c) = a \cdot b + a \cdot c$
		A. there are two states

16	The 'Boolean Algebra' is based on the premise that	<p>B. differential equations can be solved by analog circuits.</p> <p>C. either a statement is true or false</p> <p>D. arithmetic operations can be carried out</p>
17	Question Image 	<p>A. $x \cdot y$</p> <p>B. $x + y$</p> <p>C. $x \cdot y$</p> <p>D. $x \cdot y$</p>
18	According to Boolean algebra $A+A+\dots+A$ is	<p>A. A</p> <p>B. n A</p> <p>C. 0</p> <p>D. 1</p>
19	In Boolean algebra $A.A.A.A$	<p>A. 5A</p> <p>B. A</p> <p>C. A^5</p> <p>D. 1</p>
20	In Boolean algebra $A \cdot 0$ is	<p>A. 0</p> <p>B. 1</p> <p>C. $A+0$</p> <p>D. $A+1$</p>