ECAT Computer Science Online Test

Sr	Questions	Answers Choice
1	The circuit that is used for parallel to serial conversion is	A. decoder B. encoder C. multiplexer D. demultiplexer
2	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
3	In Boolean algebra A.0 is	A. 0 B. 1 C. A+0 D. A+1
4	In Boolean algebra A.A.A.A.A	A. 5A B. A C. A⁵ D. 1
5	According to Boolean algebra A+A+.....+A is	A. A B. n A C. 0 D. 1
6	According to absorption law x. (x+y) =	A. x B. y C. 1+x D. 1+y
7	According to aborption law x+x.y=	A. x B. y C. 1 + x D. 1 + y
8	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.
9	Question Image	A. x . y B. <u>x + y</u> C. <u>x</u> . <u>y</u> D. x . y
10	Question Image	A. x + y
11	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
12	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
13	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
14	Question Image	A. <u>A + B</u> +<u> C + D</u> C. <u>A</u> + <u>B</u> C<u> + D</u>
15	Question Image	A. <u>A</u> +<u> B</u> +<u> C</u> + D C. <u>A</u> <u>B</u><u>C</u> <u>D</u> D. A + B + C + D
16	NAND gates are preferred over others because these	A. have lower fabrication area B. can be used to make any gate

16	NAND gates are preferred over others because these.	C. consume least elctronic power D. provide maximum density in a chip
17	Odd parity of a word can be conveniently tested by.	A. OR gate B. XOR gate C. NOR gate D. NAND gate
18	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
19	An OR gate has 6 input. The number of input words in its truth table are.	A. 6 B. 32 C. 64 D. 128
20	Which of the following function is referred as the complementary.?	A. OR function B. NOT function C. NAND function D. AND function
21	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
22	The logic device that perform Boolean multiplication is.	A. AND gate B. OR gate C. Inverter D. None of these
23	Which of the following gate is two level logic gate.	A. OR gate B. AND gate C. EXCLUSIVE OR gate D. NAND gate
24	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
25	Logical multiplication refers to operation of.	A. OR gate B. AND gate C. NOT gate D. inverter gater
26	Logical addition refers to operation of	A. OR gate B. AND gate C. NOT gate D. invertr gate
27	Which of the following operations are used by Boolean algebra.?	A. Boolean addition B. Boolean multiplication C. Boolean complementation D. All of the above
28	Boolean algebra use which of the following to represent arithmetic quantities.	A. decimal digits B. exponents C. binary bits D. fractions
29	Boolean algebra is also known as.	A. logical algebra B. control algebra C. switching algebra D. programming algebra
30	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