# ECAT Computer Science Chapter 5 Boolean Algebra

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The number of inputs to full adder are | A. 1<br>B. 2<br>C. 3<br>D. 4 |
| 2 | According to Boolean algebra A+A+.....+A is | A. A<br>B. n A<br>C. 0<br>D. 1 |
| 3 | Question Image | A. x + y |
| 4 | Boolean description for the exclusive OR gate for two inputs x and y can be written as. | A. x<u> +</u> y __<br>B. _x _y<br>C. x.<u> y </u>+<u> x</u>. y<br>D. x . y + x .y |
| 5 | The heart of analog to digital converter (ADC) is | A. comparator<br>B. pulse generator<br>C. voltage source<br>D. current source |
| 6 | Pick up wrong logical expression | |
| 7 | In Boolean algebra A.A.A.A.A | A. 5A<br>B. A<br>C. A<sup>5</sup><br>D. 1 |
| 8 | According to aborption law x+x.y= | A. x<br>B. y<br>C. 1 + x<br>D. 1 + y |
| 9 | Question Image | A. <u>A + B</u> +<u> C + D</u><br>C. <u>A</u> + <u>B</u> C<u> + D</u> |
| 10 | An AND gate will function as OR if. | A. all the inputs to the gates are "I"<br>B. all the inputs are "O"<br>C. a Not gate is added to it<br>D. all the inputs and outputs are complemented |
| 11 | According to Boolean algebra x + 1 = _____ | A. 0<br>B. 1<br>C. x |
| 12 | Boolean algebra use which of the following to represent arithmetic quantities. | A. decimal digits<br>B. exponents<br>C. binary bits<br>D. fractions |
| 13 | The commutative law in Boolean Algebra, where a, b and c are binary number is. | A. a+0=a<br>B. a+1=1<br>C. a+b=b+a<br>D. a. (b+c) = a.b +a.c. |
| 14 | 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<br>B. If neither input is applied, there will be an output<br>C. If one input is applied there will not be any output<br>D. If one input is applied there will be an output |
| 15 | If A and B are two 1-bit numbers, what logic gates will be required to test for A=B? | A. NOR gate<br>B. EXCLUSIVE OR gate<br>C. EXCLUSIVE NOT gate<br>D. OR gate |
| 16 | The circuit that is used for parallel to serial conversion is | A. decoder<br>B. encoder<br>C. multiplexer |

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| | | D. demultiplexer |
| 17 | An OR gate has 6 input. The number of input words in its truth table are. | A. 6<br>B. 32<br>C. 64<br>D. 128 |
| 18 | The output will be one in case any input is one in the case of. | A. OR gate<br>B. AND gate<br>C. NAND gate<br>D. NOT gate |
| 19 | Logical multiplication refers to operation of. | A. OR gate<br>B. AND gate<br>C. NOT gate<br>D. inverter gater |
| 20 | Boolean algebra is also known as. | A. logical algebra<br>B. control algebra<br>C. switching algebra<br>D. programming algebra |