

Dr. Rafiq Zakaria Campus

Maulana Azad College of Arts, Science & commerce, Aurangabad

Department of Computer Science

Academic Year 2015-16

MCQs on Digital Electronic

Sem.:- I

-
1. Half adder is logic CKT that adds.Digit at a time
a) **Two** b) one c) three d) zero
 2. Half adder consist of.&....Gates
a) **EX-OR&AND** b) EX-OR&OR c) EX-OR&NOT d) None of these
 3. The full adder CKT adds.Digit at a time
a) 1 b) 2 c) **3** d) 4
 4. Full adder is constructed by using
a) **Two Half Adder& one OR gate** b) two OR gate &one HA
c) One HA & two OR gate d) One OR gate & one HA
 5. The O/P of Half adder is in the form of.
a) Sum b) carry c) **sum & carry** d) none of these
 6. is the inverse operation of addition.
a) Addition b) Multiply c) **Subtraction** d) Divide
 7. Multiplexer means
a) One in to many b) **many in to one** c) many in to many d) none of these
 8. If the input J is connected through K input of J-K, then flip-flop will behave as a
a) D type flip-flop b) **T type flip-flop** c) S-R flip-flop d) Master slave JK flip-flop
 9. Binary 0 represents
a) HIGH level b) **LOW Level** c) Both d) None of these
 10. Each Flip-flop stores ----- bits
a) **1 bit** b) 8 bit c) 16 bit d) 2 bit
 11. A binary number with 8 bits is called as a :
a) Bytes b) Bit c) Nibble d) All of these
 12. Multiplexers is also known as.
a) subtractor b) **mux** c) demux d) adder
 13. Which of the following flip-flop is free from race-around problem?
a) Q flip-flop b) T flip-flop c) SR flip-flop d) **Master-slave JK flip-flop**
 14. The two symbols 0 and 1 are known as:
a) Bytes b) **Bits** c) Nibble d) All of these

15. A Register is a group of -----
a) OR gates b) OR & AND gate c) **Flip-flops** d) None of these
16. A demultiplexer can be used as
a) Encoder b) **Decoder** c) Multiplexer d) None of these
17. 'n' Flip flops will divide the clock frequency by a factor of
a) n^2 b) n c) $2n$ d) log
18. Popular application of flip-flop are _____
a) Transfer register b) Shift registers c) Counters d) **All of these**
19. For which of the following flip-flops, the output is clearly defined for all combinations of two inputs ?
a) Q type flip-flop b) R-S flip-flop c) **J-K flip-flop** d) D flip-flop
20. The negative numbers in the binary system can be represented by
(a) Sign magnitude (b) 1's complement (c) **2's complement** (d) All of the above

1. The binary system, $1+1=$
 (a) 2 (b) 0 (c) **1** (d) none of these
2. In logic algebra, variables can assume only two values: either.....or 1.
 (a) 2 (b) **0** (c) 3 (d) 4
3. The..... gate is also called any-or-all gate.
 (a) OR (b) AND (c) NOT (d) EX-OR
4. A logic gate is an electronic circuit which
 (a) **makes logic decisions** (b) allows electron flow only in one direction
 (c) works on binary algebra (d) alternates between 0&1 values
5. The output of a 2-input OR the gate is 0 only when it's
 (a) **both inputs are 0** (b) either input is 1
 (c) both inputs are 1 (d) either input is 0
6. The only function of a NOT gate is to
 (a) stop a signal (b) recomplement a signal
 (c) **invert an input signal** (d) act as a universal set
7. Karnaugh map (K-map) technique provides a systematic method for simplifying -----
 a) multiplexers b) logic gates c) **Boolean expressions** d) none of these .
8. This is truth table for ----- gate

| A | B | Y |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

 a)OR gate b)AND gate c)NAND gate d)**EX-OR gate**
9. The number system that we use in our day to day life is called the Number System _____
 a) Octal b) Binary c) hexadecimal d) **Decimal**
10. The Binary system has base _____
 a) 8 b) **2** c) 10 d) 16
11. The Hexadecimal Number system has base _____
 a) 2 b) 10 c) **16** d) 8
12. $11010011_2 = ?_{16}$
 a) **D3**₁₆ b) A3₁₆ c) B3₁₆ d) D2₁₆

13. $25_{10} = ?_2$ _____
 a) 10001_2 b) **11001_2** c) 11000_2 d) 10101_2
14. Binary equivalent of decimal 8 is
 a. 111 b. 1001 c. **1000** d. 10001
15. Which of the following is not an octal number?
 a. 44 b. **29** c. 6632 d. 74
16. Hexadecimal equivalent of $(58)_{10}$ will be
 a. 72 b. 111010 c. **3A** d. 3C
17. _____ gate is also called as inverter.
 (a) OR (b) AND (c) **NOT** (d) EX-OR
18. _____ & _____ gate are universal building block.
 i) **NAND & NOR** II) AND & OR iii) EXOR & OR iv) AND & NAND
19. The two input OR gate will always give the output zero when :
 a. both the inputs are 1. b. **both inputs are zero** c. any one input 1 d. any one 0
20. What is the main function of NOT gate
 a. It has no effect b. It act as Universal gate c. **to invert an output signal** d. None.