

Duration: 30 Mins

Total Marks: 24

ID: ITISKILL8320PT

Student Name: _____ Roll No: _____

1. What is the power supply required to operate the most standard TTL ICs properly?

- A) + 1.5v to +2.5V B) - 1.5v to - 2.5V
C) + 4.75v to + 5.25V D) + 7.5v to + 12V

2. What is the information stored in digital registers?

- A) Decimal values B) Analog values
C) Binary values D) Alphanumeric values

3. Which IC is used for the function of 4 bit shift register?

- A) IC 7495 B) IC 7404
C) IC 7447 D) IC 7493

4. Which type of voltage regulator is IC 723?

- A) Multipin variable voltage regulator B) Three pin adjustable voltage regulator
C) Three pin positive voltage regulator D) Three pin negative voltage regulator

5. What is the maximum possible number of flip-flops in a decade counter?

- A) 2^n B) 2^{n+1}
C) 3^n D) 2^{n+1}

6. How many transistors are built inside the Very Large Scale Integration (VLSI) IC package?

- A) 1000 and above B) 1 to 10 transistors
C) 100 to 1000 transistors D) 10 to 100 transistors

7. What is the use of flip - flop?

- A) It stores current B) It stores voltage
C) It stores binary information D) It stores energy

8. What is the digital signal value for the analog signal value 6V?

- A) 110 B) 111
C) 100 D) 101

9. Which IC is used for (DEMUX) function in data transmission?

- A) IC 7483 B) 74 LS 151

C) 74 LS 138

D) IC 7486

10. Which method is followed to troubleshoot the problem causing section by the symptom?

- A) Trial and error method B) Step by step method
C) Logical approach method D) Sensory test method

11. Which three terminal voltage regulator IC has adjustable output?

- A) LM 305 B) LM 317
C) LM 100 D) LM 105

12. What is the current rating of voltage regulator IC LM338K?

- A) 5A B) 4A
C) 2A D) 3A

13. What is the decimal conversion number for the octal number (2374)₈?

- A) (1286)₁₀ B) (1266)₁₀
C) (1276)₁₀ D) (1296)₁₀

14. Which IC package consist of 100 to 1000 transistors?

- A) Small scale integration (SSI) B) Very large scale integration (VLSI)
C) Medium scale integration (MSI) D) Large scale integration (LSI)

15. What is the propagation delay of the standard TTL chip?

- A) 5 ns B) 12 ns
C) 10 ns D) 8 ns

16. How much is the maximum load current of the negative voltage regulator IC 7912?

- A) 1.5 A B) 2.0 A
C) 1.0 A D) 0.55 A

17. What is the range of output voltage of regulator IC LM 317?

- A) 0 to 32 V B) 0 to 25 V
C) 1.2 V to 32 V D) 0 to 30 V

18. What is the power dissipation of the standard TTL chip?

- A) 5 mW/gate
- B) 15 mW/gate
- C) 20 mW/gate
- D) 10 mW/gate

19. What is the current rating of voltage regulator IC LM317L?

- A) 0.4 A
- B) 0.2 A
- C) 0.1 A
- D) 0.3 A

20. Which circuits requires the flip - flops for their operation?

- A) Modulator circuits
- B) Memory circuits
- C) Amplifier circuits
- D) Oscillator circuits

21. How many inputs are available in the 7447 BCD-to-seven segment decoder used to drive the LED display?

- A) Four
- B) Seven
- C) One
- D) Eight

22. What is the decimal number for the binary number 0101?

- A) 6
- B) 7
- C) 4
- D) 5

23. Which is the 3 terminal, negative voltage regulator IC?

- A) LM 340
- B) IC 7812
- C) LM 320
- D) IC 7905

24. What is the purpose of using IC74LS190?

- A) Comparator
- B) Modulator
- C) Up/down counter
- D) Attenuator