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Score: 0/50 (0.00%)

Code: 8870

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

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

2. 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

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

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

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

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

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

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

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

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

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

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

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

- A) IC 7483
B) IC 7486
C) **74 LS 138**
D) 74 LS 151

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

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

10. What is the use of flip - flop?

- A) It stores energy
B) It stores voltage

C) It stores current

D) It stores binary information

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

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

12. What is the purpose of using IC74LS190?

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

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

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

14. What is the information stored in digital registers?

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

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

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

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

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

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

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

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

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

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

- A) 1.0 A
B) 1.5 A

C) 2.0 A

D) 0.55 A

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

- A) 2A
C) 4A

- B) 3A
D) 5A

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

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

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

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

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

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

24. Which type of voltage regulator is IC 723?

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

25. What is the common and popular application of U.J.T?

- A) Multivibrator
C) Relaxation oscillator
- B) Voltage regulator
D) Motor speed controller

26. What is the maximum forward gate current (I_g) for BFW10 JFET?

- A) 5 mA
C) 10 mA
- B) 8 mA
D) 20 mA

27. What is the package type for BF 245B?

- A) TO-72
C) TO-82
- B) TO-92
D) TO-102

28. How gate is biased in JFET?

- A) AC supply function
C) Reverse biased
- B) Forward biased
D) Dual supply function

29. What is the gate current (I_g) of the JFET, when reverse biased?

- A) Practically very low
C) Practically unity
- B) Practically zero
D) Practically infinity

30. Which is the N - channel FET?

- A) AC supply connected to drain termin
C) Main current flows through P-doped material
- B) Main current flows through N-doped material
D) S-terminal connected to positive

31. Which is the package type for the JFET BFW10?

- A) TO-62
C) TO-82
- B) TO-72
D) TO-92

32. What is the maximum drain- source voltage, V_{DS} for the JFET BF 245B?

- A) 10 V
C) 30 V
- B) 20 V
D) 40 V

33. What is the term stands for TRIAC?

- A) Triode Alternate control
C) Triode AC semiconductor
- B) Triode DC semiconductor
D) Triode Access console

34. What is the maximum specified voltage for the TRIAC TIC 201D?

- A) 1.5 V
C) 2.1 V
- B) 1.7 V
D) 2.5 V

35. What is the code number of TRIAC?

- A) 2N2646
C) BT136
- B) BFW10
D) 2N1597

36. Which current flows in TRIAC between MT1 and MT2?

- A) Conventional current
C) Reverse current
- B) Principal current
D) Leakage current

37. What is the switching speed of solid state relays?

- A) 1 to 25 nano seconds
C) 1 to 100 nano seconds
- B) 10 to 60 nano seconds
D) 1 to 100 milli seconds

38. What is the minimum current ratings of solid state relays available in low power packages?

- A) Few micro Amperes
C) 50 milli Ampere
- B) 10 milli Ampere
D) 100 milli Ampere

39. What is the full form of the abbreviation MOSFET?

- A) Minimum output signal FET
C) Metal oxide semiconductor FET
- B) Medium oscillator signal FET
D) Metal organic serial FET

40. What is the maximum blocking voltage of very high

current handling IGBT modules?

- A) 440 V
- B) 1000 V
- C) 5000 V
- D) 6000 V**

41. What is the input impedance of IGBT?

- A) Low input impedance
- B) High input impedance**
- C) Medium input impedance
- D) Infinity input impedance

42. What is the advantage of MOSFET?

- A) Fast switching speed**
- B) Slow switching speed
- C) Higher power gate signal
- D) Low thermal ionisation of electron-holes

43. What is the advantage of MOSFET?

- A) Superior current conduction capability
- B) Low gate signal power requirements**
- C) Very low on-state voltage
- D) Low driving power

44. What is the advantage of IGBT?

- A) It has low input impedance
- B) Low efficiency and slow switching
- C) High efficiency and fast switching**
- D) IGBT is a gate current driven device

45. What is the advantage of IGBT?

- A) Low driving power**
- B) Low gate signal power

C) Fast switching speed

D) Used to isolate logic circuits

46. 6 What is the input impedance of IGBT?

- A) Low
- B) High**
- C) Unity
- D) Infinity

47. Which is the property of IGBT?

- A) Low input impedance
- B) High efficiency and fast switching**
- C) Low gate signal
- D) Significant power consumption

48. What is the main advantages of IGBT over BJT?

- A) Fast switching speed
- B) Superior current conduction capability**
- C) Reverse bias secondary break downs
- D) Thermal limits are pushed to the edge

49. How many alternating layers are there in IGBT?

- A) 2 layers
- B) 3 layers
- C) 4 layers**
- D) Single layer

50. Which insulation layer is used in MOSFET?

- A) Silicon-di-oxide**
- B) Arsenic material
- C) Antimony material
- D) Germanium material