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**Score: 58/60 (96.67%)**

**Code: 8086**

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

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

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

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

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

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

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

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

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

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

6. Which type of voltage regulator is IC 723?

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

7. What is the resonant frequency range of a crystal?

- A) Between 0.1 and 1MHZ      B) Between 0.1 and 10 MHZ  
 C) Between 0.5 and 25 MHZ      D) **Between 0.5 and 30 MhZ (Correct)**

8. Which circuit is determined by the frequency of LC tank circuit?

- A) **Oscillator (Correct)**      B) Amplifier  
 C) Multiplexed      D) Demodulator

9. What type of arrangement is required to sustain the oscillations of the oscillator circuit?

- A) Provide negative feedback      **B) Provide regenerative feedback (Correct)**  
 C) Increase the bias voltage      D) Increase the value of inductor

10. What type of feed back is used by the Wein-bridge oscillator to oscillate the signal?

- A) No feedback      B) Positive feedback  
 C) Negative feedback      **D) Both positive and negative feedback (Correct)**

11. How to improve the frequency stability in oscillator circuits?

- A) Increase the supply voltage      **B) By using quartz crystal (Correct)**  
 C) Using L and C      D) Improve the property of circuits

12. Which is the transistor used to operate the Colpitts oscillator?

- A) AC 127      **B) BF 194B (Correct)**  
 C) BC 148B      D) AC 188

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

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

14. What is the maximum forward gate current (I<sub>g</sub>) for BFW10 JFET?

- A) 5 mA      B) 8 mA  
 C) **10 mA (Correct)**      D) 20 mA

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

- A) TO-72      **B) TO-92 (Correct)**  
 C) TO-82      D) TO-102

16. How gate is biased in JFET?

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

17. What is the gate current (I<sub>g</sub>) of the JFET, when reverse biased?

- A) Practically very low      **B) Practically zero (Correct)**

C) Practically unity                      D) Practically infinity

18. Which device is a unipolar transistor?

- A) UJT                                      **B) FET (Correct)**  
C) BJT                                      D) IGBT

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

- A) TO-62                                    **B) TO-72 (Correct)**  
C) TO-82                                    D) TO-92

20. What is the term stands for TRIAC?

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

21. What is the code number of TRIAC?

- A) 2N2646                                B) BFW10  
**C) BT136 (Correct)**                      D) 2N1597

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

- A) Conventional current              **B) Principal current (Correct)**  
C) Reverse current                      D) Leakage current

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

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

24. Which is the device made and interconnected by two transistors?

- A) UJT                                      **B) SCR (Correct)**  
C) FET                                      D) LED

25. How many layers of PN - junctions are used in SCR fabrication?

- A) Two layer two junctions            **B) Four layer three junctions (Correct)**  
C) Three layer three junctions        D) Three layer four junctions

26. What is the function of solid state relay(SSR)?

- A) Low pass filter                      B) High frequency oscillator  
C) High gain amplifier                **D) High speed switching (Correct)**

27. Which measuring instrument is used to make quick test on a TRIAC?

- A) Ammeter                              **B) Ohmmeter (Correct)**  
C) Voltmeter                              D) Oscilloscope

28. What type of control is used for FET?

- A) Resistance controlled device            **B) Voltage controlled device**  
C) Current controlled device (Incorrect)    D) Frequency controlled device

29. Which parameter controls the current flow in a BI-polar transistor?

- A) Voltage                                **B) Current (Correct)**  
C) Frequency                              D) Resistance

30. Which component filter the ripples in the rectifier circuit?

- A) DIAC                                    B) Diode  
C) TRIAC                                **D) Capacitor (Correct)**

31. Which parameter is maintained constant in zener diode?

- A) Power                                  B) Current  
**C) Voltage (Correct)**                      D) Resistance

32. What is the meaning of maximum safe reverse voltage across a diode?

- A) PIV voltage (Correct)**              B) Knee voltage  
C) Break down voltage                D) Reverse break down voltage

33. When does the zener diode begins to conduct in the reverse biased condition?

- A) When bias voltage reached 0.7V              B) After the barrier voltage cancelled  
C) Voltage across zener reached 0.3V              **D) Voltage across it reached the zener voltage (Correct)**

34. What is the output pulse frequency of the full wave rectifier with input frequency of 50 Hz?

- A) 40 Hz                                  B) 60 Hz  
**C) 100 Hz (Correct)**                      D) 200 Hz

35. Which diode is used in low power communication circuits?

- A) Signal diodes (Correct)**              B) Rectifier diodes  
C) Switching diodes                      D) High power diodes

36. What is the disadvantage of the two diode full wave rectifier compared with a bridge rectifier?

- A) DC output level is higher              B) The ripple frequency is higher  
**C) The need of bulky transformer (Correct)**    D) Each diode carries half the load current

37. What is the process of adding impurities to a pure semi conductor material?



C) To break down the acid within the joint

**D) Remove residual flux and prevent corrosion (Correct)**

57. Which coding system for transistor type numbering system is followed by American standard?

A) JIS standard

B) Home codes

**C) JEDEC standard (Correct)**

D) PRO-ELECTRON standard

58. What is the current gain of common collector amplifier?

A) Low

B) High

C) Medium

**D) Very high (Correct)**

59. What is the current gain of a common emitter base amplifier?

A) Unity

B) Infinity

C) Greater than 1

**D) Less than 1 (Correct)**

60. What is the meaning of first letter indicated in the transistor code number BC 107?

A) Germanium material used

**B) Silicon material used (Correct)**

C) Antimony material used

D) Indium material used