

Duration: 30 Mins

Total Marks: 60

ID: ITISKILL3090ZP

Student Name: _____ Roll No: _____

1. Which type of soldering is used for electronic circuit?

- A) Soft soldering B) Brazing
C) Hot soldering D) Hard soldering

- A) 7 - 10 seconds B) 10 - 15 seconds
C) 3 - 7 seconds D) 15 - 20 seconds

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

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

9. Which tool works on the principle of air suction?

- A) Desoldering pump B) Desoldering braid
C) Soldering wick D) Soldering iron

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

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

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

- A) 60 Hz B) 40 Hz
C) 100 Hz D) 200 Hz

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

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

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

- A) Low B) Very high
C) High D) Medium

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

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

12. How many types of soldering is used for joining metal surfaces?

- A) Two B) Five
C) Three D) Four

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

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

13. What is the effect of over heating on soldering a joint?

- A) Cold joint B) Flux trapped against lead
C) Dull grainy surface D) Poor wetting

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

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

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

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

8. How much time is required to make a quality soldered joint using soldering iron?

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

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

16. Which type of voltage regulator is IC 723?

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

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

- A) Ammeter
- B) Voltmeter
- C) Oscilloscope
- D) Ohmmeter

18. What is the range of temperature used in soldering station?

- A) 600 Degree Centigrade to 800 Degree Centigrade
- B) 150 Degree Centigrade to 450 Degree Centigrade
- C) 800 Degree Centigrade to 1000 Degree Centigrade
- D) 450 Degree Centigrade to 600 Degree Centigrade

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

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

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

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

21. Which device is a unipolar transistor?

- A) FET
- B) BJT
- C) IGBT
- D) UJT

22. What is the code number of TRIAC?

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

23. What is the term stands for TRIAC?

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

24. Which ratio of tin-lead combination is used for electronic component soldering work?

- A) 40:60
- B) 60:40:00
- C) 63:37:00
- D) 20:40

25. What is the name of the process of converting AC into DC voltage?

- A) Rectifying
- B) Demodulating
- C) Amplifying
- D) Inverting

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

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

27. What is the name of flux used for soldering electronic

components?

- A) Mild acid
- B) Organic acid
- C) Rosin
- D) Resin

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

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

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

- A) Home codes
- B) JEDEC standard
- C) PRO-ELECTRON standard
- D) JIS standard

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

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

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

- A) Germanium material used
- B) Indium material used
- C) Silicon material used
- D) Antimony material used

32. How the flux residue is removed after soldering a joint?

- A) Water
- B) Isopropyl alcohol
- C) Organic flux
- D) Petrol

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

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

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

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

35. What is the full form of the abbreviation SPDT used in switches?

- A) Single Pole Single Throw
- B) Single Phase Dual Throw
- C) Shared Pole Double Throw
- D) Single Pole Double Throw

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

- A) UJT
- B) LED
- C) SCR
- D) FET

37. At which temperature the 6040 solder start meeting?

- A) 380 Degree Centigrade
- B) 300 Degree Centigrade

C) 100 Degree Centigrade D) 200 Degree Centigrade

38. What type of control is used for FET?

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

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

- A) Unity B) Infinity
C) Less than 1 D) Greater than 1

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

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

41. How is the gate biased in JFET?

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

42. Which component filters the ripples in the rectifier circuit?

- A) Capacitor B) TRIAC
C) DIAC D) Diode

43. Which parameter is maintained constant in a Zener diode?

- A) Power B) Current
C) Voltage D) Resistance

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

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

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

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

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

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

47. Which parameter controls the current flow in a bipolar transistor?

- A) Current B) Frequency
C) Resistance D) Voltage

48. Which step is important for soldering a joint?

- A) Pasting the joint B) Cleaning the joint
C) Heating the joint D) Cooling the joint

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

- A) Amplifier B) Demodulator
C) Oscillator D) Multiplexer

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

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

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

- A) Between 0.1 and 1 MHz B) Between 0.5 and 30 MHz
C) Between 0.1 and 10 MHz D) Between 0.5 and 25 MHz

52. What is the output frequency of the pulsating DC in a two diode full wave rectifier?

- A) Same frequency of the A/C input B) Double the input A/C frequency
C) Three times the input A/C frequency D) Half of the input A/C frequency

53. Which impurity is added to form P - type semiconductor material?

- A) Antimony B) Gallium
C) Phosphorus D) Arsenic

54. What is the full form of the abbreviation DPDT used in switches?

- A) Dual Phase Dual Throw B) Direct Pole Double Throw
C) Double Pole Double Throw D) Double Pole Direct Throw

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

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

56. Which impurity is added to pure semiconductor to form N-type material?

- A) Boron B) Gallium
C) Arsenic D) Indium

57. Which bonding material is used for soldering a joint?

- A) Flux B) Acid
C) Oil D) Grease

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

- A) Diffusion
- B) Doping
- C) Forming
- D) Etching

59. Why the solvent Iso Propyl Alcohol (IPA) is used on the solder joint?

- A) To break down the acid within the joint
- B) To help the corrosive action
- C) Cleaning before soldering the joint
- D) Remove residual flux and prevent corrosion

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

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