

ITI Quiz - 26-May-2026

06:10 AM

Q. ID: ITISKILL3090ZP

May 2026

ITI HOLENARSIPURA

Answer Key

Duration: 30 Mins

Total Marks: 60

Q.ID: ITISKILL3090ZP

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

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

Answer: A) Voltage across it reached the zener voltage

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

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

Answer: B) IC 7905

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

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

Answer: C) Relaxation oscillator

4. 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

Answer: A) 1000 and above

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

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

Answer: C) TO-72

6. How gate is biased in JFET?

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

Answer: A) Reverse biased

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

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

Answer: D) Between 0.5 and 30 MHz

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

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

Answer: B) Gallium

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

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

Answer: B) Large scale integration (LSI)

10. Which device is a unipolar transistor?

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

Answer: B) FET

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

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

Answer: A) Two

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

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

Answer: D) Practically zero

13. What is the term stands for TRIAC?

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

Answer: A) Triode AC semiconductor

14. What is the name of flux used for soldering electronic components?

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

Answer: C) Rosin

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

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

Answer: A) 150 Degree Centigrade to 450 Degree Centigrade

16. Which step is important for soldering a joint?

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

Answer: B) Heating the joint

17. What type of control is used for FET?

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

Answer: B) Voltage controlled device

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

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

Answer: C) Arsenic

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

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

Answer: D) Double Pole Double Throw

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

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

Answer: D) Desoldering pump

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

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

Answer: C) 10 mA

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

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

Answer: D) Isopropyl alcohol

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

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

Answer: A) PIV voltage

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

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

Answer: C) Flux

25. Which type of voltage regulator is IC 723?

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

Answer: D) Three pin adjustable voltage regulator

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

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

Answer: B) Four layer three junctions

27. At which temperature the 6040 solder start meeting?

- A) 100 Degree Centigrade B) 200 Degree Centigrade
C) 300 Degree Centigrade D) 380 Degree Centigrade

Answer: B) 200 Degree Centigrade

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

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

Answer: A) 100 Hz

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

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

Answer: B) 60:40:00

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

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

Answer: B) Less than 1

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

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

Answer: A) High speed switching

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

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

Answer: A) Provide regenerative feedback

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

- A) Demodulator B) Amplifier

C) Multiplexed

D) Oscillator

Answer: D) Oscillator

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

A) 7 - 10 seconds

B) 15 - 20 seconds

C) 3 - 7 seconds

D) 10 - 15 seconds

Answer: C) 3 - 7 seconds

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

A) Conventional current

B) Leakage current

C) Principal current

D) Reverse current

Answer: C) Principal current

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

A) BF 194B

B) AC 127

C) BC 148B

D) AC 188

Answer: A) BF 194B

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

A) To break down the acid within the joint

B) Remove residual flux and prevent corrosion

C) Cleaning before soldering the joint

D) To help the corrosive action

Answer: B) Remove residual flux and prevent corrosion

38. What is the process of adding impurities to a pure semiconductor material?

A) Doping

B) Etching

C) Diffusion

D) Forming

Answer: A) Doping

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

A) Single Pole Single Throw

B) Single Phase Dual Throw

C) Single Pole Double Throw

D) Shared Pole Double Throw

Answer: C) Single Pole Double Throw

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

A) Dull grainy surface

B) Poor wetting

C) Flux trapped against lead

D) Cold joint

Answer: A) Dull grainy surface

41. What is the code number of TRIAC?

A) BT136

B) 2N1597

C) 2N2646

D) BFW10

Answer: A) BT136

42. What is the output frequency of the pulsating DC in a two diode fullwave rectifier?

A) Double the input A/C frequency

B) Half of the input A/C frequency

C) Three times the input A/C frequency

D) Same frequency of the A/C input

Answer: A) Double the input A/C frequency

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

A) Diode

B) Capacitor

C) TRIAC

D) DIAC

Answer: B) Capacitor

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

A) The ripple frequency is higher

B) DC output level is higher

C) The need of bulky transformer

D) Each diode carries half the load current

Answer: C) The need of bulky transformer

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

A) Ohmmeter

B) Voltmeter

C) Ammeter

D) Oscilloscope

Answer: A) Ohmmeter

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

A) High power diodes

B) Rectifier diodes

C) Signal diodes

D) Switching diodes

Answer: C) Signal diodes

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

A) Medium

B) High

C) Very high

D) Low

Answer: C) Very high

48. Which parameter is maintained constant in zener diode?

A) Power

B) Voltage

C) Resistance

D) Current

Answer: B) Voltage

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

A) TO-92

B) TO-102

C) TO-82

D) TO-72

Answer: A) TO-92

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

A) Resistance

B) Voltage

C) Current

D) Frequency

Answer: C) Current

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

A) Silicon material used

B) Indium material used

C) Antimony material used

D) Germanium material used

Answer: A) Silicon material used

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

A) Hot soldering

B) Brazing

C) Soft soldering

D) Hard soldering

Answer: C) Soft soldering

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

A) UJT

B) SCR

C) FET

D) LED

Answer: B) SCR

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

A) Both positive and negative feedback

B) Negative feedback

C) Positive feedback

D) No feedback

Answer: A) Both positive and negative feedback

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

A) Improve the property of circuits

B) Using L and C

C) Increase the supply voltage

D) By using quartz crystal

Answer: D) By using quartz crystal

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

A) Home codes

B) PRO-ELECTRON standard

C) JEDEC standard

D) JIS standard

Answer: C) JEDEC standard

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

A) LM 317

B) LM 305

C) LM 105

D) LM 100

Answer: A) LM 317

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

A) 1 to 100 milli seconds

B) 1 to 25 nano seconds

C) 10 to 60 nano seconds

D) 1 to 100 nano seconds

Answer: D) 1 to 100 nano seconds

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

A) 0 to 25 V

B) 1.2 V to 32 V

C) 0 to 30 V

D) 0 to 32 V

Answer: B) 1.2 V to 32 V

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

A) Rectifying

B) Inverting

C) Amplifying

D) Demodulating

Answer: A) Rectifying