

ITI Quiz - 30-june-2026

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Q. ID: ITISKILL7493UV

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Answer Key

Duration: 30 Mins

Total Marks: 100

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1. What is the effect of electric shock at very low voltage levels (Less than 40v)?

- A) Muscles contact
- B) Burning of the skin
- C) Unpleasant tingling sensation
- D) Fibrillation

Answer: C) Unpleasant tingling sensation

2. Which frame is used for winding the coil of PMMC meter?

- A) Steel frame
- B) Wooden frame
- C) Aluminium frame
- D) Ceramic frame

Answer: C) Aluminium frame

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

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

Answer: B) The need of bulky transformer

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

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

Answer: B) Practically zero

5. What is the minimum forward current I_f for single colour LEDs?

- A) 20 MA
- B) 10 MA
- C) 30 MA
- D) 5 MA

Answer: A) 20 MA

6. What is the full form of the abbreviation CD-ROM in computer?

- A) Classified Device Read Only Memory
- B) Connectivity Digital Read Only Memory
- C) Compact Disk Read Only Memory
- D) Computer Disk Read Only Memory

Answer: C) Compact Disk Read Only Memory

7. How many gauge numbers in SWG, changed to double the cross section area of the conductor?

- A) Three gauge sizes decreased
- B) Five gauge sizes increased

C) Four gauge sizes increased

D) Two gauge sizes decreased

Answer: A) Three gauge sizes decreased

8. Which device is used to produce hard copy of a document in a computer?

- A) Printer
- B) Monitor
- C) Speaker
- D) Modem

Answer: A) Printer

9. What type of packaging is generally used to transistors utilized for low power amplification?

- A) Metal packaging
- B) Plastic packaging
- C) Ceramic packaging
- D) Plastic packaging with metal heatsinks

Answer: B) Plastic packaging

10. What is the input impedance of IGBT?

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

Answer: C) High input impedance

11. Which codes are stored in computer ROM BIOS chip?

- A) Permanent codes
- B) Temporary codes
- C) Change codes
- D) Partial change codes

Answer: A) Permanent codes

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

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

Answer: B) Arsenic

13. What is the maximum current ratings of solid state relays available in high power packages?

- A) 10 Amp
- B) 100 Amp
- C) 40 Amp
- D) 1 Amp

Answer: B) 100 Amp

14. How the mechanical zero error of panel meter is corrected?

- A) Keeping the meter in vertical position
- B) By replacing moving coil
- C) By replacing moving coil
- D) By replacing pointer

Answer: B) By replacing moving coil

15. Which factor influences the severity of electrical shock?

- A) Level of current in micro ampere
- B) Duration of current passing
- C) Very low DC voltage
- D) Person receives the shock

Answer: B) Duration of current passing

16. What is the forward voltage drop of single colour Red LED?

- A) 2.1 V
- B) 2 V
- C) 1.8 V
- D) 2.2 V

Answer: C) 1.8 V

17. What is the advantage of MOSFET?

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

Answer: D) Low gate signal power requirements

18. Which terminal of the meter is connected for measuring electrical quantity?

- A) Output terminal
- B) Output terminal
- C) Pointer mechanism
- D) Input terminal

Answer: D) Input terminal

19. Why the complementary - symmetry amplifier is preferred over the other types of amplifier configurations?

- A) To get less distortion
- B) To minimize the gain
- C) To eliminate the transformer
- D) To get more voltage gain

Answer: C) To eliminate the transformer

20. Which memory device loses data on power failure?

- A) ROM
- B) RAM
- C) Hard disc
- D) CD ROM

Answer: B) RAM

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

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

Answer: B) LM 317

22. What is the typical forward voltage drop of the RED colour LED?

- A) 2 V
- B) 1.8 V
- C) 2.1 V
- D) 2.2 V

Answer: B) 1.8 V

23. What is successive approximation (SAR)?

- A) Method of IC fabrication
- B) Method of SMT
- C) Method of D/A conversion
- D) Method of D/A conversion

Answer: C) Method of D/A conversion

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

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

Answer: A) 10 mW/gate

25. Which characteristics enable the deflection of pointer in the attraction type moving iron meter?

- A) Weight of the soft iron pieces
- B) Deflection is inversely proportional to current
- C) Deflection is independent of current direction
- D) Deflecting and controlling torques are

Answer: C) Deflection is independent of current direction

26. Which electrical quantity controls the operation of the bipolar transistor device?

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

Answer: A) Current

27. What is the reason for electric fire?

- A) Proper earthing
- B) Deviation
- C) Overloading
- D) Open circuit

Answer: C) Overloading

28. How the sensitivity of voltmeter is determined?

- A) Maximum voltage measurement
- B) Meter coil resistance
- C) Ohms per volt rating
- D) FSD current

Answer: C) Ohms per volt rating

29. Which circuit uses photo-darlington devices?

- A) DC circuits
- B) Amplifier circuits
- C) AC powered circuits
- D) Counter circuits

Answer: A) DC circuits

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

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

Answer: B) 150 Degree Centigrade to 450 Degree Centigrade

31. What is the name of effect of changing current in one coil, induces EMF in nearby coil?

- A) Induction
- B) Self induction
- C) Coupling
- D) Mutual induction

Answer: D) Mutual induction

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

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

Answer: C) 60:40:00

33. What is the main problem caused for severe pitting in relays?

- A) Chatter during a slow release
- B) Low contact current
- C) Excessive contact current
- D) Excessive number of operations

Answer: C) Excessive contact current

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

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

Answer: D) Voltage across it reached the zener voltage

35. Which method is adopted to charge a car battery with voltage rating of 2.3 V per cell?

- A) Constant voltage charging method
- B) Trickle charging method
- C) Float charging method
- D) Constant current charging method

Answer: A) Constant voltage charging method

36. What is the purpose of standard wire gauge (SWG)?

- A) Measure current
- B) Measure voltage
- C) Measure diameter of wire
- D) Measure insulation of wire

Answer: C) Measure diameter of wire

37. What is the peak to peak voltage in a bridge rectifier circuit with load current of 10 mA, capacitance of 470 F and 50 Hz supply frequency?

- A) 0.213 v
- B) 1.525 v
- C) 3.567 v
- D) 2.134 v

Answer: A) 0.213 v

38. What is the result of hysteresis loss in magnetic material?

- A) Back emf increases
- B) Energy loss takes place
- C) Magnetic flux increases
- D) Eddy current decreases

Answer: B) Energy loss takes place

39. Why the transformer core is made as thin laminations?

- A) To increase the hysteresis losses
- B) To minimize eddy current losses

- C) To maximize eddy current losses
- D) To increase core saturation losses

Answer: B) To minimize eddy current losses

40. Which device is a unipolar transistor?

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

Answer: C) FET

41. What is the name of the procedure carried out to ensure the trustworthy standards of the measuring instrument?

- A) Calibration
- B) Re-alignment
- C) Range test
- D) Testing standards

Answer: A) Calibration

42. Which is the drain current (I_d) in JFET?

- A) Electron from drain to gate
- B) Electron from drain to source
- C) Electron from gate to source
- D) Electron from source to drain

Answer: D) Electron from source to drain

43. Which is the first step followed in troubleshooting of electronic circuit?

- A) Chemical test
- B) Physical and sensory test
- C) Thermal test
- D) Mechanical test

Answer: B) Physical and sensory test

44. What is the unit of inductance?

- A) Henry
- B) Watts
- C) Farad
- D) Joule

Answer: A) Henry

45. What is the range of photo current for photo transistor BPX 38?

- A) 0.3MA to 2.7MA
- B) 0.1MA to 1.2MA
- C) 0.4MA to 3.8MA
- D) 0.2MA to 1.6MA

Answer: D) 0.2MA to 1.6MA

46. What is the use of screw driver?

- A) Tighten or loosen bolts
- B) Tighten or loosen screws
- C) Tighten or loosen rivets
- D) Hold the screws

Answer: B) Tighten or loosen screws

47. Which is the N - channel FET?

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

Answer: B) Main current flows through N-doped material

48. Why the electronic device IGBT is preferred over the

power MOSFET?

- A) Higher driving power requirement
- B) Low switching speed
- C) Suitability for medium power applications
- D) Higher switching repetition rates

Answer: D) Higher switching repetition rates

49. What is the relation of wire diameter with current carrying capacity of conductor?

- A) Inversely proportional
- B) Wire gets less heat
- C) Drops more voltage across it
- D) Directly proportional

Answer: D) Directly proportional

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

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

Answer: A) 5A

51. Why NPN type of transistors are preferred over the PNP type transistors?

- A) NPN has good bias stability
- B) NPN has lower switching speed
- C) NPN has higher switching speed
- D) Low operating voltage

Answer: C) NPN has higher switching speed

52. What is the advantage of using bias in transistor circuits?

- A) Provides positive feed back
- B) Gives maximum distortion
- C) Easily sets saturated
- D) Never reach saturation

Answer: D) Never reach saturation

53. Which is the N - channel FET?

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

Answer: D) Main current flows through N-doped material

54. Which battery is used for cellular phones?

- A) Lithium ion
- B) Nickel ion
- C) Zinc chloride
- D) Sodium sulphur

Answer: A) Lithium ion

55. Which gauge number of rosin-cored solder is suitable for soldering medium sized joints?

- A) 18 gauge rosin cored
- B) 16 gauge rosin cored
- C) 22 gauge rosin cored
- D) 24 gauge rosin cored

Answer: A) 18 gauge rosin cored

56. Which of the device is opto-coupled TRIACS?

- A) MOC3020
- B) BT136
- C) B3202
- D) 2N2648

Answer: C) B3202

57. What type of control is used for FET?

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

Answer: B) Voltage controlled device

58. What is the defect on the soldered joint, if it is cooled by blowing air?

- A) Pits and voids
- B) Poor wetting
- C) Dry solder joint
- D) Dull grainy surface

Answer: C) Dry solder joint

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

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

Answer: D) Logical approach method

60. 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

Answer: D) High speed switching

61. What is the use of clamper in electronic circuits?

- A) For slicing both peaks
- B) For DC component restoration
- C) For negative peak clipping
- D) For positive peak clipping

Answer: B) For DC component restoration

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

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

Answer: D) Rectifying

63. What is the type of transistor BPX81?

- A) NPN - Photo transistor
- B) PNP - Photo transistor
- C) Audio frequency transistor
- D) Uni - Junction transistor

Answer: A) NPN - Photo transistor

64. When does the rosin flux melts in a soldering process?

- A) When the solder is melting
- B) During the solder is melting
- C) When the solder is heated
- D) After the solder melts

Answer: C) When the solder is heated

65. What is the advantage of SMPS in computer?

- A) Bulky
- B) High frequency noise low
- C) High efficiency
- D) Servicing of SMPS is easy

Answer: C) High efficiency

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

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

Answer: A) Dull grainy surface

67. What is the effect on the current flow with increased diameter of conductor?

- A) More voltage dropped
- B) Opposes more current
- C) Resistance increases
- D) Allows high current flow

Answer: D) Allows high current flow

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

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

Answer: D) 1 to 100 nano seconds

69. What is the purpose of using positive feed back in amplifiers?

- A) To produce multiplexion
- B) To produce oscillation
- C) To produce demodulation
- D) To produce modulation

Answer: B) To produce oscillation

70. What is the percentage of charge accumulated by the capacitor at the end of 2 time constant limit?

- A) 0.632
- B) 0.5
- C) 0.4
- D) 0.864

Answer: D) 0.864

71. How the solid state relays are working for increased lifetime?

- A) No moving parts to wear and tear
- B) Bulky profile
- C) Slower in operations
- D) Spark generated during switching

Answer: A) No moving parts to wear and tear

72. What is the name of defect if the flux is unable to remove the tarnish from the soldered joint?

- A) Dull gravity surface
- B) Poor wetting
- C) Cold joint
- D) Pits and voids

Answer: C) Cold joint

73. Which section is used by the processor to save instructions?

- A) Graphics card
- B) Memory
- C) System unit
- D) Micro processor

Answer: B) Memory

74. Which electrolyte is used in lead-acid battery?

- A) Alkaline solution
- B) Sulphuric acid
- C) Potassium hydroxide solution
- D) Zinc chloride

Answer: B) Sulphuric acid

75. Which bearing is supporting the shaft of moving coil assembly in a PMMC instrument?

- A) Bush bearings
- B) Jewelled bearings
- C) Steel bearings
- D) Gun metal bearings

Answer: B) Jewelled bearings

76. How gate is biased in JFET?

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

Answer: C) Reverse biased

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

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

Answer: A) Less than 1

78. Which control is used in repulsion type moving iron instrument to keep the pointer at zero position?

- A) Magnetic attraction control
- B) Magnetic repulsion control
- C) Spring control
- D) Air damping control

Answer: C) Spring control

79. How the lamp failures caused by the high inrush currents in lamp dimmer circuits using TRIAC is eliminated?

- A) Using Safety resistor
- B) By soft start circuit
- C) Using MCB
- D) By the fuse

Answer: B) By soft start circuit

80. Which is the output pin number IC 555 timer?

- A) Pin number 5
- B) Pin number 5
- C) Pin number 6
- D) Pin number 3

Answer: D) Pin number 3

81. Which characteristics exhibits the current conduction increases while the voltage across the devices decreases in a DIAC?

- A) Negative resistance characteristics
- B) Linearity characteristics
- C) Nonlinearity characteristics
- D) Positive resistance characteristics

Answer: A) Negative resistance characteristics

82. Which is the major factor determines the quality

performance of A/D converter?

- A) Depends on data latch
- B) Conversion cycle
- C) Measuring parameter
- D) Measuring parameter

Answer: C) Measuring parameter

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

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

Answer: A) JEDEC standard

84. What is the purpose of covering provided over the electrical conductor?

- A) Increase current flow
- B) Protection against weather
- C) Reduce current flow
- D) Decrease voltage rating

Answer: B) Protection against weather

85. What is the name of multi-stage amplifiers?

- A) Cascaded amplifier
- B) Cascoded amplifier
- C) Darlington pair amplifier
- D) Complementry symmetry amplifier

Answer: A) Cascaded amplifier

86. Which configuration of transistor amplifier is most commonly used in electronic circuits?

- A) Common drain amplifier configuration
- B) Common emitter configuration
- C) Common collector configuration
- D) Common base configuration

Answer: B) Common emitter configuration

87. Which soldering instrument has hot air blowing facility?

- A) Soldering iron
- B) Soldering station
- C) Temperature controlled soldering iron
- D) Wave soldering machine

Answer: B) Soldering station

88. What is the maximum power dissipation P_{max} for BF 245B?

- A) 100 mw
- B) 400 mw
- C) 300 mw
- D) 200 mw

Answer: C) 300 mw

89. How batteries are classified based on their working?

- A) Button cells and lithium cells
- B) Primary cells and secondary cells
- C) Cylindrical cells and rectangular cells
- D) Dry cells and alkaline cells

Answer: B) Primary cells and secondary cells

90. How the single strand wire is called?

- A) Multistrand wire
- B) Hook - up wire
- C) Twisted wire
- D) Flexible wire

Answer: B) Hook - up wire

91. Why transistors made of silicon is preferred over the germanium semiconductor material?

- A) Complex design
- B) Silicon transistor needs low cut-in-voltage
- C) Higher thermal stability
- D) Requires complicated bias arrangement

Answer: C) Higher thermal stability

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

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

Answer: B) Remove residual flux and prevent corrosion

93. Which semiconductor devices are composed inside the solid state relays?

- A) MOSFETs and IGBTs
- B) Diodes and transistors
- C) UJYs and FETs
- D) Thyristor and transistors

Answer: D) Thyristor and transistors

94. Which unit is used to measure capacitance value?

- A) Henry
- B) Mho
- C) Farad
- D) Ohm

Answer: C) Farad

95. When does the biased positive clipper removes the portion of input signal?

- A) During the negative half cycle of input
- B) Signal voltage is lesser than bias battery
- C) Signal voltage equals the bias battery voltage
- D) Signal voltage becomes greater than bias battery voltage

Answer: D) Signal voltage becomes greater than bias battery voltage

96. What is the percentage of conductivity of electric current in aluminium?

- A) 0.47
- B) 0.56
- C) 0.76
- D) 0.22

Answer: B) 0.56

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

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

Answer: C) Single Pole Double Throw

98. Which type of defects are occurring in solid state relays?

- A) More sparking
- B) Tendency to fail open
- C) Tendency to fail shorted
- D) Intermittent working

Answer: C) Tendency to fail shorted

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

- A) Rosin
- B) Organic acid

C) Resin

D) Mild acid

Answer: A) Rosin

100. At which temperature the 6040 solder start meeting?

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

Answer: D) 200 Degree Centigrade
