

July 2026

Answer Key

Duration: 30 Mins

Total Marks: 176

Q.ID: ITISKILL0556T3

1. What is the name of instrument used to measure electrical quantities?

- A) Vernier caliper
C) Tester
B) Tester
D) Meter

Answer: D) Meter

2. Which type of toe caps are used to avoid crushing of feet at the time of shifting equipments?

- A) Rubber toe caps
C) Steel toe caps
B) Plastic toe caps
D) Leather toe caps

Answer: C) Steel toe caps

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

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

Answer: D) 1.2 V to 32 V

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

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

Answer: D) 10 mA

5. Which circuit uses photo-darlington devices?

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

Answer: D) DC circuits

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

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

Answer: B) Current

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

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

Answer: B) Higher thermal stability

8. Which mode is used in differential amplifier?

- A) Common base
C) Common emitter
B) Common - mode operation
D) Common emitter

Answer: B) Common - mode operation

9. What will happen when the forward bias voltage across the PN junction is increased excessively?

- A) Junction ruptured and short circuited
C) No current flows through the junction
B) Barrier width of junction increases
D) Increases the cut - in - voltage

Answer: A) Junction ruptured and short circuited

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

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

Answer: B) For DC component restoration

11. Which factor determines the inductance value?

- A) Current flow through the coil
C) Frequency of the current
B) Diameter of the coil
D) Material of the coil

Answer: B) Diameter of the coil

12. What is the percentage of conductivity of electric current in silver?

- A) 0.94
C) 0.67
B) 0.56
D) 1

Answer: D) 1

13. In which quantity affects the Q point of a transistor amplifier?

- A) Mismatching signals
C) Proper biasing methods
B) Increased temperature
D) Decreased temperature

Answer: B) Increased temperature

14. What is the name of the circuit that shifts the waveform upward or downward without disturbing its shape?

- A) Clamper circuit
C) Clipper circuit
B) Combination clipper circuit
D) Biased clipper circuit

Answer: A) Clamper circuit

15. What is the maximum forward gate current (I_g) for

BFW10 JFET?

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

Answer: A) 10 mA

16. What is the name of the ratio of ON-time pulse to the OFF-time pulse of multivibrator?

- A) Control voltage
- B) Pulse repetition
- C) Pulse repetition
- D) Threshold comparator

Answer: B) Pulse repetition

17. Which device is used to test the fully charged condition of a lead acid battery cell?

- A) Hydrometer
- B) DC voltmeter
- C) High rate discharge tester
- D) Multimeter

Answer: C) High rate discharge tester

18. What is the unit of inductance?

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

Answer: D) Henry

19. What is the term stands for TRIAC?

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

Answer: D) Triode AC semiconductor

20. Which port is used to connect a plug and play peripheral device to CPU?

- A) COM 1 port
- B) RJ45 port
- C) COM 2 port
- D) USB port

Answer: D) USB port

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

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

Answer: D) 74 LS 138

22. Which type of clipper is that a small portion of the negative half cycle of signal is removed?

- A) Combination clipper
- B) Biased negative clipper
- C) Biased positive clipper
- D) Positive clamper

Answer: B) Biased negative clipper

23. Which type of amplifier is used to operate the loud speaker?

- A) Power Amplifier
- B) Voltage Amplifier
- C) RF Amplifier
- D) IF Amplifier

Answer: A) Power Amplifier

24. In which arrangement the high value of resistor is connected to extend the range of voltmeter?

- A) Delta
- B) Series
- C) Parallel
- D) Star

Answer: B) Series

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

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

Answer: D) Double Pole Double Throw

26. Which function control in CRO, adjust the trace sharper?

- A) Amplitude (V/Div)
- B) Focus
- C) Intensity
- D) Time/Div trigger

Answer: B) Focus

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

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

Answer: C) No moving parts to wear and tear

28. Which is the major factor to determine the quality performance of A/D converter?

- A) Proportional to the binary weight
- B) Number of bits used
- C) Number of bits used
- D) Degree of accuracy

Answer: B) Number of bits used

29. Which is the property of IGBT?

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

Answer: C) High efficiency and fast switching

30. What is the reason for the use of contactors in control circuits?

- A) To protect the load from arcing
- B) Supply power to loads
- C) To increase load current
- D) To decrease load current

Answer: B) Supply power to loads

31. How is the soldering method used for joining large metal called?

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

Answer: D) Brazing

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

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

Answer: B) Four layer three junctions

33. Which parameter of passive component can be calculated using the formula ?

- A) Inductive reactance
- B) Inductance
- C) Capacitance
- D) Capacitive reactance

Answer: D) Capacitive reactance

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

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

Answer: C) By using quartz crystal

35. How the overlapping of excess sheet metal causing bulge at seam and edge is prevented?

- A) L - angles
- B) Notches
- C) Mallet
- D) Square stake

Answer: B) Notches

36. How the movement of electrons through a conductor in a particular direction is called?

- A) Resistance
- B) Electric current
- C) Inductance
- D) Conductance

Answer: B) Electric current

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

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

Answer: C) 20 MA

38. Which band is used for UHF in International Telecommunication System?

- A) Band 11
- B) Band 6
- C) Band 9
- D) Band 4

Answer: C) Band 9

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

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

Answer: B) Input terminal

40. Which metal has very good conductivity of electric current?

- A) Copper
- B) Silver
- C) Gold
- D) Aluminium

Answer: B) Silver

41. How the negative feedback is called?

- A) Voltage controlled feedback
- B) Degenerative feedback
- C) Regenerative feedback
- D) Current controlled feedback

Answer: B) Degenerative feedback

42. 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) 3.567 v
- C) 1.525 v
- D) 2.134 v

Answer: A) 0.213 v

43. Which value is equal to one picofarad?

- A) 10-12 Farad
- B) 106 Farad
- C) 1012 Farad
- D) 10-6 Farad

Answer: A) 10-12 Farad

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

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

Answer: C) B3202

45. What are the uses of simulation softwares?

- A) Replace defective components
- B) Solder and desolder components
- C) Design and test a circuit
- D) Design a circuit

Answer: C) Design and test a circuit

46. Which parameter of the wire is directly proportional to the current carrying capacity?

- A) Conductor s shape
- B) Wire resistance
- C) Conductor s diameter
- D) Passing current

Answer: C) Conductor s diameter

47. Which material is used to make LDR for lower end requirements?

- A) Cadmium sulfide
- B) Zinc sulfide
- C) Aluminium sulfide
- D) Copper sulfide

Answer: A) Cadmium sulfide

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

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

Answer: B) Common emitter configuration

49. Which circuit uses the F to V converter section?

- | | |
|------------------------------------|------------------------------------|
| A) Schmitt trigger circuit | B) Digital frequency meter circuit |
| C) Digital frequency meter circuit | D) Up/down counter circuit |

Answer: B) Digital frequency meter circuit

50. What is the maximum blocking voltage of very high current handling IGBT modules?

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

Answer: A) 6000 V

51. What is the minimum current rating of four diode bridge rectifier to supply load current of 1.8 Amp?

- | | |
|------------|------------|
| A) 5.0 Amp | B) 2.0 Amp |
| C) 0.9 Amp | D) 1.8 Amp |

Answer: D) 1.8 Amp

52. Which port is used to connect the HDD on the mother board?

- | | |
|---------------|----------------------|
| A) Com 1 port | B) Floppy drive port |
| C) IDE port | D) Com 2 port |

Answer: C) IDE port

53. What is the electrolyte level maintained above the top of the plates in lead acid battery cells?

- | | |
|-------------------|-----------------|
| A) 16 mm to 25 mm | B) 2 mm to 4 mm |
| C) 10 mm to 15 mm | D) 5 mm to 8 mm |

Answer: C) 10 mm to 15 mm

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

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

Answer: D) Ohmmeter

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

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

Answer: D) 0.864

56. What is the unit of electric charge?

- | | |
|------------|----------|
| A) Ampere | B) Hertz |
| C) Coulomb | D) Volts |

Answer: C) Coulomb

57. Which characteristics exhibits the current conduction increases while the voltage across the devices decreases in a

DIAC?

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

Answer: D) Negative resistance characteristics

58. How the pass band gain of the circuit is expressed?

- | | |
|-------------|--------------|
| A) In volts | B) In ampere |
| C) In hertz | D) In hertz |

Answer: C) In hertz

59. How the electrical quantity measured by the meter is marked in it?

- | | |
|------------------------|---|
| A) Using colour codes | B) Printing the values |
| C) Printing the values | D) Directly printing the specifications |

Answer: B) Printing the values

60. Which battery is made from non-toxic materials?

- | | |
|----------------------------|--------------------------------|
| A) Lithium ion (Li-Ion) | B) Nickel metal hydride (NiMH) |
| C) Nickel cadmium (Nicaid) | D) Lithium polymer (Li-Poly) |

Answer: B) Nickel metal hydride (NiMH)

61. Which space is used to design circuit in schematic editor of the Tina software?

- | | |
|-------------------------|----------------------------|
| A) File operation space | B) Components type space |
| C) Circuit work space | D) Components groups space |

Answer: C) Circuit work space

62. What is the code number of TRIAC?

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

Answer: B) BT136

63. What is the advantage of MOSFET?

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

Answer: B) Low gate signal power requirements

64. Which circuits commonly use parallel-fed Hartley oscillators?

- | | |
|-------------------------|----------------------------------|
| A) Radio receivers | B) Stereo amplifiers |
| C) Television receivers | D) Automatic voltage stabilizers |

Answer: A) Radio receivers

65. Which component is used to prevent over voltage of AC

supply in SMPS?

- A) Carbon film resistor
- B) Wire wound resistor
- C) Metal film resistor
- D) Metal oxide varistor

Answer: D) Metal oxide varistor

66. What is successive approximation (SAR)?

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

Answer: A) Method of D/A conversion

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

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

Answer: A) 60:40:00

68. What is the difference of Colpitts oscillator compare to Hartley oscillator?

- A) Uses split capacitor
- B) Uses SCR combination
- C) Uses split inductor
- D) Uses crystal oscillator

Answer: A) Uses split capacitor

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

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

Answer: C) 1.8 V

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

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

Answer: A) 0.1 A

71. At which temperature the 6040 solder start meeting?

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

Answer: B) 200 Degree Centigrade

72. Which material is used to make LDR for higher end requirements?

- A) Zinc sulfide
- B) Copper sulfide
- C) Lead selenide
- D) Cadmium sulfide

Answer: C) Lead selenide

73. What should be the time constant $t = RC$ for a good clamper circuit with reference to time period of the input signal?

- A) RC valves should be at least ten times
- B) Five times the time period of signal

- C) Half the time period of signal
- D) Double the time of signal frequency

Answer: A) RC valves should be at least ten times

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

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

Answer: C) Compact Disk Read Only Memory

75. Which part of the relay causes most trouble?

- A) Hinges
- B) Relay contacts
- C) Frame and core
- D) Relay coil

Answer: B) Relay contacts

76. What is the function of pin number 4 of the IC 555?

- A) Set
- B) Reset
- C) Reset
- D) Threshold

Answer: B) Reset

77. What is the use of screw driver?

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

Answer: C) Tighten or loosen screws

78. How the insulators are called?

- A) Thyristors
- B) Dielectrics
- C) Semiconductors
- D) Molecules

Answer: B) Dielectrics

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

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

Answer: B) Relaxation oscillator

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

- A) 1.5 A
- B) 2.0 A
- C) 1.0 A
- D) 0.55 A

Answer: B) 2.0 A

81. How many electrons are contained in coulomb of electric charge?

- A) 6.25×10^{16} electrons
- B) 6.25×10^8 electrons
- C) 6.25×10^{18} electrons
- D) 6.25×10^{12} electrons

Answer: C) 6.25×10^{18} electrons

82. Which fire extinguisher is used to put off class A type of fire?

- A) Carbon-di-oxide B) Jet of water
C) Foam type D) Dry powdered

Answer: B) Jet of water

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

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

Answer: C) Capacitor

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

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

Answer: A) Aluminium frame

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

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

Answer: A) Voltage across it reached the zener voltage

86. Which electrical parameter is measured by the megger?

- A) Frequency B) Insulation resistance
C) Current D) Voltage

Answer: B) Insulation resistance

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

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

Answer: A) 10 ns

88. What is the name of Multi-turn potentiometers?

- A) Single turn dual pots B) Multi turn dual pots
C) Single turn trim pots D) Multi turn trim pots

Answer: D) Multi turn trim pots

89. What is the maximum drain current, ID for BF 245B?

- A) 35mA B) 45mA
C) 15mA D) 25mA

Answer: D) 25mA

90. What is the cause of burnt relay contacts?

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

Answer: A) Excessive contact current

91. What is the use of battery analyzers with rapid-test program?

- A) Test the charging current of battery B) Test the load current delivered
C) Test the battery life D) Indicate the health condition of battery

Answer: D) Indicate the health condition of battery

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

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

Answer: C) Oscillator

93. What is the use of flip - flop?

- A) It stores voltage B) It stores binary information
C) It stores energy D) It stores current

Answer: B) It stores binary information

94. Which material is used as electrical insulator?

- A) Porcelain B) Germanium
C) Aluminium D) Gallium

Answer: A) Porcelain

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

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

Answer: D) Flux

96. Which material conducts electricity?

- A) Copper B) Mica
C) Paper D) Glass

Answer: A) Copper

97. What is the output produced in the ADC circuit?

- A) Triangular wave output B) Triangular wave output
C) Analog output D) Sinewave output

Answer: A) Triangular wave output

98. What is the maximum safe reverse voltage rating of a diode?

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

Answer: D) PIV voltage

99. How the light sensitive photo transistor enclosed inside a tight package is activated?

- A) By the light sensitive receiver inside B) By the external signal to the transistor
C) By IR light produced inside the package D) By the bias voltage to the photo transistor

Answer: C) By IR light produced inside the package

100. What is the specific gravity of concentrated sulphuric acid?

- A) 1.945
- B) 1.835
- C) 1.175
- D) 1.245

Answer: B) 1.835

101. What is the information stored in digital registers?

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

Answer: A) Binary values

102. What is the full form of the abbreviation PMMC meter?

- A) Permanent Magnet Moving Coil meter
- B) Parallel Magnet Moving Coil meter
- C) Position Magnet Moving Coil meter
- D) Principle Magnet Moving Coil meter

Answer: A) Permanent Magnet Moving Coil meter

103. Rate of change of input voltage

- A) Rate of change of input voltage
- B) Rate of change of output frequency
- C) Rate of change of output voltage
- D) Rate of change of output voltage

Answer: C) Rate of change of output voltage

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

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

Answer: A) Pin number 3

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

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

Answer: D) 100 Hz

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

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

Answer: B) Few micro Amperes

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

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

Answer: D) 2.5 V

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

- A) Resistance increases
- B) More voltage dropped

- C) Allows high current flow
- D) Opposes more current

Answer: C) Allows high current flow

109. What is the formula used to calculate the current gain (alpha) of common base amplifier?

- A) I_C / I_E
- B) I_E / I_C
- C) I_E / I_C
- D) I_B / I_E

Answer: A) I_C / I_E

110. Which torque is used in PMMC meter movement?

- A) High torque
- B) Insufficient torque
- C) Moderate torque
- D) Low torque

Answer: C) Moderate torque

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

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

Answer: C) Deflection is independent of current direction

112. Which type of voltage regulator is IC 723?

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

Answer: A) Three pin adjustable voltage regulator

113. What is the overall base emitter voltage required to turn the darlington pair?

- A) 1.4 V
- B) 0.7 V
- C) 0.2 V
- D) 0.3 V

Answer: A) 1.4 V

114. What is the maximum drain - source voltage, VDS for BFW10?

- A) 30 V
- B) 50 V
- C) 40 V
- D) 20 V

Answer: A) 30 V

115. What is produced by the power supply connected soldering iron?

- A) Heat
- B) Fire
- C) Water vapour
- D) Cool air

Answer: A) Heat

116. Which metal coating is used on compact disk?

- A) Nickel
- B) Aluminium
- C) Silver
- D) Chromium

Answer: B) Aluminium

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

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

Answer: A) Arsenic

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

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

Answer: A) Physical and sensory test

119. How the performance of the amplifier designed using the simulation software is tested?

- A) Using measuring equipments
- B) Using test and measuring equipments
- C) Using multimeter
- D) Using virtual instrumentation testing

Answer: D) Using virtual instrumentation testing

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

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

Answer: B) 300 mw

121. What is the term stands for TRIAC?

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

Answer: C) Triode AC semiconductor

122. What is the rated voltage of a single cell in lead acid battery?

- A) 1.5 V
- B) 2.0 V
- C) 2.2 V
- D) 12 V

Answer: C) 2.2 V

123. Which method is used for blanketing with foam to extinguish the fire?

- A) Heating
- B) Cooling
- C) Starving
- D) Smothering

Answer: D) Smothering

124. Which type of wave is generated in Schmitt trigger circuit?

- A) Sine wave
- B) Triangular wave
- C) Square wave
- D) Saw tooth wave

Answer: C) Square wave

125. Which circuit uses the enhancement type MOSFET?

- A) High power amplifier circuits
- B) Low power oscillator circuits
- C) Integrated MOS switching circuits
- D) High frequency switching circuits

Answer: C) Integrated MOS switching circuits

126. Which property of the capacitor stores electrical energy in electrostatic field?

- A) Stray capacitance
- B) Capacitance
- C) Capacitive reactance
- D) Dielectric

Answer: C) Capacitive reactance

127. Why the plunger desoldering tool needs periodical cleaning?

- A) To remove the flux collected in chamber
- B) To melt the solder quickly
- C) To prevent clogging of the nozzle
- D) To help the joint to be soldered

Answer: C) To prevent clogging of the nozzle

128. Which application the clamper circuit is used in electronics?

- A) Radars
- B) Power supplies
- C) Storage counters
- D) Radio receivers

Answer: B) Power supplies

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

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

Answer: A) Constant voltage charging method

130. Which electrolyte is used in maintenance free lead acid batteries?

- A) Sodium electrolyte
- B) Ceramic electrolyte
- C) Potassium electrolyte
- D) Gelled electrolyte

Answer: D) Gelled electrolyte

131. What are the fundamental properties of insulation materials?

- A) Temperature and electrical hazards
- B) Low resistance and thermal heat
- C) Length and cross sectional area
- D) Insulation resistance and dielectric strength

Answer: D) Insulation resistance and dielectric strength

132. Which mouse action is used to move an object from one location to another?

- A) Drag and drop
- B) Right clicking
- C) Double clicking
- D) Left clicking

Answer: A) Drag and drop

133. In computer processing data, which table maintain the size of the partition?

- A) Procedure table
- B) Program table
- C) Process table
- D) Partition table

Answer: D) Partition table

134. What will happen if the photo resistor (LDR) is exposed to low level light condition?

- A) Resistance will decrease
- B) Resistance will decrease to 10 Ohm
- C) Resistance will increase to around 1 Mega Ohm
- D) Resistance will increase to 1 Kilo Ohm

Answer: C) Resistance will increase to around 1 Mega Ohm

135. Which energy is converted into electrical energy in hydropower stations?

- A) Chemical energy
- B) Mechanical energy
- C) Light energy
- D) Heat energy

Answer: B) Mechanical energy

136. What is the use of schmitt trigger circuit?

- A) Electronic thermostant
- B) Voltage regulator
- C) AC to DC converter
- D) AC to DC converter

Answer: C) AC to DC converter

137. How many operational amplifiers are fabricated in the LM741 IC?

- A) Two Op-Amps
- B) Two Op-Amps
- C) Four Op-Amps
- D) One Op-Amp

Answer: D) One Op-Amp

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

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

Answer: D) Dry solder joint

139. What is the additional advantage of rosin flux used for soldering electronic components?

- A) It is non-conductive
- B) It is good conductor
- C) Inorganic acid in nature
- D) It is a chemical paste

Answer: A) It is non-conductive

140. What is the maximum power dissipation for a 555 IC?

- A) Above 800 mW
- B) Below 500 mW
- C) Exactly 300 Mw
- D) Exactly 300 Mw

Answer: C) Exactly 300 Mw

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

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

Answer: D) 150 Degree Centigrade to 450 Degree Centigrade

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

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

Answer: B) Plastic packaging

143. Which formula is used to find the conductance?

- A) Q / V
- B) V / I
- C) $I \times R$
- D) I / V

Answer: D) I / V

144. How gate is biased in JFET?

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

Answer: C) Reverse biased

145. What is the rated output voltage of a silver oxide cell?

- A) 2.5 VDC
- B) 1.5 VDC
- C) 4.0 VDC
- D) 1.0 VDC

Answer: B) 1.5 VDC

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

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

Answer: A) IC 7495

147. Which insulation layer is used in MOSFET?

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

Answer: D) Silicon-di-oxide

148. How many ohms is equal to one Mega ohm?

- A) 2000 kW
- B) 10 kW
- C) 1000 kW
- D) 100 kW

Answer: C) 1000 kW

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

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

Answer: D) PIV voltage

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

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

Answer: B) Between 0.5 and 30 MhZ

151. What is the function of opto-coupler in the switching operation of digital input signal?

- A) Converts voltage into current B) Produces electrical noise signal
C) Amplifier the signal D) Defects the operation of switching signal

Answer: D) Defects the operation of switching signal

152. How the drive circuits for the power MOSFETs are coupled?

- A) Direct coupling method B) Using pulse transformer
C) Using logic circuitry D) Using transistors

Answer: B) Using pulse transformer

153. Find the total resistance value of 10 ohms and 20 ohms connected in parallel.

- A) 6666 Ohms B) 66.66 Ohms
C) 6.666 Ohms D) 666.6 Ohms

Answer: C) 6.666 Ohms

154. How power rating is specified for transformers?

- A) Volt ampere (VA) B) Watts (W)
C) Horse power (HP) D) Voltage (V)

Answer: A) Volt ampere (VA)

155. Which is the major factor determines the quality performance of A/D converter?

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

Answer: A) Measuring parameter

156. Which electrode controls brightness of the image on the screen of oscilloscope?

- A) Focussing electrode B) Control grid
C) Cathode D) Anode

Answer: B) Control grid

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

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

Answer: B) Practically zero

158. What is the function of pin number 2 of IC 555 timer circuit?

- A) "+VCC" B) Reset
C) Trigger D) Trigger

Answer: C) Trigger

159. What is the limitation of integrated circuits?

- A) Increased reliability B) Greater flexibility
C) Greater flexibility D) Drains more current

Answer: B) Greater flexibility

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

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

Answer: C) Never reach saturation

161. What is the advantage of MOSFET?

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

Answer: B) Fast switching speed

162. What is the forward voltage for the single colour orange LEDs?

- A) 2 V B) 0.8 V
C) 0.5 V D) 2.5 V

Answer: A) 2 V

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

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

Answer: B) The need of bulky transformer

164. Which energy is converted by the battery to produce electricity?

- A) Mechanical energy into electrical energy B) Electrical energy into mechanical energy
C) Electrical energy into light energy D) Chemical energy into electrical energy

Answer: D) Chemical energy into electrical energy

165. How the insulation coating stays without damage, even on bending the wire?

- A) Due to the strength of the wire material B) Due to elastic property of insulation
C) Due to wire resistance D) Due to high current flow

Answer: B) Due to elastic property of insulation

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

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

Answer: D) Gallium

167. What is the power supply required to operate the most standard TTL ICs properly?

- A) + 7.5v to + 12V
- B) + 4.75v to + 5.25V
- C) + 1.5v to +2.5V
- D) - 1.5v to - 2.5V

Answer: B) + 4.75v to + 5.25V

168. What type of control is used for FET?

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

Answer: D) Voltage controlled device

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

- A) To increase the hysteresis losses
- B) To increase core saturation losses
- C) To minimize eddy current losses
- D) To maximize eddy current losses

Answer: C) To minimize eddy current losses

170. What is the use of photo transistor?

- A) Used as light controlled switch
- B) Used as demodulator
- C) Used as oscillator
- D) Used in comparator circuit

Answer: A) Used as light controlled switch

171. Which is the major factor determines the quality performance of A/D converter?

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

Answer: B) Measuring parameter

172. What is the percentage of conductivity of electric current in copper?

- A) 0.56
- B) 0.94
- C) 0.67
- D) 1

Answer: B) 0.94

173. How does the values of bias resistors selected for collector current in class -B amplifiers?

- A) Quiescent current beyond the cut-off point
- B) Quiescent current at mid point
- C) Q point set slightly below cut-off
- D) Quiescent current over the cut-off value

Answer: D) Quiescent current over the cut-off value

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

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

Answer: D) SCR

175. Which is the fastest A/D conversion techniques?

- A) Low speed data acquisition applies
- B) Absolute conversion accuracy
- C) Absolute conversion accuracy
- D) High to medium speed data acquisition applies

Answer: B) Absolute conversion accuracy

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

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

Answer: D) LM 317