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Q. ID: ITISKILL8971QX

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Answer Key

Duration: 30 Mins **Total Marks: 176** **Q.ID: ITISKILL8971QX**

1. Which circuit uses the enhancement type MOSFET?

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

Answer: D) Integrated MOS switching circuits

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

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

Answer: B) Chemical energy into electrical energy

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

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

Answer: D) 60:40:00

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

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

Answer: C) 6.666 Ohms

5. Which formula is used to find the conductance?

A) I x R
B) I / V
C) V / I
D) Q / V

Answer: B) I / V

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

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

Answer: B) Radio receivers

7. 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) Each diode carries half the load current
D) The need of bulky transformer

Answer: D) The need of bulky transformer

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

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

Answer: B) Arsenic

9. 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

10. Which part of the relay causes most trouble?

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

Answer: D) Relay contacts

11. What are the uses of simulation softwares?

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

Answer: D) Design and test a circuit

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

A) IC/ IE
B) IE/ IC
C) IE/ IC
D) IB/ IE

Answer: A) IC/ IE

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

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

Answer: A) Power Amplifier

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

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

Answer: A) Nickel metal hydride (NiMH)

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

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

Answer: C) 2.2 V

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

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

Answer: D) Partition table

17. What is the unit of electric charge?

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

Answer: D) Coulomb

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

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

Answer: D) Electric current

19. What is the maximum forward gate current (Ig) for BFW10 JFET?

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

Answer: A) 10 mA

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

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

Answer: C) Reset

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

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

Answer: D) Biased negative clipper

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

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

Answer: D) Plastic packaging

23. Which torque is used in PMMC meter movement?

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

Answer: D) Moderate torque

24. What is successive approximation (SAR)?

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

Answer: B) Method of D/A conversion

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

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

Answer: B) Between 0.5 and 30 MhZ

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

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

Answer: B) SCR

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

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

Answer: B) Physical and sensory test

28. Which component is used to prevent over voltage of AC supply in SMPS?

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

Answer: D) Metal oxide varistor

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

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

Answer: A) Exactly 300 Mw

30. 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

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

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

Answer: D) Meter

32. 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

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

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

Answer: A) Double Pole Double Throw

34. What is the information stored in digital registers?

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

Answer: C) Binary values

35. 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) 1.525 v
B) 0.213 v
C) 2.134 v
D) 3.567 v

Answer: B) 0.213 v

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

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

Answer: C) In hertz

37. 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

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

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

Answer: A) Notches

39. What is the term stands for TRIAC?

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

Answer: D) Triode AC semiconductor

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

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

Answer: D) Cadmium sulfide

41. Which insulation layer is used in MOSFET?

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

Answer: C) Silicon-di-oxide

42. Which metal coating is used on compact disk?

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

Answer: B) Aluminium

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

A) Resistance will increase to 1 Kilo Ohm
B) Resistance will increase to around 1 Mega Ohm
C) Resistance will decrease to 100 Ohm
D) Resistance will decrease to 10 Ohm

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

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

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

Answer: B) By using quartz crystal

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

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

Answer: D) 1.835

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

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

Answer: A) Permanent Magnet Moving Coil meter

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

A) Double the time of signal frequency
B) RC valves should be at least ten times
C) Five times the time period of signal
D) Half the time period of signal

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

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

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

Answer: B) 10 ns

49. What is the maximum power dissipation Pmax for BF 245B?

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

Answer: D) 300 mw

50. 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

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

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

Answer: A) 0.864

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

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

Answer: D) For DC component restoration

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

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

Answer: C) Junction ruptured and short circuited

54. What type of control is used for FET?

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

Answer: D) Voltage controlled device

55. 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

56. What is the advantage of MOSFET?

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

Answer: D) Low gate signal power requirements

57. What is the limitation of integrated circuits?

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

Answer: B) Greater flexibility

58. Which mode is used in differential amplifier?

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

Answer: D) Common - mode operation

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

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

Answer: C) B3202

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

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

Answer: B) Gallium

61. Which factor determines the inductance value?

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

Answer: D) Diameter of the coil

62. What is the code number of TRIAC?

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

Answer: C) BT136

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

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

Answer: C) USB port

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

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

Answer: B) No moving parts to wear and tear

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

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

Answer: D) Input terminal

66. 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) Positive resistance characteristics
D) Nonlinearity characteristics

Answer: A) Negative resistance characteristics

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

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

Answer: C) Using virtual instrumentation testing

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

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

Answer: C) Four layer three junctions

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

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

Answer: A) PIV voltage

70. Which material conducts electricity?

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

Answer: D) Copper

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

A) Using colour codes
B) Printing the valves
C) Printing the valves
D) Directly printing the specifications

Answer: B) Printing the valves

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

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

Answer: A) + 4.75v to + 5.25V

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

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

Answer: A) Common emitter configuration

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

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

Answer: B) Conductor s diameter

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

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

Answer: A) Lead selenide

76. 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

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

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

Answer: C) By IR light produced inside the package

78. What is the cause of burnt relay contacts?

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

Answer: B) Excessive contact current

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

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

Answer: A) Triangular wave output

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

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

Answer: A) Number of bits used

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

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

Answer: D) Ohmmeter

82. What are the fundamental properties of insulation materials?

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

Answer: D) Insulation resistance and dielectric strength

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

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

Answer: C) Due to elastic property of insulation

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

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

Answer: C) Relaxation oscillator

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

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

Answer: A) 74 LS 138

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

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

Answer: B) Smothering

87. How the negative feedback is called?

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

Answer: A) Degenerative feedback

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

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

Answer: D) It is non-conductive

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

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

Answer: C) Multi turn trim pots

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

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

Answer: D) Aluminium frame

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

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

Answer: C) Focus

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

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

Answer: A) Control grid

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

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

Answer: D) 1.8 Amp

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

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

Answer: C) 2 V

95. What is the minimum forward current If for single colour LEDs?

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

Answer: A) 20 MA

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

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

Answer: A) Flux

97. 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

98. What is the use of screw driver?

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

Answer: C) Tighten or loosen screws

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

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

Answer: D) 1000 kW

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

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

Answer: A) Power supplies

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

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

Answer: B) 30 V

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

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

Answer: D) Circuit work space

103. Which type of voltage regulator is IC 723?

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

Answer: A) Three pin adjustable voltage regulator

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

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

Answer: A) Defects the operation of switching signal

105. How the insulators are called?

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

Answer: B) Dielectrics

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

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

Answer: C) 1.4 V

107. What is the use of schmitt trigger circuit?

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

Answer: A) AC to DC converter

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

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

Answer: C) Heat

109. 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

110. Which material is used as electrical insulator?

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

Answer: C) Porcelain

111. 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

112. 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) Computer Disk Read Only Memory
D) Compact Disk Read Only Memory

Answer: D) Compact Disk Read Only Memory

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

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

Answer: C) Gelled electrolyte

114. At which temperature the 6040 solder start meeting?

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

Answer: A) 200 Degree Centigrade

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

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

Answer: D) Steel toe caps

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

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

Answer: A) PIV voltage

117. How power rating is specified for transformers?

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

Answer: D) Volt ampere (VA)

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

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

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

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

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

Answer: B) Increased temperature

120. What is the maximum forward gate current (Ig) for BFW10 JFET?

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

Answer: D) 10 mA

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

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

Answer: D) Brazing

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

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

Answer: B) Trigger

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

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

Answer: A) 2.0 A

124. What is the advantage of MOSFET?

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

Answer: C) Fast switching speed

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

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

Answer: C) 0.1 A

126. 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

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

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

Answer: A) 150 Degree Centigrade to 450 Degree Centigrade

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

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

Answer: C) Drag and drop

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

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

Answer: C) Current

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

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

Answer: C) 1.5 VDC

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

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

Answer: D) Oscillator

132. Which electrical parameter is measured by the megger?

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

Answer: C) Insulation resistance

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

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

Answer: D) Uses split capacitor

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

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

Answer: A) Deflection is independent of current direction

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

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

Answer: C) To minimize eddy current losses

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

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

Answer: C) 1

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

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

Answer: B) Pin number 3

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

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

Answer: C) Measuring parameter

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

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

Answer: D) 6000 V

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

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

Answer: B) 1.8 V

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

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

Answer: C) Capacitor

142. What is the unit of inductance?

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

Answer: D) Henry

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

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

Answer: A) Series

144. 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

145. What is the use of photo transistor?

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

Answer: B) Used as light controlled switch

146. How gate is biased in JFET?

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

Answer: D) Reverse biased

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

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

Answer: D) Silver

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

A) 6.25 x 1012 electrons
B) 6.25 x 1016 electrons
C) 6.25 x 108 electrons
D) 6.25 x 1018 electrons

Answer: D) 6.25 x 1018 electrons

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

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

Answer: D) Capacitive reactance

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

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

Answer: B) Pulse repetition

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

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

Answer: C) Mechanical energy

152. Which circuit uses photo-darlington devices?

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

Answer: C) DC circuits

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

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

Answer: A) IDE port

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

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

Answer: B) Few micro Amperes

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

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

Answer: B) Clamper circuit

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

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

Answer: D) 0.94

157. Which is the property of IGBT?

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

Answer: A) High efficiency and fast switching

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

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

Answer: B) Square wave

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

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

Answer: C) 25mA

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

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

Answer: B) Using pulse transformer

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

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

Answer: D) IC 7495

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

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

Answer: B) Dry solder joint

163. What is the term stands for TRIAC?

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

Answer: B) Triode AC semiconductor

164. What is the gate current (Ig) of the JFET, when reverse biased?

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

Answer: C) Practically zero

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

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

Answer: D) High rate discharge tester

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

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

Answer: C) Supply power to loads

167. What is the range of output voltage of regulator IC LM

317?

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

Answer: D) 1.2 V to 32 V

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

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

Answer: A) Capacitive reactance

169. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: B) To prevent clogging of the nozzle

170. What is the use of flip - flop?

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

Answer: B) It stores binary information

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

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

Answer: D) Allows high current flow

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

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

Answer: B) Constant voltage charging method

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

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

Answer: B) Voltage across it reached the zener voltage

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

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

Answer: C) 2.5 V

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

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

Answer: B) Never reach saturation

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

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

Answer: C) Absolute conversion accuracy