

Duration: 30 Mins

Total Marks: 422

Q.ID: ITISKILL6684RZ

1. What is successive approximation (SAR)?

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

Answer: B) Method of D/A conversion

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

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

Answer: C) Double Pole Double Throw

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

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

Answer: C) 6.25×10^{18} electrons

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

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

Answer: B) Exactly 300 Mw

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

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

Answer: C) PIV voltage

6. 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) Float charging method D) Constant current charging method

Answer: B) Constant voltage charging method

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

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

Answer: D) 1.5 VDC

8. What is the unit of inductance?

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

Answer: A) Henry

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

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

Answer: A) 1.8 V

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

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

Answer: D) + 4.75v to + 5.25V

11. Which value is equal to one picofarad?

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

Answer: B) 10-12 Farad

12. 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

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

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

Answer: D) Arsenic

14. Which circuits requires the flip - flops for their operation?

- A) Oscillator circuits B) Modulator circuits
C) Memory circuits D) Amplifier circuits

Answer: C) Memory circuits

15. How batteries are classified?

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

Answer: B) Primary cells and secondary cells

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

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

Answer: A) 1 to 100 nano seconds

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

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

Answer: C) Oscillator

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

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

Answer: C) Circuit work space

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

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

Answer: C) Common emitter configuration

20. What is the use of flip - flop?

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

Answer: B) It stores binary information

21. How the insulators are called?

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

Answer: D) Dielectrics

22. How the sensitivity of voltmeter is determined?

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

Answer: A) Ohms per volt rating

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

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

Answer: C) Supply power to loads

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

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

Answer: D) To eliminate the transformer

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

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

Answer: C) Multi turn trim pots

26. 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

27. Which condition the mechanical zero error occur in panel meters?

- A) At load connected condition B) At load connected condition
C) At normal condition D) At voltage connected condition

Answer: C) At normal condition

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

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

Answer: A) Protection against weather

29. 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

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

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

Answer: B) Cadmium sulfide

31. Which option opens a list of programs, currently installed in the computer?

- A) Help menu B) Start menu
C) Recent documents D) All program

Answer: D) All program

32. What is the load current handled by the solid state relay that must be mounted to some heatsink to protect the device?

- A) 2 Amp B) 1 Amp
C) 3 Amp D) Greater than 4 Amp

Answer: D) Greater than 4 Amp

33. What are the basic components required for a clipping circuit?

- A) Diode and resistor B) Capacitor and resistor
C) Diode and capacitor D) Transistor and diode

Answer: A) Diode and resistor

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

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

Answer: C) Power Amplifier

35. Which type of packaging is used to transistors utilized for medium power amplification?

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

Answer: C) Plastic packaging with metal heatsinks

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

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

Answer: D) TO-72

37. What is the colour code for 100 Ohm resistor?

- A) Brown, black, red B) Brown, brown, brown
C) Black, brown, black D) Brown, black, brown

Answer: D) Brown, black, brown

38. What is the advantage of MOSFET?

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

Answer: B) Low gate signal power requirements

39. Which mode is used in differential amplifier?

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

Answer: B) Common - mode operation

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

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

Answer: B) 3 - 7 seconds

41. Which tool is used for the simplest method of skinning wires?

- A) Mechanical wire stripper B) Manual wire stripper
C) Electrician's knife D) Thermal wire stripper

Answer: C) Electrician's knife

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

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

Answer: C) Silicon material used

43. What is the shape of standard wire gauge?

- A) Cylindrical glass disk B) Rectangular plastic disk
C) Circular metal disk D) Square metal disk

Answer: C) Circular metal disk

44. What is the advantage of using digital multimeter?

- A) Easy portability B) Accuracy
C) Logarithmic scale D) Linear scale

Answer: B) Accuracy

45. What is the term stands for TRIAC?

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

Answer: C) Triode AC semiconductor

46. What is the advantage of IGBT?

- A) Fast switching speed B) Low gate signal power
C) Used to isolate logic circuits D) Low driving power

Answer: D) Low driving power

47. What is the total voltage of six 1.5 V cells, connected in series?

- A) 6 VDC B) 12 VDC
C) 9 VDC D) 3 VDC

Answer: C) 9 VDC

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

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

Answer: D) Using virtual instrumentation testing

49. What is the main application of photo resistor?

- A) Controls of street lighting systems B) To generate oscillations
C) Demodulation purpose D) Voltage rectification

Answer: A) Controls of street lighting systems

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

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

Answer: D) Current

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

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

Answer: B) Compact Disk Read Only Memory

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

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

Answer: B) 2.0 A

53. 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

54. Which tool is used to measure the size of wire?

- A) Steel rule
- B) Standard wire gauge
- C) Try square
- D) Feeler gauge

Answer: B) Standard wire gauge

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

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

Answer: C) 1 to 100 nano seconds

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

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

Answer: A) Large scale integration (LSI)

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

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

Answer: D) It is non-conductive

58. Which property of the capacitor stores electrical energy in

electrostatic field?

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

Answer: D) Capacitive reactance

59. What will happen in SCR with forward biased condition and gate current is applied?

- A) Forward current conduction commences
- B) Forward current conduction stops
- C) Reverse current turned off
- D) Reverse current conduction commences

Answer: A) Forward current conduction commences

60. How power rating is specified for transformers?

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

Answer: D) Volt ampere (VA)

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

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

Answer: A) JEDEC standard

62. 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

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

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

Answer: A) In hertz

64. Why the load testing is done on the lead-acid battery?

- A) Measure the rated output voltage
- B) Verify the rated power delivery
- C) Test I²R power loss in the battery cell
- D) Test the dimensional accuracy

Answer: A) Measure the rated output voltage

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

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

Answer: A) 1000 and above

66. What is the typical forward voltage drop of the yellow colour LED?

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

Answer: D) 2.1 V

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

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

Answer: C) Deflection is independent of current direction

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

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

Answer: A) Calibration

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

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

Answer: C) 100 Amp

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

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

Answer: A) 1.835

71. At which condition the cold resistance of the low voltage lamp is measured using ohmmeter?

- A) Lamp is ON at 400 Degree Centigrade
B) Lamp is ON at 320 Degree Centigrade
C) Lamp is ON at 100 Degree Centigrade
D) Lamp is OFF at room temperature

Answer: D) Lamp is OFF at room temperature

72. Which material is used for making instrument cabinets?

- A) Hard rubber B) Sheet metal
C) Wood D) Plastic

Answer: B) Sheet metal

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

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

Answer: B) Trigger

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

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

Answer: B) Less than 1

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

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

Answer: D) 1.4 V

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

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

Answer: B) 0.1 A

77. What is the full form of the abbreviation LBA in computer system?

- A) Large block accessing B) Logical block accessing
C) Large boot addressing D) Low block accessing

Answer: A) Large block accessing

78. What type of ripple filter circuit is used for large load current requirements?

- A) Inductor Input filter B) LC filter
C) Capacitor Input filter D) RC filter

Answer: C) Capacitor Input filter

79. What is the type of transistor BPX81?

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

Answer: B) NPN - Photo transistor

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

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

Answer: D) 2 V

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

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

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

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

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

Answer: A) Defects the operation of switching signal

83. What is the purpose of vacuum contactors in electrical panel?

- A) Slow switching
- B) Medium switching
- C) Fast switching
- D) Packet switching

Answer: C) Fast switching

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

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

Answer: D) Few micro Amperes

85. How many Op-Amps are fabricated inside the LM 324 IC pack?

- A) Two Op-Amps
- B) Three Op-Amps
- C) Three Op-Amps
- D) Five Op-Amps

Answer: B) Three Op-Amps

86. What is the decimal conversion number for the octal number (2374)₈?

- A) (1286)₁₀
- B) (1266)₁₀
- C) (1276)₁₀
- D) (1296)₁₀

Answer: C) (1276)₁₀

87. Which electrical quantity is directly proportional to the current carrying capacity of the conductor?

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

Answer: D) Conductor s diameter

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

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

Answer: B) Provide regenerative feedback

89. Which electrical parameter is measured by the megger?

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

Answer: B) Insulation resistance

90. How the active and passive components are added in the circuit using simulation software?

- A) Clicking on the list of components
- B) Clicking from the similar circuit
- C) Copy and paste from similar circuit
- D) Clicking on the component group

Answer: D) Clicking on the component group

91. 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

92. Which class of amplifier uses fixed bias because of its important advantage of transistor will never go to saturation?

- A) Class - C
- B) Class - B
- C) Class - AB
- D) Class - A

Answer: D) Class - A

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

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

Answer: B) Principal current

94. Where the programs and datas are stored after execution in computer?

- A) Memory
- B) Buffer
- C) Chip set
- D) Processor

Answer: A) Memory

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

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

Answer: A) 6.666 Ohms

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

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

Answer: C) Radio receivers

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

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

Answer: A) Silver

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

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

Answer: A) SCR

99. Which is the combination of photo transistor?

- A) LASER diode and pin diode
- B) Photo transistor and DIAC

- C) Photo diode and transistor D) Photo resistor and TRIAC

Answer: C) Photo diode and transistor

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

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

Answer: B) Soft soldering

101. Which angle is checked by the try square?

- A) 75 Degree B) 45 Degree
C) 60 Degree D) 90 Degree

Answer: D) 90 Degree

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

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

Answer: D) Four layer three junctions

103. 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) 2.134 v B) 3.567 v
C) 1.525 v D) 0.213 v

Answer: D) 0.213 v

104. 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

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

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

Answer: C) By replacing moving coil

106. How many time constants required to change a capacitor to 63.2% of its full charge voltage?

- A) Two time constant B) Three time constant
C) Four time constant D) One time constant

Answer: D) One time constant

107. What is the purpose of wood rasp file?

- A) Preliminary rough work B) 90 Degree corners
C) Cutting metals D) Finishing flat edges

Answer: A) Preliminary rough work

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

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

Answer: D) 1.8 V

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

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

Answer: C) Relaxation oscillator

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

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

Answer: C) Unpleasant tingling sensation

111. Which device generates high frequency radio frequency interferences by the extremely rapid turn-ON time?

- A) Op-Amp B) TRIAC
C) UJT D) Transistor

Answer: B) TRIAC

112. Electrical conductivity of gold is

- A) 100% B) 67%
C) 56% D) 94%

Answer: B) 67%

113. The speed of spindle motor rotates inside the hard disk

- A) 4000 to 800 r.p.m B) 3600 to 7200 r.p.m
C) 2500 to 5000 r.p.m D) 3500 to 6000 r.p.m

Answer: B) 3600 to 7200 r.p.m

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

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

Answer: C) No moving parts to wear and tear

115. What is the name of the circuit that shifts the original signal in a vertical upward direction?

- A) Positive clamping circuit B) Combination clipper circuit
C) Negative clamping circuit D) Peak clipper circuit

Answer: A) Positive clamping circuit

116. How can you confirm a transistor as defective?

- A) By voltage measurements B) By circuit testing
C) By physical testing D) By ohm meter testing

Answer: D) By ohm meter testing

117. What is the term stands for TRIAC?

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

Answer: B) Triode AC semiconductor

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

- A) Five gauge sizes increased
- B) Three gauge sizes decreased
- C) Two gauge sizes decreased
- D) Four gauge sizes increased

Answer: B) Three gauge sizes decreased

119. How the thick layers of oxide is removed before doing the soldering activity?

- A) Use Isopropyl Alcohol
- B) Apply flux
- C) Clean normally
- D) Use abrasive method

Answer: D) Use abrasive method

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

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

Answer: D) To minimize eddy current losses

121. What is the advantage of MOSFET?

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

Answer: B) Fast switching speed

122. Which memory device loses data on power failure?

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

Answer: A) RAM

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

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

Answer: C) Directly proportional

124. What is the cause of burnt relay contacts?

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

Answer: C) Excessive contact current

125. Which metal coating is used on compact disk?

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

Answer: A) Aluminium

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

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

Answer: D) Chemical energy into electrical energy

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

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

Answer: A) 60:40:00

128. 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

129. Which type of transistors are required to amplify signals from the microphone /transducer?

- A) Medium power transistors
- B) Low power transistors
- C) Epitaxial versa watt transistors
- D) High power transistors

Answer: B) Low power transistors

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

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

Answer: D) Nickel metal hydride (NiMH)

131. Which factor influences the severity of electrical shock?

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

Answer: A) Duration of current passing

132. What is the full form of the abbreviation MOSFET?

- A) Metal oxide semiconductor FET
- B) Metal organic serial FET
- C) Minimum output signal FET
- D) Medium oscillator signal FET

Answer: A) Metal oxide semiconductor FET

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

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

Answer: C) 1

134. Which metal has very good conductivity to the electric current?

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

Answer: D) Silver

135. How the circuit schematic drawn using the simulation software is tested?

- A) Using analysis menu
- B) Using virtual oscilloscope
- C) Using external oscilloscope
- D) Using multimeter

Answer: A) Using analysis menu

136. What is the advantage of IGBT?

- A) High efficiency and fast switching
- B) IGBT is a gate current driven device
- C) Low efficiency and slow switching
- D) It has low input impedance

Answer: A) High efficiency and fast switching

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

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

Answer: A) Dry solder joint

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

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

Answer: B) Measure diameter of wire

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

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

Answer: D) High speed switching

140. Why LC tuned circuits are not used in audio frequency oscillators?

- A) LC tank circuit does not produce AF signals
- B) LC components are not available
- C) LC values required is too large
- D) LC tank circuit operation requires high voltage

Answer: C) LC values required is too large

141. Which device converts digital data from computer into analog data and transmit through telephone line?

- A) MODEM
- B) Cache memory
- C) Chipset
- D) Processor

Answer: A) MODEM

142. Which circuit photo SCR opto couplers are used?

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

Answer: B) AC powered circuits

143. Which is the N - channel FET?

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

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

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

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

Answer: B) 0.56

145. Which parameter is measured by a multimeter?

- A) Energy
- B) Frequency
- C) Time duration
- D) Voltage

Answer: D) Voltage

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

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

Answer: D) Negative resistance characteristics

147. How the accuracy of amplitude and frequency measured by CRO is checked?

- A) By sine wave signal
- B) By built-in calibration signal
- C) By function generator
- D) By complex wave form

Answer: B) By built-in calibration signal

148. 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

149. Which measuring instrument is used to check the working condition of a photo resistor (LDR)?

- A) Ohmmeter
- B) Voltmeter

- C) Ammeter D) Oscilloscope

Answer: A) Ohmmeter

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

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

Answer: C) Remove residual flux and prevent corrosion

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

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

Answer: D) 10 ns

152. What is the function of schottky diode BA 157 in SMPS circuit?

- A) Error amplifier B) Switching diode
C) Voltage regulator D) Fast recovery diode

Answer: D) Fast recovery diode

153. Which shortcut key function is used to close the working window on the computer?

- A) Ctrl + P B) Shift + F3
C) Alt + F4 D) Ctrl + S

Answer: C) Alt + F4

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

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

Answer: D) Tendency to fail shorted

155. What is the input impedance of darlington pair transistors?

- A) Medium input impedance B) Uniter
C) Very low input impedance D) Very high input impedance

Answer: D) Very high input impedance

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

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

Answer: C) Jewelled bearings

157. What is the effect of shaking the soldered joint while cooling?

- A) It disturbs the chemical bonding take place B) Flux will not dissolve
C) It results in oxidation of solder D) It will corrode the joint

Answer: A) It disturbs the chemical bonding take place

158. What is the main advantages of IGBT over BJT?

- A) Fast switching speed B) Reverse bias secondary break downs
C) Superior current conduction capability D) Thermal limits are pushed to the edge

Answer: C) Superior current conduction capability

159. What type of control is used for FET?

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

Answer: A) Voltage controlled device

160. How the stationary electric charges are called?

- A) Static charges B) Electrical charges
C) Chemical charges D) Kinetic charges

Answer: A) Static charges

161. Which meter movement is not affected by stray magnetic fields?

- A) Thermo couple meter B) MI meter - Repulsion type
C) MI meter - attraction type D) PMMC meter

Answer: D) PMMC meter

162. What is the phase relationship between the applied voltage and current in the primary of a transformer with open secondary winding?

- A) Voltage lags current by 45 Degree B) Voltage leads current by 45 Degree
C) Current leads voltage by 90 Degree D) Current lags voltage by 90 Degree

Answer: B) Voltage leads current by 45 Degree

163. Why the soft iron pieces in the moving iron meter is tongue shaped?

- A) To achieve uniformity of scale B) To produce magnetic attraction
C) To generate heat D) To damp the oscillations

Answer: A) To achieve uniformity of scale

164. Why the electronic device IGBT is preferred over the power MOSFET?

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

Answer: C) Higher switching repetition rates

165. What is the specified Vcc voltage of 4 bit digital switch with 4 independent lines?

- A) 5.0 V to 7.5 V B) 1.5 V to 2.2 V
C) 4.5 V to 5.5 V D) 2.3 V to 3.6 V

Answer: C) 4.5 V to 5.5 V

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

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

Answer: A) 10 mW/gate

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

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

Answer: A) Electric current

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

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

Answer: A) Brazing

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

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

Answer: A) 10 mA

170. What is the function of astable multivibrator in timer IC 555?

- A) Serving as comparator B) Serving as an oscillator
C) Serving as an oscillator D) Acting as transducers

Answer: B) Serving as an oscillator

171. How batteries are classified based on their working?

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

Answer: D) Primary cells and secondary cells

172. What is the purpose of flux in soldering electronic circuit components?

- A) Form the oxide layer B) Dissolve the oxide layer on the metal surface
C) Increase the melting temperature of solder D) Reduce the solder cooling time

Answer: B) Dissolve the oxide layer on the metal surface

173. Which component, which reads the command from memory and executes?

- A) Random Access Memory B) Read Only Memory
C) Graphics card D) Processor

Answer: A) Random Access Memory

174. Which signal is sent by the SMPS to computer mother board?

- A) Processor signal B) Device signal
C) Peripheral signal D) Power good signal

Answer: D) Power good signal

175. What is the cause of injuring at the time of lifting a load?

- A) Falling object B) Wrong lifting technique
C) Object striking the load D) Heavy load

Answer: B) Wrong lifting technique

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

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

Answer: D) Control grid

177. Find the total inductance value of two inductors 10H and 15H of connected in series.

- A) 25 H B) 10 H
C) 05 H D) 15 H

Answer: A) 25 H

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

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

Answer: D) Dull grainy surface

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

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

Answer: C) TO-92

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

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

Answer: B) Higher thermal stability

181. What are the uses of simulation softwares?

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

Answer: C) Design and test a circuit

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

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

Answer: D) Flux

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

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

Answer: A) Mutual induction

184. What is the full form of electronic component MOV?

- A) Metal Oxide Varactor B) Metal Over Varactor
C) Metal Oxide Varistor D) Metal Over Varistor

Answer: C) Metal Oxide Varistor

185. Which artificial respiration method to be avoided to a person with abdomen injury?

- A) Mouth-to-mouth method B) Mouth-to-nose method
C) Schafer's method D) Nose-to-mouth method

Answer: C) Schafer's method

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

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

Answer: D) Memory

187. Which is the N - channel FET?

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

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

188. Which unit is used to measure capacitance value?

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

Answer: A) Farad

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

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

Answer: A) Electron from source to drain

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

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

Answer: A) Allows high current flow

191. What is the range of current rating of lead acid batteries used in automobiles?

- A) 2.5 to 4.5 Amp B) 10 to 25 Amp
C) 100 to 400 Amp D) 5 to 10 Amp

Answer: C) 100 to 400 Amp

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

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

Answer: D) Few micro Amperes

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

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

Answer: B) Double the input A/C frequency

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

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

Answer: D) USB port

195. Which materials are used for semiconductor?

- A) Silver and aluminium B) Arsenic and antimony
C) Silicon and germanium D) Gallium and indium

Answer: C) Silicon and germanium

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

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

Answer: C) Smothering

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

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

Answer: A) Series

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

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

Answer: C) 2.2 V

199. What is the unit of electric charge?

- A) Hertz B) Coulomb

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

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

Answer: D) Logical approach method

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

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

Answer: D) Pin number 3

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

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

Answer: C) Conductor s diameter

219. What is the purpose of using IC74LS190?

- A) Modulator
- B) Up/down counter
- C) Comparator
- D) Attemnator

Answer: B) Up/down counter

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

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

Answer: A) Printing the valves

221. Which step is followed for treating a person from electric shock?

- A) Provide water
- B) Cover the victim with a coat
- C) Keep the victim cold
- D) Move the victim to a ventilated place

Answer: D) Move the victim to a ventilated place

222. What is the effect on the output voltage in a bridge rectifier circuits, with one diode open?

- A) Half of the rated output voltage
- B) No output DC voltage
- C) Very low voltage
- D) Full output rated voltage

Answer: A) Half of the rated output voltage

223. Which material conducts electricity?

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

Answer: D) Copper

224. What is the code number of TRIAC?

- A) 2N2646
- B) 2N1597

- C) BFW10
- D) BT136

Answer: D) BT136

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

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

Answer: B) Permanent codes

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

Answer: C) The need of bulky transformer

227. 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

228. 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

229. 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

230. What is the name of the motion of charged particles in any medium?

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

Answer: D) Current

231. Which electrical parameter opposes the flow of electrons?

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

Answer: A) Resistance

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

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

Answer: B) Digital frequency meter circuit

233. Which software is used to simulate electronic circuits?

- A) Auto cad
- B) Photo shop
- C) Multi sim
- D) MS office

Answer: C) Multi sim

234. Which part of the relay causes most trouble?

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

Answer: D) Relay contacts

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

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

Answer: C) 20 MA

236. What is the full form of the abbreviation ISA?

- A) Industry Software Architecture
- B) Industry System Architecture
- C) Institution Standard Architecture
- D) Industry Standard Architecture

Answer: D) Industry Standard Architecture

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

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

Answer: A) Cascaded amplifier

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

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

Answer: C) Focus

239. What is stationary electric charges?

- A) Chemical charges
- B) Kinetic charges
- C) Static charges
- D) Electrical charges

Answer: C) Static charges

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

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

Answer: D) Practically zero

241. What is the shape of prohibition sign?

- A) Square
- B) Circular
- C) Rectangular
- D) Triangular

Answer: B) Circular

242. What is the result of forced air is blown to cool the joint while soldering?

- A) Solder setting very slowly
- B) Disturbs the chemical bonding
- C) Results in dry brittle joint
- D) Joint becomes mechanically stronger

Answer: C) Results in dry brittle joint

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

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

Answer: D) LM 317

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

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

Answer: D) Ohmmeter

245. What is the purpose of trimmer capacitor?

- A) Filtering
- B) Decoupling
- C) Fine tuning
- D) Coupling

Answer: C) Fine tuning

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

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

Answer: A) Physical and sensory test

247. What is the voltage gain in a transistor if the input voltage in 40mv and the output voltage in 3.6V?

- A) 270
- B) 90
- C) 45
- D) 180

Answer: B) 90

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

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

Answer: D) TO-92

249. Which battery is used for cellular phones?

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

Answer: D) Lithium ion

250. What is the advantage of PIN photo diodes?

- A) Medium sensitivity in the infrared range
- B) Low sensitivity in the infrared range

- C) Low sensitivity in the Ultraviolet range D) High sensitivity in the infrared range

Answer: D) High sensitivity in the infrared range

251. Which insulation layer is used in MOSFET?

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

Answer: B) Silicon-di-oxide

252. What is the function of clipper circuit?

- A) Amplification B) Rectification
C) Wave shaping D) Regulation

Answer: C) Wave shaping

253. What is the reason for electric fire?

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

Answer: A) Overloading

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

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

Answer: C) 10 mA

255. What is the shape of warning sign board?

- A) Hexagonal shape B) Square shape
C) Triangular shape D) Circular shape

Answer: C) Triangular shape

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

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

Answer: A) For DC component restoration

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

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

Answer: D) 6000 V

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

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

Answer: A) Capacitor

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

- A) Sinewave output B) Triangular wave output

- C) Triangular wave output D) Analog output

Answer: B) Triangular wave output

260. How the gas and liquefied gases are classified

- A) Class A fire B) Class C fire
C) Class B fire D) Class D fire

Answer: C) Class B fire

261. How the negative feedback is called?

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

Answer: D) Degenerative feedback

262. Where does the depletion region exists in a bipolar transistor?

- A) Between E-B and B-C electrodes B) Between collector - base electrodes
C) Between emitter - base electrodes D) Between collector and emitter electrodes

Answer: A) Between E-B and B-C electrodes

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

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

Answer: B) 0.864

264. What is the maximum reverse voltage that can be applied across the general purpose LED?

- A) 12 V B) 8 V
C) 32 V D) 15 V

Answer: B) 8 V

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

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

Answer: D) Power amplifier

266. What is the advantage of SMPS in computer?

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

Answer: D) High efficiency

267. Which device is a unipolar transistor?

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

Answer: B) FET

268. Which is the property of IGBT?

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

Answer: D) High efficiency and fast switching

269. Rate of change of input voltage

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

Answer: B) Rate of change of output voltage

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

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

Answer: A) Capacitive reactance

271. Which is electronic simulation software?

- A) Macspice
- B) MS Office
- C) AutoCAD
- D) Photoshop

Answer: A) Macspice

272. What is the expansion of PRF related to frequency?

- A) Pulse repetition frequency
- B) Pulse repetition frequency
- C) Pulse probability frequency
- D) Power regulated frequency

Answer: A) Pulse repetition frequency

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

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

Answer: C) 74 LS 138

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

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

Answer: C) 30 V

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

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

Answer: D) IC 7905

276. In which analog meter the battery is provided?

- A) Watt meter
- B) Ohm meter
- C) Voltmeter
- D) Ammeter

Answer: B) Ohm meter

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

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

Answer: A) 100 Hz

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

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

Answer: A) Input terminal

279. What is the purpose of damping torque in PMMC meter?

- A) Control the swinging of the coil
- B) Control the pivot point
- C) Control the magnetic field
- D) Control the jewel bearing

Answer: A) Control the swinging of the coil

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

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

Answer: B) Drag and drop

281. What is the drawback of IGBT compared to the power MOSFET?

- A) Not suitable for power applications
- B) Higher driving power requirement
- C) Poor current conduction capability
- D) Poor switching speed

Answer: D) Poor switching speed

282. 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

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

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

Answer: C) Lead selenide

284. What is the advantage of photo transistors over photo diodes?

- A) Vulnerable to electrical sources
- B) Limit voltage handling capacity

- C) Considerably lower sensitivity D) Considerable greater sensitivity

Answer: D) Considerable greater sensitivity

285. What is the limitation of integrated circuits?

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

Answer: B) Greater flexibility

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

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

Answer: B) By IR light produced inside the package

287. What is characteristics of instrumentation amplifier?

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

Answer: C) High input impedance

288. What is the lowest voltage level of discharging the lead-acid battery?

- A) 1.5 V B) 1.2 V
C) 1.85 V D) 1.7 V

Answer: D) 1.7 V

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

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

Answer: C) IDE port

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

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

Answer: D) Cold joint

291. What is the advantage of silicon over germanium for transistor fabrication?

- A) Higher thermal stability B) Higher amplification factor
C) Lower thermal stability D) Lower operating voltage

Answer: A) Higher thermal stability

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

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

Answer: D) High rate discharge tester

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

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

Answer: D) Biased negative clipper

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

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

Answer: A) Doping

295. What is the name of the circuit that shifts the original signal in a vertical downward direction?

- A) Peak clipper circuit B) Combination clipper circuit
C) Positive clamping circuit D) Negative clamping circuit

Answer: D) Negative clamping circuit

296. What is the natural shape of a quartz crystal?

- A) Cylindrical shape with pyramid at ends B) Hexagonal prism with pyramid at ends
C) Pentagonal prism with pyramid at ends D) Cube shape with pyramid at ends

Answer: B) Hexagonal prism with pyramid at ends

297. 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

298. What is the maximum emitter to base voltage V_{EB} (max) for the transistor BC 147?

- A) 4V B) 8V
C) 5V D) 6V

Answer: D) 6V

299. What is the use of screw driver?

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

Answer: B) Tighten or loosen screws

300. Which class of fire is classified involving metals?

- A) Class B B) Class A
C) Class D D) Class C

Answer: C) Class D

301. Which component is used to remove the heat generated inside the SMPS?

- A) Heat sink B) Silicon grease

- C) Cooler fan D) Mica film spacer

Answer: C) Cooler fan

302. How many time constant period is required to fully charge a capacitor?

- A) 5 time constants B) 7 time constants
C) 10 time constants D) 3 time constants

Answer: A) 5 time constants

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

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

Answer: A) 5A

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

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

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

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

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

Answer: A) Pulse repetition

306. What is the maximum drain- source voltage, VDS for the JFET BF 245B?

- A) 30 V B) 10 V
C) 20 V D) 40 V

Answer: A) 30 V

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

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

Answer: C) Energy loss takes place

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

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

Answer: A) Jet of water

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

- A) Test the charging current of battery B) Test the battery life

- C) Indicate the health condition of battery D) Test the load current delivered

Answer: C) Indicate the health condition of battery

310. 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

311. Which band of frequency is used for RADAR in frequency spectrum allotted by the International Telecommunication Union (ITU)?

- A) ITU band - 10 B) ITU band - 8
C) ITU band - 6 D) ITU band - 4

Answer: A) ITU band - 10

312. 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

313. 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

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

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

Answer: A) Junction ruptured and short circuited

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

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

Answer: A) 0.94

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

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

Answer: D) NPN has higher switching speed

317. Which voltage level is reached to increase the current through DIAC rapidly?

- A) Break down voltage B) Cut in voltage
C) Zener voltage D) Break over voltage

Answer: D) Break over voltage

318. What is the digital signal value for the analog signal value 6V?

- A) 100 B) 101
C) 111 D) 110

Answer: D) 110

319. What is the use of schmitt trigger circuit?

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

Answer: C) AC to DC converter

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

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

Answer: D) Current

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

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

Answer: B) Two

322. Which step is important for soldering a joint?

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

Answer: B) Heating the joint

323. Which instrument used to measure resistance, capacitance and inductance?

- A) Wein bridge B) Kelvin bridge
C) LCR bridge D) Wheatstone bridge

Answer: C) LCR bridge

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

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

Answer: C) Heat

325. What is the maximum drain- source voltage, VDS for the JFET BF 245B?

- A) 10 V B) 30 V
C) 20 V D) 40 V

Answer: B) 30 V

326. Which torque is used in PMMC meter movement?

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

Answer: D) Moderate torque

327. What is the efficiency transformer coupled class A amplifier?

- A) Less than 20% B) About 50%
C) Unity D) More than 60%

Answer: B) About 50%

328. Which material is used as electrical insulator?

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

Answer: B) Porcelain

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

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

Answer: B) One Op-Amp

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

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

Answer: B) Spring control

331. Which electronic device inversely changes its resistance with the amount of light falling on it?

- A) Photo resistors B) Photo diodes
C) Photo transistors D) Photo voltaic cells

Answer: A) Photo resistors

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

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

Answer: D) PIV voltage

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

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

Answer: D) Aluminium frame

334. What is the power dissipated if 10mA current flows through a 10K Ohm resistor?

- A) 4000 milli watts B) 2000 milli watts
C) 3000 milli watts D) 1000 milli watts

Answer: D) 1000 milli watts

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

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

Answer: A) BF 194B

336. What is the important feature of instrumentation amplifier?

- A) Reduce the output off set voltage
- B) Low gain accuracy
- C) Low gain accuracy
- D) Increase the output voltage

Answer: B) Low gain accuracy

337. Which material contains eight electrons in valency layer?

- A) Insulators
- B) Intrinsic semiconductors
- C) Semiconductors
- D) Conductors

Answer: A) Insulators

338. Which fire extinguisher is used to put off class C type of fire?

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

Answer: D) Dry powdered

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

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

Answer: A) By soft start circuit

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

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

Answer: A) Square wave

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

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

Answer: C) Thyristor and transistors

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

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

Answer: A) Desoldering pump

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

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

Answer: C) Steel toe caps

344. Which parameter is maintained constant in zener diode?

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

Answer: A) Voltage

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

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

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

346. Which material is used to make photo resistors (LDR)?

- A) Germanium
- B) Aluminium
- C) Cadmium sulfide
- D) Silicon

Answer: C) Cadmium sulfide

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

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

Answer: A) Metal oxide varistor

348. When does the complementary metal oxide type MOSFET configuration consumes power?

- A) Always consumes power
- B) During switching
- C) While it holds its state
- D) Never consumes power

Answer: B) During switching

349. Find the value of shunt resistance required for 1 mA meter to extend the range and measure 10 mA (RM = 27 Ohm) ?

- A) 1 Ohm
- B) 2 Ohms
- C) 3 Ohms
- D) 4 Ohms

Answer: C) 3 Ohms

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

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

Answer: B) Single Pole Double Throw

351. Which purpose the cadmium sulfide cells (CDS cells) are used?

- A) Light dependent resistor B) Rechargeable cells
C) Primary cells D) Voltage dependent resistor

Answer: A) Light dependent resistor

352. Which parameter is used in the working of moving coil meter?

- A) Permanent magnetic fields B) Stray magnetic fields
C) Spring control D) Eddy current damping

Answer: A) Permanent magnetic fields

353. 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

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

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

Answer: D) 18 gauge rosin cored

355. What is the first step to rescue the person in electrical contact?

- A) Pull the person from electrical contact B) Call the doctor
C) Break the contact D) Switch OFF power supply

Answer: D) Switch OFF power supply

356. Which circuit uses photo-darlington devices?

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

Answer: D) DC circuits

357. 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

358. How gate is biased in JFET?

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

Answer: B) Reverse biased

359. How many alternating layers are there in IGBT?

- A) Single layer B) 2 layers
C) 3 layers D) 4 layers

Answer: D) 4 layers

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

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

Answer: D) Very high

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

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

Answer: B) Permanent Magnet Moving Coil meter

362. How the maximum permissible voltage that can be applied across the collector ? Emitter junction of a transistor is indicated?

- A) VCC in volts B) VBE (max) in volts
C) VCE (max) in volts D) VCB (max) in volts

Answer: C) VCE (max) in volts

363. What is the shape of mandatory signs?

- A) Rectangular B) Triangular
C) Circular D) Square

Answer: C) Circular

364. Which is the additional percentage of power delivered by the lithium Ion compared to NiMH battery?

- A) 60% B) 0.15
C) 40% D) 25%

Answer: C) 40%

365. Which tool is used for seaming the funnel like taper?

- A) Vices B) Blow horn stake
C) Hatchet stake D) Angle steel

Answer: B) Blow horn stake

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

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

Answer: A) Increased temperature

367. Which factor determines the inductance value?

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

Answer: D) Diameter of the coil

368. Which cores are used in intermediate frequency transformers?

- A) Cobalt
- B) Steel
- C) Ferrite
- D) Nickel

Answer: C) Ferrite

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

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

Answer: D) IC 7495

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

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

Answer: D) Relaxation oscillator

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

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

Answer: D) B3202

372. Which circuit is used to clip portion of both positive and negative half cycle of input signal voltage?

- A) Combination clipper circuit
- B) Biased positive clipper circuit
- C) Unbiased clipper circuit
- D) Biased negative clipper circuit

Answer: A) Combination clipper circuit

373. 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

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

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

Answer: A) When the solder is heated

375. What is the effect on a secondary cell supplying current to the load?

- A) Unloading
- B) Discharging
- C) Leaking
- D) Charging

Answer: B) Discharging

376. 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

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

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

Answer: C) 300 mw

378. Which material is used for negative terminal of alkaline manganese dioxide batteries?

- A) Zinc
- B) Lithium
- C) Nickel hydroxide
- D) Cadmium

Answer: A) Zinc

379. Which formula is used to find the conductance?

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

Answer: D) I / V

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

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

Answer: D) Principal current

381. When does the biased negative clipper removes the portion of input signal?

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

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

382. What is the maximum drain current I_D for BFW10?

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

Answer: B) 20 mA

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

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

Answer: D) Rectifying

384. What is the maximum possible number of flip-flops in a decade counter?

- A) 2^n
- B) 1^n
- C) 3^n
- D) 2^{n+1}

Answer: A) 2^n

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

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

Answer: D) Sulphuric acid

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

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

Answer: B) Power supplies

387. What is the effect on the transformer operated below the rated voltage?

- A) Transformer heated up excessively
- B) Leads to interwinding leakage
- C) Burn out windings
- D) Delivers reduced secondary voltage

Answer: D) Delivers reduced secondary voltage

388. Which meter uses a moving coil for measurement?

- A) PMMC meter
- B) LCR meter
- C) MI repulsion type
- D) MI attraction type

Answer: A) PMMC meter

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

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

Answer: C) Clamper circuit

390. What is the information stored in digital registers?

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

Answer: C) Binary values

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

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

Answer: C) Partition table

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

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

Answer: B) Reset

393. What is the use of photo transistor?

- A) Used as demodulator
- B) Used as light controlled switch

- C) Used as oscillator
- D) Used in comparator circuit

Answer: B) Used as light controlled switch

394. What is the percentage of sulphuric acid in electrolyte used for lead-acid batteries?

- A) 40%
- B) 25%
- C) 27%
- D) 12%

Answer: C) 27%

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

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

Answer: A) 1000 kW

396. How the single strand wire is called?

- A) Flexible wire
- B) Hook up wire
- C) Twisted wire
- D) Multi strand wire

Answer: B) Hook up wire

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

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

Answer: B) Rosin

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

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

Answer: B) To produce oscillation

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

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

Answer: C) Notches

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

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

Answer: C) 25mA

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

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

Answer: C) Plastic packaging

402. What is the advantage of using bias in transistor

circuits?

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

Answer: C) Never reach saturation

403. What type of feedback is used by the Wein-bridge oscillator to oscillate the signal?

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

Answer: D) Both positive and negative feedback

404. How the single strand wire is called?

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

Answer: A) Hook - up wire

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

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

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

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

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

Answer: B) Mechanical energy

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

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

Answer: C) Meter

408. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: A) To prevent clogging of the nozzle

409. What is the name of the process to maintain the recommended level of electrolyte in lead-acid battery cell?

- A) Topping up
- B) Charging the cell
- C) Recharging
- D) Cycling of the cell

Answer: A) Topping up

410. Which meter is used to find the exact resistance value of resistors?

- A) Ohm meter
- B) Watt meter
- C) Volt meter
- D) Ammeter

Answer: A) Ohm meter

411. Which process the ICS are made?

- A) Grown junction process
- B) Point contact junction process
- C) Point contact junction process
- D) Micro photo - lithographic process

Answer: D) Micro photo - lithographic process

412. Which component opposes any change in current?

- A) Capacitor
- B) Inductor
- C) Diode
- D) Resistor

Answer: B) Inductor

413. Which rechargeable cell is designed with conductive polymer?

- A) Nickel metal hydride cell
- B) Lead acid cell
- C) Plastic cell
- D) Gelled electrolyte lead acid cell

Answer: C) Plastic cell

414. Which device is a unipolar transistor?

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

Answer: C) FET

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

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

Answer: C) Isopropyl alcohol

416. What is the name of the pair of metal strips used in battery cell?

- A) Electrodes
- B) Electrolyte
- C) Carbon rod
- D) Cathode

Answer: A) Electrodes

417. Which is the maximum size of drill bit used in electrical hand drilling machine?

- A) 3.5 mm
- B) 6.5 mm
- C) 0.35 mm
- D) 1.5 mm

Answer: B) 6.5 mm

418. What is the unit of electric charge?

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

Answer: A) Coulomb

419. What is the code number of TRIAC?

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

Answer: A) BT136

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

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

Answer: D) Gelled electrolyte

421. 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

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

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

Answer: C) Gallium
