

11:10 AM

March 2026

Sri Mahalingeswara ITI

Answer Key

Duration: 30 Mins

Total Marks: 422

Q.ID: ITISKILL7503XU

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

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

Answer: C) Blow horn stake

2. Which material is used as electrical insulator?

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

Answer: C) Porcelain

3. What is the maximum emitter to base voltage VEB (max) for the transistor BC 147?

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

Answer: C) 6V

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

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

Answer: A) Reset

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

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

Answer: B) Electrician's knife

6. Which parameter is maintained constant in zener diode?

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

Answer: D) Voltage

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

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

Answer: A) Rosin

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

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

Answer: D) Higher thermal stability

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

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

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

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

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

Answer: B) IC 7905

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

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

Answer: B) Calibration

12. 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

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

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

Answer: A) Superior current conduction capability

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

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

Answer: D) Principal current

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

- A) Television receivers
- B) Stereo amplifiers

C) Radio receivers
D) Automatic voltage stabilizers

Answer: C) Radio receivers

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

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

Answer: B) Capacitor Input filter

17. 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

18. What is the input impedance of IGBT?

A) Infinity
B) High
C) Unity
D) Low

Answer: B) High

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

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

Answer: D) Large block accessing

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

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

Answer: A) One time constant

21. What is the important feature of instrumentation amplifier?

A) Low gain accuracy
B) Low gain accuracy
C) Increase the output voltage
D) Reduce the output offset voltage

Answer: A) Low gain accuracy

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

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

Answer: D) Spring control

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

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

Answer: C) 25 H

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

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

Answer: D) By built-in calibration signal

25. 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

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

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

Answer: B) TRIAC

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

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

Answer: D) Measure diameter of wire

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

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

Answer: D) By soft start circuit

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

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

Answer: C) Measure the rated output voltage

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

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

Answer: A) 20 MA

31. 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) + 4.75v to + 5.25V
D) + 1.5v to +2.5V

Answer: C) + 4.75v to + 5.25V

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

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

Answer: C) Four layer three junctions

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

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

Answer: D) Aluminium frame

34. Which is electronic simulation software?

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

Answer: D) Macspice

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

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

Answer: D) Electric current

36. What is the decimal number for the binary number 0101?

- A) 6 B) 7
C) 4 D) 5

Answer: D) 5

37. What is the cause of burnt relay contacts?

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

Answer: C) Excessive contact current

38. 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

39. 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

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

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

Answer: C) IDE port

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

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

Answer: A) Triangular wave output

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

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

Answer: B) Ohmmeter

43. What is the shape of standard wire gauge?

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

Answer: C) Circular metal disk

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

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

Answer: B) Input terminal

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

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

Answer: B) Gelled electrolyte

46. 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

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

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

Answer: C) Dull grainy surface

48. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: A) To prevent clogging of the nozzle

49. What is the shape of prohibition sign?

- A) Rectangular B) Square

C) Circular

D) Triangular

Answer: C) Circular

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

A) Absolute conversion accuracy

B) Absolute conversion accuracy

C) High to medium speed data acquisition applies

D) Low speed data acquisition applies

Answer: A) Absolute conversion accuracy

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

A) Lamp is ON at 100 Degree Centigrade

B) Lamp is ON at 400 Degree Centigrade

C) Lamp is OFF at room temperature

D) Lamp is ON at 320 Degree Centigrade

Answer: C) Lamp is OFF at room temperature

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

A) Epitaxial versa watt transistors

B) Low power transistors

C) High power transistors

D) Medium power transistors

Answer: B) Low power transistors

53. Which cores are used in intermediate frequency transformers?

A) Nickel

B) Steel

C) Ferrite

D) Cobalt

Answer: C) Ferrite

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

A) Positive clamper

B) Biased negative clipper

C) Combination clipper

D) Biased positive clipper

Answer: B) Biased negative clipper

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

A) 40%

B) 12%

C) 27%

D) 25%

Answer: C) 27%

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

A) Watt meter

B) Ammeter

C) Volt meter

D) Ohm meter

Answer: D) Ohm meter

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

A) 1.7 V

B) 2.5 V

C) 1.5 V

D) 2.1 V

Answer: B) 2.5 V

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

A) Delivers reduced secondary voltage

B) Burn out windings

C) Transformer heated up excessively

D) Leads to interwinding leakage

Answer: A) Delivers reduced secondary voltage

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

A) Voltage dependent resistor

B) Primary cells

C) Rechargeable cells

D) Light dependent resistor

Answer: D) Light dependent resistor

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

A) Low contact current

B) Chatter during a slow release

C) Excessive number of operations

D) Excessive contact current

Answer: D) Excessive contact current

61. What is the unit of electric charge?

A) Volts

B) Coulomb

C) Ampere

D) Hertz

Answer: B) Coulomb

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

A) Dielectric

B) Stray capacitance

C) Capacitance

D) Capacitive reactance

Answer: D) Capacitive reactance

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

A) Classified Device Read Only Memory

B) Computer Disk Read Only Memory

C) Connectivity Digital Read Only Memory

D) Compact Disk Read Only Memory

Answer: D) Compact Disk Read Only Memory

64. Which part of the relay causes most trouble?

A) Frame and core

B) Relay coil

C) Relay contacts

D) Hinges

Answer: C) Relay contacts

65. Which electrical parameter is measured by the megger?

A) Voltage

B) Insulation resistance

C) Current

D) Frequency

Answer: B) Insulation resistance

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

A) 0.56

B) 0.67

C) 1

D) 0.94

Answer: C) 1

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

A) Lithium ion (Li-Ion)

B) Nickel metal hydride (NiMH)

C) Nickel cadmium (Nicad)

D) Lithium polymer (Li-Poly)

Answer: B) Nickel metal hydride (NiMH)

68. Which unit is used to measure capacitance value?

A) Henry

B) Mho

C) Ohm

D) Farad

Answer: D) Farad

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

A) Oscilloscope

B) Voltmeter

C) Ammeter

D) Ohmmeter

Answer: D) Ohmmeter

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

A) 25mA

B) 15mA

C) 45mA

D) 35mA

Answer: A) 25mA

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

A) Carbon-di-oxide

B) Foam type

C) Jet of water

D) Dry powdered

Answer: C) Jet of water

72. What is the use of screw driver?

A) Tighten or loosen bolts

B) Tighten or loosen rivets

C) Hold the screws

D) Tighten or loosen screws

Answer: D) Tighten or loosen screws

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

A) Phosphorus

B) Arsenic

C) Antimony

D) Gallium

Answer: D) Gallium

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

A) Dry powdered

B) Foam type

C) Jet of water

D) Carbon-di-oxide

Answer: A) Dry powdered

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

A) Cool air

B) Fire

C) Heat

D) Water vapour

Answer: C) Heat

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

A) Vernier caliper

B) Tester

C) Tester

D) Meter

Answer: D) Meter

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

A) Diode and capacitor

B) Capacitor and resistor

C) Transistor and diode

D) Diode and resistor

Answer: D) Diode and resistor

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

A) 20:40

B) 60:40:00

C) 40:60

D) 63:37:00

Answer: B) 60:40:00

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

A) Metal packaging

B) Plastic packaging with metal heatsinks

C) Plastic packaging

D) Ceramic packaging

Answer: B) Plastic packaging with metal heatsinks

80. What is the advantage of MOSFET?

A) Superior current conduction capability

B) Very low on-state voltage

C) Low gate signal power requirements

D) Low driving power

Answer: C) Low gate signal power requirements

81. What are the fundamental properties of insulation materials?

A) Length and cross sectional area

B) Insulation resistance and dielectric strength

C) Temperature and electrical hazards

D) Low resistance and thermal heat

Answer: B) Insulation resistance and dielectric strength

82. 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

83. What is the colour of positive electrode in fully charged lead acid battery?

- A) Grey colour
- B) Spongy grey colour
- C) Reddish brown
- D) Red colour

Answer: C) Reddish brown

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

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

Answer: D) Using pulse transformer

85. Which device is a unipolar transistor?

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

Answer: D) FET

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

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

Answer: D) 5A

87. Which type of voltage regulator is IC 723?

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

Answer: D) Three pin adjustable voltage regulator

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

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

Answer: B) Cadmium sulfide

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

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

Answer: B) To achieve uniformity of scale

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

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

Answer: C) Very high input impedance

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

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

Answer: B) Less than 1

92. 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) 18 gauge rosin cored
- D) 22 gauge rosin cored

Answer: C) 18 gauge rosin cored

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

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

Answer: B) Memory

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

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

Answer: A) Fast recovery diode

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

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

Answer: C) It disturbs the chemical bonding take place

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

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

Answer: C) Electron from source to drain

97. Which software is used to simulate electronic circuits?

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

Answer: D) Multi sim

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

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

Answer: C) Between 0.5 and 30 MHz

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

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

Answer: B) Physical and sensory test

100. Which electrical property opposes the flow of electrons?

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

Answer: C) Resistance

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

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

Answer: D) LC values required is too large

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

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

Answer: A) Power amplifier

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

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

Answer: A) Brown, black, brown

104. How power rating is specified for transformers?

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

Answer: B) Volt ampere (VA)

105. What is the type of transistor BPX81?

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

Answer: C) NPN - Photo transistor

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

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

Answer: B) TO-72

107. How many alternating layers are there in IGBT?

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

Answer: D) 4 layers

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

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

Answer: A) Mechanical energy

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

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

Answer: C) 100 Hz

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

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

Answer: D) SCR

111. 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

112. Which torque is used in PMMC meter movement?

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

Answer: A) Moderate torque

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

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

Answer: A) Positive clamping circuit

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

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

Answer: C) 1.4 V

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

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

Answer: D) 2.1 V

116. 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

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

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

Answer: A) One Op-Amp

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

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

Answer: A) Very high

119. What is the advantage of IGBT?

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

Answer: D) Low driving power

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

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

Answer: A) Energy loss takes place

121. Which electrical parameter opposes the flow of electrons?

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

Answer: A) Resistance

122. 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

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

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

Answer: C) 110

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

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

Answer: C) 30 V

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

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

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

126. What is the advantage of PIN photo diodes?

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

Answer: A) High sensitivity in the infrared range

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

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

Answer: A) Never reach saturation

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

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

Answer: A) Provide regenerative feedback

129. Which metal coating is used on compact disk?

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

Answer: D) Aluminium

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

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

Answer: C) 10 ns

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

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

Answer: B) TO-72

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

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

Answer: B) It is non-conductive

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

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

Answer: B) Practically zero

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

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

Answer: C) Notches

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

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

Answer: C) Isopropyl alcohol

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

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

Answer: C) Few micro Amperes

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

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

Answer: D) Two

138. 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 the external signal to the transistor
- D) By IR light produced inside the package

Answer: D) By IR light produced inside the package

139. 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

140. Which material contains eight electrons in valency layer?

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

Answer: A) Insulators

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

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

Answer: D) 0.2MA to 1.6MA

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

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

Answer: C) Three gauge sizes decreased

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

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

Answer: C) By using quartz crystal

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

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

Answer: B) During switching

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

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

Answer: C) Industry Standard Architecture

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

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

Answer: D) Directly proportional

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

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

Answer: A) Capacitor

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

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

Answer: D) Standard wire gauge

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

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

Answer: A) 9 VDC

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

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

Answer: D) Current

151. What is the advantage of MOSFET?

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

Answer: D) Fast switching speed

152. 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

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

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

Answer: B) Hexagonal prism with pyramid at ends

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

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

Answer: B) Control grid

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

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

Answer: B) Exactly 300 Mw

156. How the stationary electric charges are called?

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

Answer: C) Static charges

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

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

Answer: A) No moving parts to wear and tear

158. 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

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

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

Answer: A) 300 mw

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

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

Answer: C) Half of the rated output voltage

161. Which battery is used for cellular phones?

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

Answer: D) Lithium ion

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

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

Answer: A) Combination clipper circuit

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

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

Answer: A) At normal condition

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

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

Answer: A) Tendency to fail shorted

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

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

Answer: C) Band 9

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

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

Answer: C) Smothering

167. 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

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

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

Answer: C) Negative resistance characteristics

169. 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

170. 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

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

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

Answer: A) 2.0 A

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

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

Answer: C) Clicking on the component group

173. Which angle is checked by the try square?

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

Answer: B) 90 Degree

174. In which analog meter the battery is provided?

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

Answer: C) Ohm meter

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

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

Answer: B) 150 Degree Centigrade to 450 Degree Centigrade

176. Which materials are used for semiconductor?

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

Answer: A) Silicon and germanium

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

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

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

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

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

Answer: B) Single Pole Double Throw

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

- A) Limit voltage handling capacity
- B) Considerable greater sensitivity
- C) Considerably lower sensitivity
- D) Vulnerable to electrical sources

Answer: B) Considerable greater sensitivity

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

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

Answer: D) Silicon material used

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

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

Answer: A) Brazing

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

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

Answer: A) 90

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

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

Answer: C) Due to elastic property of insulation

184. What is the input impedance of IGBT?

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

Answer: A) High input impedance

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

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

Answer: A) 1000 kW

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

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

Answer: A) Three Op-Amps

187. How the negative feedback is called?

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

Answer: B) Degenerative feedback

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

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

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

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

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

Answer: A) Plastic packaging

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

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

Answer: A) Lead selenide

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

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

Answer: C) 1.8 V

192. How gate is biased in JFET?

- A) Reverse biased B) Dual supply function

- C) AC supply function D) Forward biased

Answer: A) Reverse biased

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

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

Answer: C) Fast switching

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

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

Answer: B) 2.5 V

195. Find the value of shunt resistance required for 1 mA meter to extend the range and measure 10 mA ($R_M = 27 \text{ Ohm}$) ?

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

Answer: A) 3 Ohms

196. Which device is a unipolar transistor?

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

Answer: A) FET

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

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

Answer: B) Power Amplifier

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

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

Answer: C) Class - A

199. What type of control is used for FET?

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

Answer: A) Voltage controlled device

200. What is the term stands for TRIAC?

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

Answer: A) Triode AC semiconductor

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

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

Answer: A) Series

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

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

Answer: B) Drag and drop

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

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

Answer: B) Double Pole Double Throw

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

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

Answer: A) LM 317

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

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

Answer: D) JEDEC standard

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

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

Answer: A) 40%

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

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

Answer: C) 1000 milli watts

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

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

Answer: D) Unpleasant tingling sensation

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

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

Answer: C) 5 time constants

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

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

Answer: A) In hertz

211. How many inputs are available in the 7447 BCD-to-seven segment decoder used to drive the LED display?

- A) Seven
- B) Eight
- C) Four
- D) One

Answer: C) Four

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

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

Answer: C) Mutual induction

213. How gate is biased in JFET?

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

Answer: C) Reverse biased

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

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

Answer: A) By replacing moving coil

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

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

Answer: B) Discharging

216. 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

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

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

Answer: A) Control the swinging of the coil

218. Which class of fire is classified involving metals?

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

Answer: D) Class D

219. 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

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

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

Answer: A) Power good signal

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

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

Answer: C) Increased temperature

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

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

Answer: B) Arsenic

223. What is the maximum drain current ID for BFW10?

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

Answer: B) 20 mA

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

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

Answer: D) Flux

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

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

Answer: B) Circuit work space

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

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

Answer: D) Logical approach method

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

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

Answer: B) Silver

228. What is the main application of photo resistor?

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

Answer: C) Controls of street lighting systems

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

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

Answer: B) Conductor s diameter

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

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

Answer: B) Both positive and negative feedback

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

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

Answer: B) Steel toe caps

232. Which is the N - channel FET?

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

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

233. How the insulators are called?

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

Answer: A) Dielectrics

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

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

Answer: A) Square wave

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

- A) 6.5 mm
- B) 0.35 mm

- C) 1.5 mm D) 3.5 mm

Answer: A) 6.5 mm

236. How batteries are classified?

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

Answer: A) Primary cells and secondary cells

237. Which factor determines the inductance value?

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

Answer: D) Diameter of the coil

238. 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

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

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

Answer: D) PMMC meter

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

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

Answer: C) USB port

241. What is the use of photo transistor?

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

Answer: B) Used as light controlled switch

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

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

Answer: D) Zinc

243. 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

244. At which temperature the 6040 solder start meeting?

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

Answer: B) 200 Degree Centigrade

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

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

Answer: C) Thyristor and transistors

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

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

Answer: B) B3202

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

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

Answer: B) 1.5 VDC

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

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

Answer: D) 10 mW/gate

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

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

Answer: D) Doping

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

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

Answer: C) Using analysis menu

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

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

Answer: A) Memory

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

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

Answer: A) 0.1 A

253. Which is the property of IGBT?

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

Answer: B) High efficiency and fast switching

254. What is successive approximation (SAR)?

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

Answer: C) Method of D/A conversion

255. 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

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

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

Answer: A) Rectifying

257. Which step is important for soldering a joint?

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

Answer: A) Heating the joint

258. What is the unit of electric charge?

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

Answer: B) Coulomb

259. Which component opposes any change in current?

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

Answer: B) Inductor

260. 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

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

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

Answer: B) 1.8 V

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

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

Answer: D) The need of bulky transformer

263. What is the code number of TRIAC?

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

Answer: B) BT136

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

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

Answer: A) TO-92

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

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

Answer: A) Cascaded amplifier

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

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

Answer: A) Deflection is independent of current direction

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

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

Answer: C) Permanent magnetic fields

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

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

Answer: C) 6.666 Ohms

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

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

Answer: B) Voltage across it reached the zener voltage

270. 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) 0.213 v
D) 1.525 v

Answer: C) 0.213 v

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

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

Answer: C) VCE (max) in volts

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

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

Answer: A) About 50%

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

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

Answer: D) Forward current conduction commences

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

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

Answer: C) PIV voltage

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

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

Answer: C) Remove residual flux and prevent corrosion

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

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

Answer: A) 3 - 7 seconds

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

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

Answer: C) 2 V

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

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

Answer: D) Relaxation oscillator

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

- A) 1.5 V to 2.2 V
B) 5.0 V to 7.5 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

280. 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) Indicate the health condition of battery
D) Test the battery life

Answer: C) Indicate the health condition of battery

281. Which meter uses a moving coil for measurement?

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

Answer: B) PMMC meter

282. Which material is used for making instrument cabinets?

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

Answer: C) Sheet metal

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

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

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

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

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

Answer: B) Current

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

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

Answer: D) IC 7495

286. How batteries are classified based on their working?

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

Answer: D) Primary cells and secondary cells

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

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

Answer: D) TO-92

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

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

Answer: C) Silver

289. What is the limitation of integrated circuits?

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

Answer: A) Greater flexibility

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

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

Answer: C) 1 to 100 nano seconds

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

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

Answer: B) Higher switching repetition rates

292. 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) Reduce the solder cooling time
- D) Increase the melting temperature of solder

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

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

- A) Hot soldering
- B) Brazing

- C) Soft soldering
- D) Hard soldering

Answer: C) Soft soldering

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

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

Answer: B) Focus

295. What is the use of flip - flop?

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

Answer: C) It stores binary information

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

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

Answer: A) 1.7 V

297. 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

298. Which mode is used in differential amplifier?

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

Answer: D) Common - mode operation

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

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

Answer: D) 1.835

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

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

Answer: A) Cadmium sulfide

301. How the sensitivity of voltmeter is determined?

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

Answer: D) Ohms per volt rating

302. Which circuit is determined by the frequency of LC tank

circuit?

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

Answer: C) Oscillator

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

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

Answer: A) Allows high current flow

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

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

Answer: D) Voltage leads current by 45 Degree

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

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

Answer: A) Random Access Memory

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

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

Answer: D) Metal oxide semiconductor FET

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

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

Answer: B) Printer

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

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

Answer: D) Topping up

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

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

Answer: C) Practically zero

310. What is the purpose of using positive feed back in

amplifiers?

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

Answer: C) To produce oscillation

311. What is stationary electric charges?

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

Answer: C) Static charges

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

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

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

313. Which insulation layer is used in MOSFET?

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

Answer: C) Silicon-di-oxide

314. What is the shape of warning sign board?

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

Answer: B) Triangular shape

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

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

Answer: A) Desoldering pump

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

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

Answer: A) Capacitive reactance

317. What is the reason for electric fire?

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

Answer: A) Overloading

318. What is the drawbacks of LDR?

- A) Available different sizes and specifications
- B) Cannot be used to determine precise light levels
- C) Made of low resistance material with few holes
- D) More sensitive

Answer: B) Cannot be used to determine precise light levels

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

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

Answer: C) Supply power to loads

320. 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

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

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

Answer: B) Measuring parameter

322. What is the shape of mandatory signs?

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

Answer: D) Circular

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

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

Answer: B) ITU band - 10

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

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

Answer: D) Alt + F4

325. 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

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

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

Answer: C) Electrodes

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

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

Answer: D) 100 Amp

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

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

Answer: B) I_C / I_E

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

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

Answer: C) MODEM

330. How to overcome the problem of frequency drift in LC oscillators?

- A) Using high Q coils and good quality capacitors
- B) Provide negative feedback
- C) Increase the supply voltage
- D) Apply opposite polarity of signal

Answer: A) Using high Q coils and good quality capacitors

331. Which parameter is measured by a multimeter?

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

Answer: A) Voltage

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

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

Answer: D) PIV voltage

333. Which rechargeable cell is designed with conductive polymer?

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

Answer: A) Plastic cell

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

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

Answer: D) 1.8 Amp

335. Which is the transistor used to operate the Colpitts

oscillator?

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

Answer: D) BF 194B

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

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

Answer: D) 0.56

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

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

Answer: A) Wrong lifting technique

338. Which circuit uses the enhancement type MOSFET?

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

Answer: C) Integrated MOS switching circuits

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

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

Answer: A) Poor switching speed

340. Which is the N - channel FET?

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

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

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

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

Answer: B) Few micro Amperes

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

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

Answer: D) Protection against weather

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

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

Answer: C) Dry solder joint

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

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

Answer: C) Photo resistors

345. How the gas and liquefied gases are classified

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

Answer: B) Class B fire

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

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

Answer: C) Use abrasive method

347. What is the unit of inductance?

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

Answer: A) Henry

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

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

Answer: C) 10 mA

349. What is the purpose of using IC74LS190?

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

Answer: A) Up/down counter

350. Which soldering instrument has hot air blowing facility?

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

Answer: B) Soldering station

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

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

Answer: B) Conductor s diameter

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

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

Answer: B) 2^n

353. What is the purpose of trimmer capacitor?

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

Answer: D) Fine tuning

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

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

Answer: A) Trigger

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

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

Answer: D) 1000 and above

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

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

Answer: A) Jewelled bearings

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

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

Answer: A) 10 mA

358. Which material conducts electricity?

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

Answer: A) Copper

359. What is characteristics of instrumentation amplifier?

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

Answer: A) High input impedance

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

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

Answer: C) 1.2 V to 32 V

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

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

Answer: B) Chemical energy into electrical energy

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

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

Answer: D) Defects the operation of switching signal

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

- A) High power diodes
- B) Switching diodes
- C) Rectifier diodes
- D) Signal diodes

Answer: D) Signal diodes

364. Electrical conductivity of gold is

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

Answer: A) 67%

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

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

Answer: B) Memory circuits

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

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

Answer: A) Sulphuric acid

367. 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

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

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

Answer: D) LCR bridge

369. Which circuit photo SCR opto couplers are used?

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

Answer: D) AC powered circuits

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

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

Answer: A) 8 V

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

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

Answer: C) 0.94

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

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

Answer: D) Negative clamping circuit

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

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

Answer: C) Break over voltage

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

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

Answer: B) Greater than 4 Amp

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

- A) Mica film spacer
- B) Silicon grease
- C) Heat sink
- D) Cooler fan

Answer: D) Cooler fan

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

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

Answer: A) All program

377. Which formula is used to find the conductance?

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

- C) V / I
- D) I / V

Answer: D) I / V

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

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

Answer: D) 1 to 100 nano seconds

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

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

Answer: C) Metal Oxide Varistor

380. How the single strand wire is called?

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

Answer: A) Hook - up wire

381. What is the purpose of wood rasp file?

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

Answer: A) Preliminary rough work

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

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

Answer: B) Clamper circuit

383. 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

384. 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

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

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

Answer: B) Uses split capacitor

386. 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 eliminate the transformer
- D) To minimize the gain

Answer: C) To eliminate the transformer

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

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

Answer: C) Digital frequency meter circuit

388. Which is the combination of photo transistor?

- A) Photo resistor and TRIAC
- B) Photo diode and transistor
- C) LASER diode and pin diode
- D) Photo transistor and DIAC

Answer: B) Photo diode and transistor

389. Which factor influences the severity of electrical shock?

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

Answer: D) Duration of current passing

390. Which circuit uses photo-darlington devices?

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

Answer: D) DC circuits

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

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

Answer: D) Large scale integration (LSI)

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

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

Answer: B) Using virtual instrumentation testing

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

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

Answer: C) Higher thermal stability

394. How can you confirm a transistor as defective?

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

Answer: B) By ohm meter testing

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

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

Answer: B) 100 to 400 Amp

396. What is the advantage of SMPS in computer?

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

Answer: C) High efficiency

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

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

Answer: B) Current

398. How the single strand wire is called?

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

Answer: D) Hook up wire

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

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

Answer: B) High rate discharge tester

400. 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) Threshold comparator
- D) Control voltage

Answer: A) Pulse repetition

401. What is the function of clipper circuit?

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

Answer: B) Wave shaping

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

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

Answer: B) High speed switching

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

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

Answer: D) Pin number 3

404. Which process the ICS are made?

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

Answer: B) Micro photo - lithographic process

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

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

Answer: D) Double the input A/C frequency

406. Which memory device loses data on power failure?

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

Answer: D) RAM

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

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

Answer: C) Results in dry brittle joint

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

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

Answer: B) Partition table

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

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

Answer: B) 6.25×10^{18} electrons

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

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

Answer: B) When the solder is heated

411. What are the uses of simulation softwares?

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

Answer: A) Design and test a circuit

412. What is the term stands for TRIAC?

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

Answer: B) Triode AC semiconductor

413. 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

414. What is the code number of TRIAC?

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

Answer: A) BT136

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

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

Answer: C) Serving as an oscillator

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

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

Answer: B) For DC component restoration

417. What is the information stored in digital registers?

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

Answer: D) Binary values

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

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

Answer: A) Switch OFF power supply

419. What is the advantage of using digital multimeter?

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

Answer: B) Accuracy

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

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

Answer: D) Schafer's method

421. 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

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

A) Storage counters

B) Radars

C) Radio receivers

D) Power supplies

Answer: D) Power supplies
