

Duration: 30 Mins

Total Marks: 422

Q.ID: ITISKILL0318JV

1. Which class of fire is classified involving metals?

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

Answer: B) Class D

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

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

Answer: C) Brazing

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

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

Answer: B) Large block accessing

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

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

Answer: D) Two

5. What is the shape of standard wire gauge?

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

Answer: D) Circular metal disk

6. 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

7. How power rating is specified for transformers?

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

Answer: A) Volt ampere (VA)

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

- A) PRO-ELECTRON standard B) JIS standard

C) JEDEC standard

D) Home codes

Answer: C) JEDEC standard

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

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

Answer: C) PMMC meter

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

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

Answer: A) Remove residual flux and prevent corrosion

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

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

Answer: D) Biased negative clipper

12. What is the main application of photo resistor?

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

Answer: B) Controls of street lighting systems

13. What is the code number of TRIAC?

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

Answer: D) BT136

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

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

Answer: C) It disturbs the chemical bonding take place

15. What is the cause of burnt relay contacts?

- A) Low contact current B) Excessive contact current

- C) Excessive number of operations
D) Chatter during a slow release

Answer: B) Excessive contact current

16. Which is the property of IGBT?

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

Answer: C) High efficiency and fast switching

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

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

Answer: B) Current

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

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

Answer: D) 6.25×10^{18} electrons

19. What is the advantage of MOSFET?

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

Answer: B) Low gate signal power requirements

20. What is the shape of warning sign board?

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

Answer: C) Triangular shape

21. 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

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

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

Answer: C) In hertz

23. 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

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

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

Answer: A) 5

25. What are the fundamental properties of insulation materials?

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

Answer: C) Insulation resistance and dielectric strength

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

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

Answer: D) By IR light produced inside the package

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

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

Answer: D) Allows high current flow

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

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

Answer: A) Energy loss takes place

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

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

Answer: A) 90

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

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

Answer: B) 30 V

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

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

Answer: D) Defects the operation of switching signal

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

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

Answer: C) I_C / I_E

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

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

Answer: C) Control grid

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

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

Answer: A) Power Amplifier

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

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

Answer: A) Control the swinging of the coil

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

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

Answer: C) During switching

37. 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 - 8
- D) ITU band - 6

Answer: B) ITU band - 10

38. How gate is biased in JFET?

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

Answer: A) Reverse biased

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

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

Answer: C) By soft start circuit

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

- A) Dry powdered
- B) Carbon-di-oxide

- C) Jet of water
- D) Foam type

Answer: A) Dry powdered

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

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

Answer: B) Using analysis menu

42. 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

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

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

Answer: A) Double the input A/C frequency

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

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

Answer: C) 100 Amp

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

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

Answer: D) Current

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

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

Answer: C) Combination clipper circuit

47. Which material contains eight electrons in valency layer?

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

Answer: D) Insulators

48. 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

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

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

Answer: D) 100 to 400 Amp

50. 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

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

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

Answer: B) Printing the valves

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

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

Answer: D) SCR

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

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

Answer: A) Printer

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

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

Answer: C) Tendency to fail shorted

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

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

Answer: D) Greater than 4 Amp

56. Which rechargeable cell is designed with conductive polymer?

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

Answer: A) Plastic cell

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

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

Answer: D) 2.5 V

58. 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

59. What is the use of photo transistor?

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

Answer: A) Used as light controlled switch

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

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

Answer: A) Measuring parameter

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

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

Answer: A) Poor switching speed

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

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

Answer: C) TO-72

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

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

Answer: A) 1.7 V

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

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

Answer: B) 2.1 V

65. 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

66. Which step is important for soldering a joint?

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

Answer: B) Heating the joint

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

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

Answer: B) 10 mA

68. 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

69. What is the reason for electric fire?

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

Answer: C) Overloading

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

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

Answer: D) Indicate the health condition of battery

71. 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 decrease to 10 Ohm D) Resistance will increase to 1 Kilo Ohm

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

72. What is the specified V_{cc} voltage of 4 bit digital switch with 4 independent lines?

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

Answer: A) 4.5 V to 5.5 V

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

- A) To get less distortion B) To eliminate the transformer

- C) To get more voltage gain D) To minimize the gain

Answer: B) To eliminate the transformer

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

- A) Test I^2R power loss in the battery cell B) Measure the rated output voltage
C) Verify the rated power delivery D) Test the dimensional accuracy

Answer: B) Measure the rated output voltage

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

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

Answer: D) Negative clamping circuit

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

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

Answer: B) 20 MA

77. What is the advantage of using digital multimeter?

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

Answer: A) Accuracy

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

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

Answer: B) Less than 1

79. Which device is a unipolar transistor?

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

Answer: B) FET

80. 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

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

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

Answer: D) Isopropyl alcohol

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

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

Answer: A) Superior current conduction capability

83. 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

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

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

Answer: C) To minimize eddy current losses

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

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

Answer: D) Cadmium sulfide

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

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

Answer: A) Lead selenide

87. 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

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

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

Answer: B) Band 9

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

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

Answer: C) Pulse repetition frequency

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

- A) Cooling
B) Starving

- C) Heating
D) Smothering

Answer: D) Smothering

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

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

Answer: C) 1.8 Amp

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

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

Answer: B) Industry Standard Architecture

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

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

Answer: C) 9 VDC

94. Which memory device loses data on power failure?

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

Answer: B) RAM

95. 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

96. 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

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

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

Answer: D) 1.8 V

98. 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

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

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

Answer: C) By using quartz crystal

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

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

Answer: B) Ohm meter

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

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

Answer: A) 5A

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

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

Answer: C) Rectifying

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

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

Answer: C) Multi turn trim pots

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

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

Answer: A) It is non-conductive

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

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

Answer: B) 2.0 A

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

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

Answer: C) 3 - 7 seconds

107. What is the unit of inductance?

- A) Watts
- B) Joule

- C) Farad
- D) Henry

Answer: D) Henry

108. What is the unit of electric charge?

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

Answer: D) Coulomb

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

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

Answer: A) Memory circuits

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

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

Answer: D) + 4.75v to + 5.25V

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

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

Answer: D) 10 mA

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

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

Answer: A) 0.864

113. Which material is used as electrical insulator?

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

Answer: B) Porcelain

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

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

Answer: C) Negative resistance characteristics

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

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

Answer: A) Voltage across it reached the zener voltage

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

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

Answer: B) To produce oscillation

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

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

Answer: D) LM 317

118. What is the advantage of IGBT?

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

Answer: A) High efficiency and fast switching

119. Which parameter is measured by a multimeter?

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

Answer: B) Voltage

120. Which mode is used in differential amplifier?

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

Answer: C) Common - mode operation

121. Which metal coating is used on compact disk?

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

Answer: B) Aluminium

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

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

Answer: C) Aluminium frame

123. Which part of the relay causes most trouble?

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

Answer: A) Relay contacts

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

- A) 40 V
- B) 30 V

C) 50 V

D) 20 V

Answer: B) 30 V

125. Which electrical parameter opposes the flow of electrons?

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

Answer: C) Resistance

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

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

Answer: B) Diode and resistor

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

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

Answer: D) Clamper circuit

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

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

Answer: B) Partition table

129. Which is the combination of photo transistor?

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

Answer: A) Photo diode and transistor

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

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

Answer: B) USB port

131. 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

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

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

Answer: A) Reset

133. Which is the N - channel FET?

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

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

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

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

Answer: A) Steel toe caps

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

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

Answer: C) Rosin

136. What is the purpose of wood rasp file?

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

Answer: A) Preliminary rough work

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

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

Answer: C) One time constant

138. Which parameter is maintained constant in zener diode?

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

Answer: B) Voltage

139. 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

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

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

Answer: C) 1 to 100 nano seconds

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

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

Answer: B) Excessive contact current

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

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

Answer: A) Higher thermal stability

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

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

Answer: D) 2.5 V

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

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

Answer: D) Sulphuric acid

145. 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%

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

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

Answer: A) 0.56

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

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

Answer: B) B3202

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

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

Answer: D) 18 gauge rosin cored

149. 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

150. 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

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

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

Answer: D) Calibration

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

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

Answer: B) Capacitive reactance

153. Which soldering instrument has hot air blowing facility?

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

Answer: C) Soldering station

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

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

Answer: C) Four layer three junctions

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

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

Answer: A) (1276)₁₀

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

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

Answer: D) Practically zero

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

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

Answer: C) Gelled electrolyte

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

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

Answer: C) Square wave

159. 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 OFF at room temperature
- C) Lamp is ON at 320 Degree Centigrade
- D) Lamp is ON at 400 Degree Centigrade

Answer: B) Lamp is OFF at room temperature

160. What is the information stored in digital registers?

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

Answer: A) Binary values

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

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

Answer: B) Silver

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

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

Answer: B) Never reach saturation

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

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

Answer: A) Flux

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

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

Answer: C) Plastic packaging

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

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

Answer: B) Serving as an oscillator

166. 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

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

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

Answer: C) Silver

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

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

Answer: A) LC values required is too large

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

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

Answer: C) Metal oxide varistor

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

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

Answer: A) Move the victim to a ventilated place

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

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

Answer: B) Permanent Magnet Moving Coil meter

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

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

Answer: A) Between 0.5 and 30 MhZ

173. What is stationary electric charges?

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

Answer: B) Static charges

174. What is the input impedance of IGBT?

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

Answer: C) High input impedance

175. Which is the N - channel FET?

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

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

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

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

Answer: B) Notches

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

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

Answer: A) Few micro Amperes

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

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

Answer: A) Hexagonal prism with pyramid at ends

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

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

Answer: D) Double Pole Double Throw

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

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

Answer: A) Heat

181. How the sensitivity of voltmeter is determined?

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

Answer: C) Ohms per volt rating

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

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

Answer: D) Deflection is independent of current direction

183. How many Op-Amps are fabricated inside the LM 324 IC

pack?

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

Answer: A) Three Op-Amps

184. 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

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

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

Answer: C) Soft soldering

186. What is the advantage of IGBT?

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

Answer: C) Low driving power

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

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

Answer: B) Break over voltage

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

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

Answer: C) Jewelled bearings

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

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

Answer: D) Gallium

190. 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) Clicking on the component group
- D) Copy and paste from similar circuit

Answer: C) Clicking on the component group

191. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: D) To prevent clogging of the nozzle

192. 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

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

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

Answer: B) 1.5 VDC

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

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

Answer: B) By replacing moving coil

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

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

Answer: C) 8 V

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

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

Answer: D) Memory

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

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

Answer: B) Large scale integration (LSI)

198. How the single strand wire is called?

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

Answer: C) Hook up wire

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

- A) High speed switching
- B) Low pass filter

C) High frequency oscillator D) High gain amplifier

Answer: A) High speed switching

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

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

Answer: D) Considerable greater sensitivity

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

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

Answer: D) Class - A

202. 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) 4 Ohms
B) 2 Ohms
C) 3 Ohms
D) 1 Ohm

Answer: C) 3 Ohms

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

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

Answer: B) Relaxation oscillator

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

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

Answer: C) Triangular wave output

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

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

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

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

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

Answer: C) Cadmium sulfide

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

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

Answer: A) Trigger

208. 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

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

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

Answer: B) Single Pole Double Throw

210. Which circuit photo SCR opto couplers are used?

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

Answer: A) AC powered circuits

211. Which unit is used to measure capacitance value?

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

Answer: B) Farad

212. Which electrical property opposes the flow of electrons?

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

Answer: D) Resistance

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

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

Answer: C) Mechanical energy

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

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

Answer: A) Forward current conduction commences

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

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

Answer: D) Capacitive reactance

216. How batteries are classified based on their working?

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

Answer: A) Primary cells and secondary cells

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

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

Answer: D) Topping up

218. Which type of voltage regulator is IC 723?

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

Answer: A) Three pin adjustable voltage regulator

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

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

Answer: D) Current

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

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

Answer: C) Exactly 300 Mw

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

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

Answer: D) 6V

222. What is the important feature of instrumentation amplifier?

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

Answer: C) Low gain accuracy

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

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

Answer: B) Compact Disk Read Only Memory

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

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

Answer: D) Electron from source to drain

225. What is the function of clipper circuit?

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

Answer: C) Wave shaping

226. Which factor influences the severity of electrical shock?

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

Answer: C) Duration of current passing

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

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

Answer: D) Conductor s diameter

228. How batteries are classified?

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

Answer: C) Primary cells and secondary cells

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

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

Answer: A) Power amplifier

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

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

Answer: A) Reddish brown

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

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

Answer: B) Unpleasant tingling sensation

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

- A) Rechargeable cells
B) Primary cells

- C) Voltage dependent resistor D) Light dependent resistor

Answer: D) Light dependent resistor

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

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

Answer: C) 6000 V

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

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

Answer: C) Memory

235. 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

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

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

Answer: B) Supply power to loads

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

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

Answer: C) Arsenic

238. 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

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

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

Answer: A) Pin number 3

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

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

Answer: B) MODEM

241. Electrical conductivity of gold is

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

Answer: A) 67%

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

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

Answer: B) Physical and sensory test

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

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

Answer: D) 1

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

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

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

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

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

Answer: C) Principal current

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

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

Answer: C) Positive clamping circuit

247. Which angle is checked by the try square?

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

Answer: D) 90 Degree

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

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

Answer: B) Conductor s diameter

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

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

Answer: D) Very high

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

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

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

251. Which material is used for making instrument cabinets?

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

Answer: C) Sheet metal

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

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

Answer: C) 150 Degree Centigrade to 450 Degree Centigrade

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

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

Answer: B) IC 7905

254. What is the term stands for TRIAC?

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

Answer: C) Triode AC semiconductor

255. What is the type of transistor BPX81?

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

Answer: B) NPN - Photo transistor

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

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

Answer: C) 20 mA

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

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

Answer: A) Capacitor

258. Which circuit uses photo-darlington devices?

- A) AC powered circuits
- B) Amplifier circuits

C) DC circuits

D) Counter circuits

Answer: C) DC circuits

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

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

Answer: A) Practically zero

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

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

Answer: D) 10 mm to 15 mm

261. How many alternating layers are there in IGBT?

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

Answer: A) 4 layers

262. Which is electronic simulation software?

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

Answer: D) Macspice

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

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

Answer: D) PIV voltage

264. What is the unit of electric charge?

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

Answer: D) Coulomb

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

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

Answer: D) Random Access Memory

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

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

Answer: B) 300 mw

267. 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

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

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

Answer: D) Three gauge sizes decreased

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

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

Answer: D) 0.94

270. 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

271. 6 What is the input impedance of IGBT?

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

Answer: B) High

272. Which software is used to simulate electronic circuits?

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

Answer: B) Multi sim

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

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

Answer: C) When the solder is heated

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

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

Answer: B) Jet of water

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

- A) Float charging method
B) Constant voltage charging method

- C) Trickle charging method
D) Constant current charging method

Answer: B) Constant voltage charging method

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

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

Answer: D) 100 Hz

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

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

Answer: C) Provide regenerative feedback

278. Which meter uses a moving coil for measurement?

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

Answer: D) PMMC meter

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

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

Answer: A) Low power transistors

280. 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

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

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

Answer: A) Radio receivers

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

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

Answer: B) Cold joint

283. How the single strand wire is called?

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

Answer: B) Hook - up wire

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

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

Answer: D) 6.666 Ohms

285. 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 damp the oscillations
- D) To generate heat

Answer: A) To achieve uniformity of scale

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

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

Answer: A) Permanent magnetic fields

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

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

Answer: A) Using virtual instrumentation testing

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

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

Answer: A) Protection against weather

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

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

Answer: D) Schafer's method

290. 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) VCE (max) in volts
- C) VCC in volts
- D) VBE (max) in volts

Answer: B) VCE (max) in volts

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

- A) Soldering iron
- B) Soldering wick

- C) Desoldering pump
- D) Desoldering braid

Answer: C) Desoldering pump

292. 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) 3.567 v
- B) 1.525 v
- C) 2.134 v
- D) 0.213 v

Answer: D) 0.213 v

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

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

Answer: B) Four

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

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

Answer: A) Uses split capacitor

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

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

Answer: C) Higher thermal stability

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

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

Answer: C) 1000 kW

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

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

Answer: A) 110

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

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

Answer: C) Doping

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

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

Answer: D) Dull grainy surface

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

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

Answer: C) 2^n

301. Which electrical parameter is measured by the megger?

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

Answer: B) Insulation resistance

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

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

Answer: B) Zinc

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

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

Answer: B) Power supplies

304. 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

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

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

Answer: C) Digital frequency meter circuit

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

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

Answer: A) Few micro Amperes

307. How the negative feedback is called?

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

Answer: D) Degenerative feedback

308. 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

309. 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

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

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

Answer: B) Cooler fan

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

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

Answer: D) All program

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

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

Answer: D) Ohmmeter

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

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

Answer: C) Nickel metal hydride (NiMH)

314. Which cores are used in intermediate frequency transformers?

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

Answer: C) Ferrite

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

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

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

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

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

Answer: D) Blow horn stake

317. 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 mechanical energy
D) Electrical energy into light energy

Answer: B) Chemical energy into electrical energy

318. What is the advantage of PIN photo diodes?

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

Answer: C) High sensitivity in the infrared range

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

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

Answer: A) Circuit work space

320. What is the advantage of SMPS in computer?

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

Answer: A) High efficiency

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

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

Answer: A) Wrong lifting technique

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

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

Answer: C) Brown, black, brown

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

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

Answer: D) 2 V

324. How can you confirm a transistor as defective?

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

Answer: D) By ohm meter testing

325. What is the purpose of using IC74LS190?

- A) Comparator
B) Attenuator

- C) Up/down counter
D) Modulator

Answer: C) Up/down counter

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

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

Answer: C) Ohmmeter

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

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

Answer: A) For DC component restoration

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

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

Answer: C) Both positive and negative feedback

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

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

Answer: B) IC 7495

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

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

Answer: A) 25 H

331. Which torque is used in PMMC meter movement?

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

Answer: C) Moderate torque

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

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

Answer: A) 40%

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

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

Answer: D) High rate discharge tester

334. Which formula is used to find the conductance?

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

Answer: A) I / V

335. Which factor determines the inductance value?

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

Answer: A) Diameter of the coil

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

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

Answer: A) NPN has higher switching speed

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

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

Answer: C) 10 mW/gate

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

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

Answer: D) Spring control

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

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

Answer: A) TO-92

340. 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

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

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

Answer: B) Metal Oxide Varistor

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

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

Answer: A) 1.2 V to 32 V

343. Which material conducts electricity?

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

Answer: D) Copper

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

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

Answer: B) Silicon material used

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

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

Answer: B) Electrician's knife

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

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

Answer: B) 1000 and above

347. What is the use of screw driver?

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

Answer: D) Tighten or loosen screws

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

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

Answer: B) By built-in calibration signal

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

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

Answer: D) 60:40:00

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

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

Answer: A) Increased temperature

351. How the gas and liquefied gases are classified

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

Answer: A) Class B fire

352. 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

353. Which materials are used for semiconductor?

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

Answer: D) Silicon and germanium

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

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

Answer: B) Meter

355. What is the code number of TRIAC?

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

Answer: B) BT136

356. What is the purpose of trimmer capacitor?

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

Answer: D) Fine tuning

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

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

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

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

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

Answer: B) Logical approach method

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

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

Answer: A) Very high input impedance

360. How gate is biased in JFET?

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

Answer: B) Reverse biased

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

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

Answer: B) Metal oxide semiconductor FET

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

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

Answer: D) Fast recovery diode

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

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

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

364. What is the use of flip - flop?

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

Answer: D) It stores binary information

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

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

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

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

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

Answer: B) TO-92

367. In which analog meter the battery is provided?

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

Answer: B) Ohm meter

368. What is the drawbacks of LDR?

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

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

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

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

Answer: A) 74 LS 138

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

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

Answer: D) 1.835

371. 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

372. 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) Current lags voltage by 90 Degree
- C) Current leads voltage by 90 Degree
- D) Voltage leads current by 45 Degree

Answer: D) Voltage leads current by 45 Degree

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

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

Answer: B) Focus

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

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

Answer: C) 25mA

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

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

Answer: A) Plastic packaging with metal heatsinks

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

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

Answer: D) Fast switching

377. Which battery is used for cellular phones?

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

Answer: A) Lithium ion

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

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

Answer: A) Relaxation oscillator

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

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

Answer: D) Drag and drop

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

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

Answer: A) TRIAC

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

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

Answer: B) No moving parts to wear and tear

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

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

Answer: B) Using pulse transformer

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

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

Answer: B) Half of the rated output voltage

384. How the insulators are called?

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

Answer: D) Dielectrics

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

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

Answer: C) Electrodes

386. Which component opposes any change in current?

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

Answer: D) Inductor

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

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

Answer: C) 30 V

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

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

Answer: D) Cascaded amplifier

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

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

Answer: D) IDE port

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

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

Answer: D) BF 194B

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

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

Answer: D) Principal current

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

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

Answer: B) PIV voltage

393. What is the shape of prohibition sign?

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

Answer: A) Circular

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

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

Answer: C) Capacitor Input filter

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

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

Answer: B) Signal diodes

396. Which insulation layer is used in MOSFET?

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

Answer: B) Silicon-di-oxide

397. Which value is equal to one picofarad?

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

Answer: C) 10⁻¹² Farad

398. What is the advantage of MOSFET?

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

Answer: D) Fast switching speed

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

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

Answer: A) Common emitter configuration

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

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

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

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

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

Answer: A) Due to elastic property of insulation

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

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

Answer: C) Oscillator

403. What is the shape of mandatory signs?

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

Answer: C) Circular

404. 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

405. 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

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

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

Answer: D) Directly proportional

407. Which process the ICS are made?

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

Answer: A) Micro photo - lithographic process

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

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

Answer: B) 6.5 mm

409. What is the limitation of integrated circuits?

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

Answer: B) Greater flexibility

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

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

Answer: C) About 50%

411. Which instrument used to measure resistance,

capacitance and inductance?

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

Answer: C) LCR bridge

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

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

Answer: A) TO-72

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

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

Answer: D) Higher switching repetition rates

414. How the stationary electric charges are called?

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

Answer: A) Static charges

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

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

Answer: C) Alt + F4

416. 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

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

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

Answer: B) Discharging

418. Which device is a unipolar transistor?

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

Answer: B) FET

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

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

Answer: B) 2.2 V

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

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

Answer: B) Standard wire gauge

421. 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

422. 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
