

Duration: 30 Mins

Total Marks: 422

Q.ID: ITISKILL2194N9

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

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

Answer: D) Ohm meter

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

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

Answer: A) 0.2MA to 1.6MA

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

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

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

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

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

Answer: C) 1.2 V to 32 V

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

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

Answer: B) Supply power to loads

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

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

Answer: A) Higher thermal stability

7. What is the limitation of integrated circuits?

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

Answer: C) Greater flexibility

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

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

Answer: A) 5

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

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

Answer: A) Four layer three junctions

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

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

Answer: A) 6.666 Ohms

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

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

Answer: D) Multi turn trim pots

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

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

Answer: A) Allows high current flow

13. 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

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

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

Answer: A) 10 mW/gate

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

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

Answer: B) 6000 V

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

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

Answer: B) Doping

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

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

Answer: D) Focus

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

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

Answer: A) Serving as an oscillator

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

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

Answer: C) Printing the values

20. What is the term stands for TRIAC?

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

Answer: A) Triode AC semiconductor

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

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

Answer: D) Protection against weather

22. What is the shape of mandatory signs?

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

Answer: B) Circular

23. Which metal coating is used on compact disk?

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

Answer: A) Aluminium

24. What is the shape of standard wire gauge?

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

Answer: D) Circular metal disk

25. Which circuit photo SCR opto couplers are used?

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

Answer: C) AC powered circuits

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

- A) 10^n
- B) 3^n
- C) 2^n
- D) 2^{n+1}

Answer: C) 2^n

27. 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

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

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

Answer: A) All program

29. Which rechargeable cell is designed with conductive polymer?

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

Answer: B) Plastic cell

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

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

Answer: C) Chemical energy into electrical energy

31. What is the purpose of wood rasp file?

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

Answer: B) Preliminary rough work

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

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

Answer: C) Electric current

33. What will happen when the forward bias voltage across

the PN junction is increased excessively?

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

Answer: C) Junction ruptured and short circuited

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

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

Answer: D) Switch OFF power supply

35. Which process the ICS are made?

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

Answer: D) Micro photo - lithographic process

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

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

Answer: A) 0.94

37. Which circuit uses the enhancement type MOSFET?

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

Answer: C) Integrated MOS switching circuits

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

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

Answer: A) 1 to 100 nano seconds

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

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

Answer: A) Four

40. Which is the N - channel FET?

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

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

41. Which electrical property opposes the flow of electrons?

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

Answer: D) Resistance

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

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

Answer: A) Few micro Amperes

43. Which parameter is maintained constant in zener diode?

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

Answer: D) Voltage

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

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

Answer: A) Current

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

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

Answer: C) Power amplifier

46. Electrical conductivity of gold is

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

Answer: C) 67%

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

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

Answer: C) Calibration

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

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

Answer: C) Wrong lifting technique

49. What is the type of transistor BPX81?

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

Answer: A) NPN - Photo transistor

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

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

Answer: C) Sulphuric acid

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

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

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

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

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

Answer: C) Absolute conversion accuracy

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

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

Answer: B) By IR light produced inside the package

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

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

Answer: B) Capacitor

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

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

Answer: C) Lamp is OFF at room temperature

56. What is the advantage of PIN photo diodes?

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

Answer: A) High sensitivity in the infrared range

57. How the stationary electric charges are called?

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

Answer: C) Static charges

58. Which value is equal to one picofarad?

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

Answer: A) 10-12 Farad

59. What is the shape of prohibition sign?

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

Answer: B) Circular

60. 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

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

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

Answer: B) 300 mw

62. What is the purpose of using IC74LS190?

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

Answer: C) Up/down counter

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

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

Answer: B) Mechanical energy

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

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

Answer: B) Control grid

65. Which angle is checked by the try square?

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

Answer: B) 90 Degree

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

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

Answer: C) Alt + F4

67. What is the input impedance of IGBT?

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

Answer: B) High input impedance

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

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

Answer: A) 1.7 V

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

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

Answer: B) 10 mm to 15 mm

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

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

Answer: D) Topping up

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

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

Answer: C) Permanent codes

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

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

Answer: C) Isopropyl alcohol

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

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

Answer: B) Positive clamping circuit

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

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

Answer: D) (1276)₁₀

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

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

Answer: B) 1.8 V

76. 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

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

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

Answer: C) Electron from source to drain

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

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

Answer: C) 5A

79. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: D) To prevent clogging of the nozzle

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

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

Answer: D) 1

81. Which type of voltage regulator is IC 723?

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

Answer: D) Three pin adjustable voltage regulator

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

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

Answer: A) Arsenic

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

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

Answer: D) Ohmmeter

84. How the single strand wire is called?

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

Answer: D) Hook up wire

85. Which electrical parameter is measured by the megger?

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

Answer: A) Insulation resistance

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

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

Answer: A) Soft soldering

87. Which device is a unipolar transistor?

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

Answer: D) FET

88. What is the advantage of using digital multimeter?

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

Answer: C) Accuracy

89. Which material is used as electrical insulator?

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

Answer: B) Porcelain

90. What is the peak to peak voltage in a bridge rectifier circuit with load current of 10 mA, capacitance of 470 F and 50 Hz supply frequency?

- A) 0.213 v
- B) 2.134 v
- C) 1.525 v
- D) 3.567 v

Answer: A) 0.213 v

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

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

Answer: A) Current

92. What is the advantage of MOSFET?

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

Answer: D) Low gate signal power requirements

93. 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

94. 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

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

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

Answer: B) Cascaded amplifier

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

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

Answer: D) Metal Oxide Varistor

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

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

Answer: B) Very high

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

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

Answer: C) Dull grainy surface

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

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

Answer: A) Brazing

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

- A) V_{BE} (max) in volts
- B) V_{CC} in volts
- C) V_{CB} (max) in volts
- D) V_{CE} (max) in volts

Answer: D) V_{CE} (max) in volts

101. What is characteristics of instrumentation amplifier?

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

Answer: B) High input impedance

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

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

Answer: A) High rate discharge tester

103. How the gas and liquefied gases are classified

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

Answer: B) Class B fire

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

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

Answer: D) Hexagonal prism with pyramid at ends

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

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

Answer: C) 1.5 VDC

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

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

Answer: B) Digital frequency meter circuit

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

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

Answer: C) Pulse repetition frequency

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

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

Answer: C) Double Pole Double Throw

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

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

Answer: C) Plastic packaging

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

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

Answer: B) Unpleasant tingling sensation

111. How can you confirm a transistor as defective?

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

Answer: A) By ohm meter testing

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

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

Answer: D) USB port

113. 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

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

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

Answer: D) 2.5 V

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

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

Answer: C) Cold joint

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

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

Answer: B) To achieve uniformity of scale

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

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

Answer: D) Provide regenerative feedback

118. What is the advantage of SMPS in computer?

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

Answer: A) High efficiency

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

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

Answer: B) PIV voltage

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

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

Answer: A) 2.2 V

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

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

Answer: B) It is non-conductive

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

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

Answer: D) 25mA

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

Answer: B) Voltage leads current by 45 Degree

124. At which temperature the 6040 solder start meeting?

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

Answer: C) 200 Degree Centigrade

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

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

Answer: A) 40%

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

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

Answer: B) Practically zero

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

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

Answer: A) Standard wire gauge

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

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

Answer: A) To eliminate the transformer

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

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

Answer: B) 2.0 A

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

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

Answer: C) Pin number 3

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

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

Answer: C) Power good signal

132. Which circuit uses photo-darlington devices?

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

Answer: A) DC circuits

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

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

Answer: B) Pulse repetition

134. 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

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

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

Answer: A) 110

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

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

Answer: C) No moving parts to wear and tear

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

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

Answer: C) Cadmium sulfide

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

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

Answer: A) Exactly 300 Mw

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

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

Answer: B) 4.5 V to 5.5 V

140. What are the uses of simulation softwares?

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

Answer: B) Design and test a circuit

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

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

Answer: D) Results in dry brittle joint

142. What is stationary electric charges?

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

Answer: D) Static charges

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

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

Answer: B) 27%

144. What are the fundamental properties of insulation materials?

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

Answer: B) Insulation resistance and dielectric strength

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

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

Answer: D) Relaxation oscillator

146. Which material is used for making instrument cabinets?

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

Answer: D) Sheet metal

147. 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

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

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

Answer: D) 1000 milli watts

149. 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) Forward current conduction commences
- D) Reverse current conduction commences

Answer: C) Forward current conduction commences

150. 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

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

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

Answer: D) Reddish brown

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

- A) Combination clipper circuit
- B) Biased negative clipper circuit

- C) Unbiased clipper circuit D) Biased positive clipper circuit

Answer: A) Combination clipper circuit

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

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

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

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

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

Answer: B) Current

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

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

Answer: A) By replacing moving coil

156. How the negative feedback is called?

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

Answer: C) Degenerative feedback

157. 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

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

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

Answer: D) TO-92

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

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

Answer: B) One time constant

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

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

Answer: B) 74 LS 138

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

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

Answer: D) 6.5 mm

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

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

Answer: C) Between 0.5 and 30 MhZ

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

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

Answer: C) Rosin

164. How batteries are classified based on their working?

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

Answer: D) Primary cells and secondary cells

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

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

Answer: D) Steel toe caps

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

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

Answer: B) Half of the rated output voltage

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

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

Answer: A) IC 7905

168. Which soldering instrument has hot air blowing facility?

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

Answer: C) Soldering station

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

- A) During the positive half cycle of input B) Signal voltage equals the bias battery voltage

C) Signal voltage is lesser than bias battery voltage
D) Signal voltage becomes greater than bias battery voltage
Answer: D) Signal voltage becomes greater than bias battery voltage

170. What is the purpose of trimmer capacitor?

A) Coupling
B) Filtering
C) Fine tuning
D) Decoupling
Answer: C) Fine tuning

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

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

172. Which insulation layer is used in MOSFET?

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

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

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

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

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

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

A) Memory
B) Processor
C) Chip set
D) Buffer
Answer: A) Memory

176. 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

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

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

178. What is the unit of electric charge?

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

179. Which electrical parameter opposes the flow of electrons?

A) Voltage
B) Resistance
C) Current
D) Power
Answer: B) Resistance

180. What is the drawbacks of LDR?

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

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

A) Photo resistors
B) Photo voltaic cells
C) Photo diodes
D) Photo transistors
Answer: A) Photo resistors

182. In which analog meter the battery is provided?

A) Watt meter
B) Ohm meter
C) Voltmeter
D) Ammeter
Answer: B) Ohm meter

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

A) 9 VDC
B) 12 VDC
C) 6 VDC
D) 3 VDC
Answer: A) 9 VDC

184. 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

185. 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

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

A) 0.9 Amp
B) 1.8 Amp

- C) 5.0 Amp D) 2.0 Amp

Answer: B) 1.8 Amp

187. Which class of fire is classified involving metals?

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

Answer: A) Class D

188. 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

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

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

Answer: A) Negative clamping circuit

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

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

Answer: B) Three gauge sizes decreased

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

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

Answer: C) TO-72

192. How power rating is specified for transformers?

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

Answer: A) Volt ampere (VA)

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

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

Answer: B) TO-92

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

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

Answer: B) Low power transistors

195. How batteries are classified?

- A) Button cells and lithium cells B) Cylindrical cells and rectangular cells

- C) Dry cells and alkaline cells D) Primary cells and secondary cells

Answer: D) Primary cells and secondary cells

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

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

Answer: D) Using analysis menu

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

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

Answer: A) Fast recovery diode

198. 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

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

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

Answer: B) Uses split capacitor

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

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

Answer: C) Principal current

201. What is the unit of electric charge?

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

Answer: A) Coulomb

202. What is the common and popular application of UJT?

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

Answer: A) Relaxation oscillator

203. 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) 1 Ohm
C) 4 Ohms D) 2 Ohms

Answer: A) 3 Ohms

204. Which component opposes any change in current?

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

Answer: C) Inductor

205. What is the use of screw driver?

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

Answer: C) Tighten or loosen screws

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

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

Answer: B) Mutual induction

207. Which material conducts electricity?

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

Answer: D) Copper

208. Which materials are used for semiconductor?

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

Answer: B) Silicon and germanium

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

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

Answer: C) LM 317

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

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

Answer: A) Electrodes

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

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

Answer: D) Input terminal

212. 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

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

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

Answer: C) I_C / I_E

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

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

Answer: A) Very high input impedance

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

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

Answer: C) Partition table

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

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

Answer: B) 1.8 V

217. Which step is important for soldering a joint?

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

Answer: A) Heating the joint

218. Which memory device loses data on power failure?

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

Answer: B) RAM

219. 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

220. 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%

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

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

Answer: D) Defects the operation of switching signal

222. Which parameter is measured by a multimeter?

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

Answer: D) Voltage

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

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

Answer: D) Practically zero

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

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

Answer: B) + 4.75v to + 5.25V

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

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

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

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

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

Answer: A) Jet of water

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

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

Answer: A) NPN has higher switching speed

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

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

Answer: B) 1 to 100 nano seconds

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

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

Answer: B) Permanent Magnet Moving Coil meter

230. What is the term stands for TRIAC?

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

Answer: B) Triode AC semiconductor

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

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

Answer: D) 6.25×10^{18} electrons

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

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

Answer: D) PIV voltage

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

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

Answer: B) Plastic packaging with metal heatsinks

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

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

Answer: B) Clicking on the component group

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

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

Answer: D) 1000 kW

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

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

Answer: A) Radio receivers

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

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

Answer: A) 90

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

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

Answer: A) Signal diodes

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

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

Answer: C) Silver

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

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

Answer: A) Trigger

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

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

Answer: C) Electrician's knife

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

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

Answer: D) 1.4 V

243. What is the unit of inductance?

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

Answer: D) Henry

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

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

Answer: B) 2.1 V

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

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

Answer: B) Tendency to fail shorted

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

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

Answer: A) Metal oxide semiconductor FET

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

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

Answer: B) 10 mA

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

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

Answer: C) Memory

249. What is the advantage of MOSFET?

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

Answer: B) Fast switching speed

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

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

Answer: C) Gelled electrolyte

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

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

Answer: D) 100 to 400 Amp

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

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

Answer: D) Principal current

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

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

Answer: D) Measure the rated output voltage

254. What is the reason for electric fire?

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

Answer: C) Overloading

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

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

Answer: B) Delivers reduced secondary voltage

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

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

Answer: B) Light dependent resistor

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

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

Answer: A) Jewelled bearings

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

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

Answer: D) 30 V

259. 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

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

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

Answer: B) Indicate the health condition of battery

261. Which battery is used for cellular phones?

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

Answer: D) Lithium ion

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

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

Answer: B) Blow horn stake

263. What is the cause of burnt relay contacts?

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

Answer: C) Excessive contact current

264. What is the code number of TRIAC?

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

Answer: A) BT136

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

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

Answer: C) High speed switching

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

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

Answer: B) For DC component restoration

267. How many alternating layers are there in IGBT?

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

Answer: D) 4 layers

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

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

Answer: A) Measure diameter of wire

269. Which cores are used in intermediate frequency transformers?

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

Answer: D) Ferrite

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

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

Answer: C) TRIAC

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

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

Answer: B) Signal voltage becomes greater than bias battery

voltage

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

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

Answer: D) Lead selenide

273. 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

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

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

Answer: B) Dry powdered

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

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

Answer: A) Triangular wave output

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

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

Answer: D) Higher thermal stability

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

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

Answer: A) Biased negative clipper

278. 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

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

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

Answer: A) The need of bulky transformer

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

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

Answer: B) MODEM

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

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

Answer: D) During switching

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

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

Answer: B) 18 gauge rosin cored

283. What is the function of clipper circuit?

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

Answer: C) Wave shaping

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

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

Answer: B) Fast switching

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

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

Answer: C) Zinc

286. 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

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

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

Answer: D) Considerable greater sensitivity

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

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

Answer: A) Power supplies

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

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

Answer: C) Capacitor Input filter

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

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

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

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

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

Answer: C) Using virtual instrumentation testing

292. Which software is used to simulate electronic circuits?

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

Answer: B) Multi sim

293. 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

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

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

Answer: D) SCR

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

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

Answer: C) Memory circuits

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

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

Answer: A) Spring control

297. How the insulators are called?

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

Answer: A) Dielectrics

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

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

Answer: D) 1.835

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

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

Answer: D) Class - A

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

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

Answer: C) Thyristor and transistors

301. 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

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

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

Answer: D) Conductor s diameter

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

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

Answer: B) Single Pole Double Throw

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

- A) Provides positive feed back B) Gives maximum distortion

- C) Easily sets saturated D) Never reach saturation

Answer: D) Never reach saturation

305. 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

306. Which torque is used in PMMC meter movement?

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

Answer: C) Moderate torque

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

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

Answer: A) Circuit work space

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

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

Answer: A) Excessive contact current

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

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

Answer: D) 30 V

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

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

Answer: A) 3 - 7 seconds

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

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

Answer: B) Metal oxide varistor

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

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

Answer: C) Nickel metal hydride (NiMH)

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

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

Answer: D) Industry Standard Architecture

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

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

Answer: D) B3202

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

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

Answer: C) IDE port

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

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

Answer: A) LCR bridge

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

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

Answer: A) Voltage across it reached the zener voltage

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

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

Answer: C) 0.1 A

319. What is the advantage of IGBT?

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

Answer: D) Low driving power

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

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

Answer: B) Higher switching repetition rates

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

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

Answer: C) Smothering

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

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

Answer: D) 100 Amp

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

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

Answer: C) By built-in calibration signal

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

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

Answer: A) Meter

325. 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) Half of the input A/C frequency
- D) Three times the input A/C frequency

Answer: A) Double the input A/C frequency

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

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

Answer: B) Two

327. How the single strand wire is called?

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

Answer: B) Hook - up wire

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

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

Answer: A) BF 194B

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

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

Answer: B) Cadmium sulfide

330. Which is the N - channel FET?

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

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

331. 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

332. What is the use of flip - flop?

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

Answer: D) It stores binary information

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

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

Answer: C) Gallium

334. Which is electronic simulation software?

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

Answer: C) Macspice

335. 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

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

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

Answer: A) Directly proportional

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

- A) To maximize eddy current losses
- B) To increase the hysteresis losses

C) To increase core saturation losses

D) To minimize eddy current losses

Answer: D) To minimize eddy current losses

338. 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

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

A) To produce modulation

B) To produce multiplexion

C) To produce demodulation

D) To produce oscillation

Answer: D) To produce oscillation

340. How gate is biased in JFET?

A) Forward biased

B) Dual supply function

C) AC supply function

D) Reverse biased

Answer: D) Reverse biased

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

A) RF Amplifier

B) Power Amplifier

C) IF Amplifier

D) Voltage Amplifier

Answer: B) Power Amplifier

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

A) 10 mA

B) 5 mA

C) 30 mA

D) 20 mA

Answer: D) 20 mA

343. Which formula is used to find the conductance?

A) I / V

B) V / I

C) Q / V

D) $I \times R$

Answer: A) I / V

344. What is the input impedance of IGBT?

A) High

B) Unity

C) Low

D) Infinity

Answer: A) High

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

A) Triangular wave

B) Sine wave

C) Saw tooth wave

D) Square wave

Answer: D) Square wave

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

A) Poor wetting

B) Dry solder joint

C) Dull grainy surface

D) Pits and voids

Answer: B) Dry solder joint

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

A) Charging

B) Unloading

C) Discharging

D) Leaking

Answer: C) Discharging

348. 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

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

A) Greater than 1

B) Less than 1

C) Unity

D) Infinity

Answer: B) Less than 1

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

A) Greater than 4 Amp

B) 3 Amp

C) 2 Amp

D) 1 Amp

Answer: A) Greater than 4 Amp

351. How the sensitivity of voltmeter is determined?

A) Meter coil resistance

B) Ohms per volt rating

C) FSD current

D) Maximum voltage measurement

Answer: B) Ohms per volt rating

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

A) 150 Degree Centigrade to 450 Degree Centigrade

B) 600 Degree Centigrade to 800 Degree Centigrade

C) 800 Degree Centigrade to 1000 Degree Centigrade

D) 450 Degree Centigrade to 600 Degree Centigrade

Answer: A) 150 Degree Centigrade to 450 Degree Centigrade

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

A) 12 V

B) 15 V

C) 32 V

D) 8 V

Answer: D) 8 V

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

A) Left clicking

B) Right clicking

C) Drag and drop

D) Double clicking

Answer: C) Drag and drop

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

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

Answer: A) Schafer's method

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

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

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

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

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

Answer: A) Energy loss takes place

358. Rate of change of input voltage

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

Answer: A) Rate of change of output voltage

359. What is the code number of TRIAC?

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

Answer: A) BT136

360. Which device is a unipolar transistor?

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

Answer: A) FET

361. How gate is biased in JFET?

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

Answer: C) Reverse biased

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

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

Answer: D) Physical and sensory test

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

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

Answer: C) Diode and resistor

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

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

Answer: B) When the solder is heated

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

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

Answer: D) 25 H

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

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

Answer: A) Desoldering pump

367. Which unit is used to measure capacitance value?

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

Answer: D) Farad

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

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

Answer: C) Poor switching speed

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

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

Answer: A) Common emitter configuration

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

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

Answer: B) ITU band - 10

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

- A) Reverse bias secondary break downs B) Thermal limits are pushed to the edge

- C) Superior current conduction capability D) Fast switching speed

Answer: C) Superior current conduction capability

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

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

Answer: C) 0.56

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

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

Answer: B) Negative resistance characteristics

374. What is the information stored in digital registers?

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

Answer: A) Binary values

375. What is the shape of warning sign board?

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

Answer: B) Triangular shape

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

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

Answer: D) Band 9

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

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

Answer: C) Flux

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

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

Answer: C) Three Op-Amps

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

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

Answer: A) 6V

380. Which factor determines the inductance value?

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

Answer: D) Diameter of the coil

381. Which material contains eight electrons in valency layer?

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

Answer: C) Insulators

382. 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

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

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

Answer: C) Due to elastic property of insulation

384. Which is the combination of photo transistor?

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

Answer: C) Photo diode and transistor

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

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

Answer: A) IC 7495

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

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

Answer: A) Silicon material used

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

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

Answer: C) Permanent magnetic fields

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

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

Answer: B) It disturbs the chemical bonding take place

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

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

Answer: A) Reset

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

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

Answer: A) 1000 and above

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

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

Answer: B) 60:40:00

392. What is successive approximation (SAR)?

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

Answer: B) Method of D/A conversion

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

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

Answer: D) 30 V

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

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

Answer: B) 100 Hz

395. 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

396. Which part of the relay causes most trouble?

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

Answer: B) Relay contacts

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

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

Answer: D) At normal condition

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

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

Answer: C) Deflection is independent of current direction

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

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

Answer: D) Compact Disk Read Only Memory

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

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

Answer: C) Rectifying

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

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

Answer: A) In hertz

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

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

Answer: D) Conductor s diameter

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

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

Answer: C) Move the victim to a ventilated place

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

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

Answer: A) By using quartz crystal

405. 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

406. 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

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

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

Answer: D) Few micro Amperes

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

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

Answer: C) Series

409. Which is the property of IGBT?

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

Answer: C) High efficiency and fast switching

410. 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

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

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

Answer: C) Large scale integration (LSI)

412. 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

413. 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 values required is too large D) LC components are not available

Answer: C) LC values required is too large

414. Which meter uses a moving coil for measurement?

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

Answer: A) PMMC meter

415. 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

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

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

Answer: B) Heat

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

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

Answer: A) Silver

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

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

Answer: D) Capacitive reactance

419. What is the use of photo transistor?

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

Answer: A) Used as light controlled switch

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

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

Answer: C) Constant voltage charging method

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

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

Answer: A) Aluminium frame

422. What should be the time constant $t = RC$ for a good

clamper circuit with reference to time period of the input signal?

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

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