monthly test

ITI Quiz - 09-Feb-2026 04:07 PM

Q. ID: ITISKILL1359SF

February 2026 | **tagaduru** | Question Paper

Duration: 30 Mins | **Total Marks: 422** | **ID: ITISKILL1359SF**

Student Name: _____ Roll No: _____

1. Which circuit photo SCR opto couplers are used?

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

2. 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

3. What is characteristics of instrumentation amplifier?

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

4. At which temperature the 6040 solder start meeting?

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

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

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

6. What is the purpose of using IC74LS190?

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

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

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

8. What is the effeciency transformer coupled class A amplifier?

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

9. Which battery is used for cellular phones?

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

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

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

11. Which circuit uses the enhancement type MOSFET?

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

12. Which material is used for making instrument cabinets?

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

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

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

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

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

15. 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

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

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

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

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

18. What is the limitation of integrated circuits?

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

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

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

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

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

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

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

22. What is the unit of electric charge?

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

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

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

24. Which electrical parameter opposes the flow of electrons?

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

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

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

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

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

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

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

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

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

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

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

30. How the insulators are called?

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

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

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

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

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

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

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

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

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

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

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

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

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

37. 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

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

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

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

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

40. 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) Cleaning before soldering the joint
D) Remove residual flux and prevent corrosion

41. What is the type of transistor BPX81?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

52. How many alternating layers are there in IGBT?

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

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

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

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

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

55. What is the advantage of SMPS in computer?

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

56. Which device is a unipolar transistor?

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

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

A) 3ⁿ
B) 2ⁿ⁺¹

C) 1ⁿ D) 2ⁿ

58. 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 10 MHZ D) Between 0.1 and 1MHZ

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

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

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

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

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

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

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

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

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

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

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

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

65. What is the cause of burnt relay contacts?

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

66. What is the advantage of MOSFET?

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

67. Which insulation layer is used in MOSFET?

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

68. How the single strand wire is called?

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

69. What is the important feature of instrumentation amplifier?

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

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

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

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

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

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

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

73. 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) Biased negative clipper circuit D) Combination clipper circuit

74. 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

75. Which process the ICS are made?

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

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

A) Television receivers B) Stereo amplifiers

C) Automatic voltage stabilizers
D) Radio receivers

77. How the sensitivity of voltmeter is determined?

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

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

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

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

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

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

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

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

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

82. What is stationary electric charges?

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

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

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

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

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

85. How batteries are classified?

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

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

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

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

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

88. How gate is biased in JFET?

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

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

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

90. 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

91. 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

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

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

93. Which is the property of IGBT?

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

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

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

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

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

96. 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) 1.525 v
C) 3.567 v
D) 2.134 v

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

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

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

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

99. In which analog meter the battery is provided?

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

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

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

101. What is the shape of prohibition sign?

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

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

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

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

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

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

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

105. 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

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

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

107. How the gas and liquefied gases are classified

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

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

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

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

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

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

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

111. What is the function of clipper circuit?

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

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

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

113. What is the shape of standard wire gauge?

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

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

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

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

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

116. Which is the N - channel FET?

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

117. 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

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

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

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

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

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

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

121. 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 bias voltage to the photo transistor
D) By the external signal to the transistor

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

130. Which electrical property opposes the flow of electrons?

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

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

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

132. How gate is biased in JFET?

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

133. Which type of voltage regulator is IC 723?

A) Three pin negative voltage regulator
B) Multipin variable voltage regulator

C) Three pin positive voltage regulator
D) Three pin adjustable voltage regulator

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

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

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

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

136. Which electrical parameter is measured by the megger?

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

137. What is the unit of electric charge?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

150. Which torque is used in PMMC meter movement?

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

151. Which soldering instrument has hot air blowing facility?

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

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

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

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

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

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

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

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

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

156. What is the use of schmitt trigger circuit?

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

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

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

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

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

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

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

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

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

161. Which software is used to simulate electronic circuits?

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

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

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

163. What is the code number of TRIAC?

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

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

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

165. Which part of the relay causes most trouble?

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

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

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

167. Which material conducts electricity?

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

168. Which factor influences the severity of electrical shock?

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

169. Which parameter is maintained constant in zener diode?

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

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

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

171. What is the purpose of trimmer capacitor?

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

172. 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

173. Which factor determines the inductance value?

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

174. What in the current gain of a common ? base amplifier?

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

175. 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

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

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

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

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

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

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

179. Which type of amplifier in used to operate the loud speaker?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

187. How the negative feedback is called?

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

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

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

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

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

190. Which cores are used in intermediate frequency transformers?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

198. Which materials are used for semiconductor?

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

199. What is the use of photo transistor?

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

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

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

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

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

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

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

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

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

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

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

205. Which material contains eight electrons in valency layer?

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

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

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

207. What is the information stored in digital registers?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A) Low switching speed
B) Higher driving power requirement

C) Higher switching repetition rates
D) Suitability for medium power applications

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

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

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

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

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

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

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

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

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

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

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

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

221. What is the advantage of IGBT?

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

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

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

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

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

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

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

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

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

226. 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) Proportional to the binary weight
D) Degree of accuracy

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

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

228. What type of control is used for FET?

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

229. 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

230. Which parameter is measured by a multimeter?

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

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

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

232. What is the reason for electric fire?

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

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

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

234. What is the cause of injuring at the time of lifting a

load?

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

235. Which device is a unipolar transistor?

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

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

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

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

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

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

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

239. Which meter uses a moving coil for measurement?

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

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

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

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

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

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

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

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

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

244. What is the use of flip - flop?

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

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

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

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

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

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

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

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

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

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

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

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

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

251. What is the advantage of MOSFET?

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

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

A) Low contact current
B) Chatter during a slow release

C) Excessive number of operations
D) Excessive contact current

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

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

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

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

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

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

256. What is the term stands for TRIAC?

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

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

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

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

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

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

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

260. Which is the combination of photo transistor?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

269. What is the purpose of wood rasp file?

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

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

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

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

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

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

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

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

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

274. Which step is important for soldering a joint?

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

275. What is the advantage of using digital multimeter?

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

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

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

277. 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

278. Why the plunger desoldering tool needs periodical cleaning?

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

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

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

280. Which is electronic simulation software?

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

281. Which is the drain current (Id) in JFET?

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

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

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

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

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

284. 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 - 6
C) ITU band - 8
D) ITU band - 10

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

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

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

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

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

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

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

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

289. How the stationary electric charges are called?

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

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

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

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

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

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

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

293. How can you confirm a transistor as defective?

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

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

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

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

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

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

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

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

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

298. 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

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

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

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

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

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

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

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

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

303. What is the input impedance of IGBT?

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

304. Which circuit uses photo-darlington devices?

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

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

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

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

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

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

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

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

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

309. What is the unit of inductance?

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

310. 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 and emitter electrodes
D) Between collector - base electrodes

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

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

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

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

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

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

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

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

315. Which class of fire is classified involving metals?

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

316. 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 output frequency
D) Rate of change of input voltage

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

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

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

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

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

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

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

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

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

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

322. Which memory device loses data on power failure?

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

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

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

324. 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

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

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

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

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

327. 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

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

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

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

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

330. What is the input impedence of darlington pair transistors?

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

331. What is the advantage of IGBT?

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

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

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

333. What are the fundamental properties of insulation materials?

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

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

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

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

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

336. What is successive approximation (SAR)?

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

337. Which mode is used in differential amplifier?

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

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

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

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

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

340. How the single strand wire is called?

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

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

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

342. 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 100 Degree Centigrade
C) Lamp is ON at 320 Degree Centigrade
D) Lamp is OFF at room temperature

343. Which is the N - channel FET?

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

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

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

345. 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
D) Available different sizes and specifications

346. What is the term stands for TRIAC?

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

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

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

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

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

349. 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

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

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

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

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

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

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

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

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

354. 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

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

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

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

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

357. Which metal coating is used on compact disk?

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

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

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

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

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

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

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

361. 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

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

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

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

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

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

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

365. 6 What is the input impedance of IGBT?

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

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

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

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

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

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

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

369. How batteries are classified based on their working?

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

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

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

371. Which unit is used to measure capacitance value?

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

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

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

373. What is the use of screw driver?

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

374. What is the shape of warning sign board?

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

375. Electrical conductivity of gold is

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

376. Which angle is checked by the try square?

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

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

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

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

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

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

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

380. 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

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

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

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

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

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

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

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

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

385. Which value is equal to one picofarad?

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

386. What is the code number of TRIAC?

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

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

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

388. What is the main application of photo resistor?

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

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

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

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

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

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

A) Industry Software Architecture
B) Industry System Architecture

C) Industry Standard Architecture
D) Institution Standard Architecture

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

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

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

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

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

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

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

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

396. How power rating is specified for transformers?

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

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

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

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

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

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

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

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

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

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

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

402. What are the uses of simulation softwares?

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

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

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

404. Which component opposes any change in current?

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

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

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

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

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

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

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

408. Which material is used as electrical insulator?

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

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

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

410. Which formula is used to find the conductance?

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

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

A) For slicing both peaks
B) For positive peak clipping

C) For negative peak clipping
D) For DC component restoration

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

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

413. Which rechargeable cell is designed with conductive polymer?

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

414. 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

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

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

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

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

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

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

418. What is the shape of mandatory signs?

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

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

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

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

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

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

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

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

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