ITI Quiz - 13-Mar-2026 03:37 PM

March 2026 **Sri Mahalingeswara ITI** Question Paper

Duration: 30 Mins **Total Marks: 422** **ID: ITISKILL9219XS**

Student Name: _____ Roll No: _____

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

A) 2ⁿ⁺¹ B) 1ⁿ
C) 2ⁿ D) 3ⁿ

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

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

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

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

4. Which material contains eight electrons in valency layer?

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

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

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

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

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

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

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

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

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

9. Which part of the relay causes most trouble?

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

10. What is the limitation of integrated circuits?

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

11. How batteries are classified?

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

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

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

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

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

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

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

15. Which battery is used for cellular phones?

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

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

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

17. What is the overall base emitter voltage required to turn

the darlington pair?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

28. Which soldering instrument has hot air blowing facility?

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

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

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

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

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

31. 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

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

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

33. 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) 1.525 v
B) 0.213 v
C) 3.567 v
D) 2.134 v

34. Electrical conductivity of gold is

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

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

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

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

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

37. What is the use of photo transistor?

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

38. 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

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

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

40. Which metal coating is used on compact disk?

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

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

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

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

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

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

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

44. What is the cause of burnt relay contacts?

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

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

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

46. What is the function of clipper circuit?

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

47. In which analog meter the battery is provided?

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

48. What is the purpose of wood rasp file?

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

49. What are the fundamental properties of insulation materials?

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

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

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

51. What is the advantage of using digital multimeter?

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

52. 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

61. Which material is used for making instrument cabinets?

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

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

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

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

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

64. What is the term stands for TRIAC?

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

65. What is the purpose of trimmer capacitor?

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

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

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

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

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

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

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

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

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

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

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

71. What is the advantage of SMPS in computer?

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

72. 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

73. How power rating is specified for transformers?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

86. 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) Quiescent current beyond the cut-off point D) Q point set slightly below cut-off

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A) RC valves should be at least ten times B) Half the time period of signal

C) Five times the time period of signal
D) Double the time of signal frequency

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

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

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

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

99. 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

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

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

101. 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) Combination clipper circuit
D) Peak clipper circuit

102. Which is the combination of photo transistor?

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

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

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

104. What is the main application of photo resistor?

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

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

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

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

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

107. Which insulation layer is used in MOSFET?

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

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

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

109. 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

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

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

111. Which electrical parameter is measured by the megger?

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

112. 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

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

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

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

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

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

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

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

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

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

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

118. Which parameter is measured by a multimeter?

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

119. What is the reason for electric fire?

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

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

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

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

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

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

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

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

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

124. 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 function generator
D) By complex wave form

125. Which component opposes any change in current?

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

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

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

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

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

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

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

129. What is the shape of prohibition sign?

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

130. What is the information stored in digital registers?

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

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

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

132. What is the shape of warning sign board?

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

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

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

134. What is the shape of mandatory signs?

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

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

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

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

A) Band 9
B) Band 4

C) Band 11 D) Band 6

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

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

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

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

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

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

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

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

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

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

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

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

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

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

144. What is the shape of standard wire gauge?

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

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

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

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

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

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

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

148. How the insulators are called?

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

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

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

150. What is the input impedance of IGBT?

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

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

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

152. What is the type of transistor BPX81?

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

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

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

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

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

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

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

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

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

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

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

158. Which materials are used for semiconductor?

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

159. Which software is used to simulate electronic circuits?

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

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

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

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

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

162. What is the use of flip - flop?

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

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

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

164. What type of control is used for FET?

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

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

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

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

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

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

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

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

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

169. Why the plunger desoldering tool needs periodical cleaning?

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

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

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

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

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

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

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

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

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

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

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

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

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

176. How many time constant period is required to fully

charge a capacitor?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

184. Which cores are used in intermediate frequency transformers?

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

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

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

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

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

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

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

188. 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

189. How batteries are classified based on their working?

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

190. How can you confirm a transistor as defective?

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

191. 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

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

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

193. 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

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

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

195. 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) 2 mm to 4 mm D) 5 mm to 8 mm

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

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

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

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

198. How the sensitivity of voltmeter is determined?

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

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

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

200. What is the drawbacks of LDR?

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

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

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

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

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

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

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

204. Which factor determines the inductance value?

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

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

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

206. Which is the property of IGBT?

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

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

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

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

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

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

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

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

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

211. Which circuit photo SCR opto couplers are used?

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

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

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

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

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

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

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

215. Which device is a unipolar transistor?

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

216. Which parameter is maintained constant in zener diode?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

224. Which rechargeable cell is designed with conductive polymer?

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

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

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

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

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

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

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

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

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

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

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

230. What is the use of screw driver?

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

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

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

232. Which memory device loses data on power failure?

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

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

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

234. 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) 3 Ohms
C) 4 Ohms
D) 1 Ohm

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

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

236. Which process the ICS are made?

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

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

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

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

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

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

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

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

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

241. What is the advantage of IGBT?

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

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

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

243. Which is the N - channel FET?

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

244. Which step is important for soldering a joint?

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

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

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

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

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

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

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

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

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

249. At which temperature the 6040 solder start meeting?

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

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

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

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

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

252. How the gas and liquefied gases are classified

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

253. Which value is equal to one picofarad?

A) 106 Farad
B) 1012 Farad

C) 10-12 Farad D) 10-6 Farad

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

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

255. 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

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

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

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

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

258. Which is the major factor to determine the quality performance of A/D converter?

A) Proportional to the binary weight B) Number of bits used
C) Number of bits used D) Degree of accuracy

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

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

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

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

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

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

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

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

263. 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

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

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

265. 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) 1 Amp D) 2 Amp

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

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

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

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

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

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

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

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

270. Which material conducts electricity?

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

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

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

272. How the solid state relays are working for increased

lifetime?

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

273. 6 What is the input impedance of IGBT?

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

274. 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

275. 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) When bias voltage reached 0.7V
D) Voltage across it reached the zener voltage

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

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

277. Which electrical parameter opposes the flow of electrons?

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

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

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

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

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

280. What are the uses of simulation softwares?

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

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

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

282. Which circuit uses the enhancement type MOSFET?

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

283. Which is electronic simulation software?

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

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

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

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

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

286. Which torque is used in PMMC meter movement?

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

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

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

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

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

289. What is the advantage of MOSFET?

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

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

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

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

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

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

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

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

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

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

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

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

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

296. What is characteristics of instrumentation amplifier?

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

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

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

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

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

299. What is the code number of TRIAC?

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

300. What is the advantage of IGBT?

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

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

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

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

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

303. How the stationary electric charges are called?

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

304. Which factor influences the severity of electrical shock?

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

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

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

306. Which electrical property opposes the flow of electrons?

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

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

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

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

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

309. Which type of voltage regulator is IC 723?

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

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

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

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

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

312. How gate is biased in JFET?

A) AC supply function
B) Dual supply function

C) Forward biased D) Reverse biased

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

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

314. Which formula is used to find the conductance?

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

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

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

316. What is the unit of inductance?

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

317. Which unit is used to measure capacitance value?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

329. 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

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

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

331. Rate of change of input voltage

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

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

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

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

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

334. What is the code number of TRIAC?

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

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

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

336. Which angle is checked by the try square?

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

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

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

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

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

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

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

340. Which meter uses a moving coil for measurement?

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

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

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

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

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

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

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

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

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

345. Which is the N - channel FET?

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

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

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

347. Which device is a unipolar transistor?

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

348. What is the important feature of instrumentation amplifier?

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

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

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

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

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

351. How the negative feedback is called?

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

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

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

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

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

354. What is stationary electric charges?

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

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

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

356. How the single strand wire is called?

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

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

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

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

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

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

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

360. How the single strand wire is called?

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

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

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

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

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

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

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

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

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

365. What is the purpose of using IC74LS190?

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

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

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

367. Which circuit uses photo-darlington devices?

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

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

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

369. What is the use of schmitt trigger circuit?

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

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

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

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

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

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

A) Radars
B) Radio receivers

C) Power supplies D) Storage counters

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

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

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

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

375. What is the unit of electric charge?

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

376. How gate is biased in JFET?

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

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

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

378. What is the unit of electric charge?

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

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

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

380. How many alternating layers are there in IGBT?

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

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

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

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

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

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

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

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

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

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

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

386. What is the advantage of PIN photo diodes?

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

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

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

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

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

389. 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

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

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

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

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

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

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

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

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

394. Which class of fire is classified involving metals?

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

395. Which material is used as electrical insulator?

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

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

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

397. What is the advantage of MOSFET?

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

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

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

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

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

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

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

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

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

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

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

403. What is the term stands for TRIAC?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

422. Which mode is used in differential amplifier?

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