ITI Quiz - 18-Mar-2026 04:40 PM

Q. ID: ITISKILL8823VF

March 2026 | **GOVT ITI Tagaduru** | Question Paper

Duration: 30 Mins | **Total Marks: 422** | **ID: ITISKILL8823VF**

Student Name: _____ Roll No: _____

1. What are the fundamental properties of insulation materials?

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

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

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

3. What is the main application of photo resistor?

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

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

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

5. Which circuit uses the enhancement type MOSFET?

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

6. 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

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

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

8. What is successive approximation (SAR)?

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

9. Which circuit uses photo-darlington devices?

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

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

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

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

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

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

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

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

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

14. Which cores are used in intermediate frequency transformers?

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

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

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

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

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

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

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

18. 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

19. How gate is biased in JFET?

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

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

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

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

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

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

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

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

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

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

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

25. Which type of voltage regulator is IC 723?

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

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

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

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

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

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

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

29. How batteries are classified based on their working?

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

30. What is the code number of TRIAC?

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

31. 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) 1 Amp
C) 3 Amp
D) 2 Amp

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

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

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

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

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

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

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

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

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

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

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

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

38. Which soldering instrument has hot air blowing facility?

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

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

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

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

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

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

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

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

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

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

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

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

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

45. What is the limitation of integrated circuits?

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

46. What is the purpose of using IC74LS190?

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

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

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

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

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

49. What is the advantage of using digital multimeter?

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

50. Which rechargeable cell is designed with conductive polymer?

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

51. How batteries are classified?

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

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

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

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

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

54. Which metal coating is used on compact disk?

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

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

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

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

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

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

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

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

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

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

60. 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

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

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

62. How the sensitivity of voltmeter is determined?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

71. 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

72. What is the cause of burnt relay contacts?

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

73. Which electrical parameter opposes the flow of electrons?

A) Current
B) Voltage

C) Power D) Resistance

74. 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

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

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

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

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

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

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

78. Which is the property of IGBT?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

86. 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

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

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

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

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

89. Which software is used to simulate electronic circuits?

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

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

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

91. At which temperature the 6040 solder start meeting?

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

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

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

93. What is the unit of inductance?

A) Joule B) Henry

C) Watts D) Farad

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

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

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

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

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

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

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

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

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

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

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

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

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

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

101. In which analog meter the battery is provided?

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

102. How the negative feedback is called?

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

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

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

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

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

105. What is the use of photo transistor?

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

106. Which class of fire is classified involving metals?

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

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

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

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

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

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

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

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

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

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

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

112. 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) 100 to 400 Amp D) 2.5 to 4.5 Amp

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

125. What is the code number of TRIAC?

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

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

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

127. Which angle is checked by the try square?

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

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

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

129. 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

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

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

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

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

132. Which circuit photo SCR opto couplers are used?

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

133. Which is the combination of photo transistor?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

141. What is the shape of standard wire gauge?

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

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

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

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

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

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

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

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

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

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

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

147. Which material conducts electricity?

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

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

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

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

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

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

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

151. 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) Positive clamper
D) Biased positive clipper

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

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

153. How the stationary electric charges are called?

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

154. Which materials are used for semiconductor?

A) Silver and aluminium
B) Silicon and germanium

C) Gallium and indium D) Arsenic and antimony

155. 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 over the cut-off value
C) Q point set slightly below cut-off D) Quiescent current at mid point

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

165. 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

166. What is the drawbacks of LDR?

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

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

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

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

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

169. What is the type of transistor BPX81?

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

170. 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

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

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

172. What is stationary electric charges?

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

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

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

174. Which impurity is added to pure semiconductor to form

N-type material?

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

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

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

176. Which insulation layer is used in MOSFET?

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

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

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

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

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

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

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

180. Which device is a unipolar transistor?

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

181. Which electrical parameter is measured by the megger?

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

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

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

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

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

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

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

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

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

186. What is the shape of warning sign board?

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

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

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

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

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

189. 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

190. 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

191. How the gas and liquefied gases are classified

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

192. 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

193. What is the use of flip - flop?

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

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

A) To damp the oscillations
B) To achieve uniformity of scale

C) To generate heat
D) To produce magnetic attraction

195. What is the term stands for TRIAC?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

208. Which unit is used to measure capacitance value?

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

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

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

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

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

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

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

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

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

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

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

214. What is the advantage of SMPS in computer?

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

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

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

216. What is the function of clipper circuit?

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

217. Which material is used as electrical insulator?

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

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

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

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

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

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

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

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

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

222. 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

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

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

224. What is the advantage of PIN photo diodes?

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

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

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

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

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

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

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

228. 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) Constant voltage charging method D) Trickle charging method

229. What type of control is used for FET?

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

230. 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

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

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

232. How the single strand wire is called?

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

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

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

234. What is characteristics of instrumentation amplifier?

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

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

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

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

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

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

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

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

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

239. How gate is biased in JFET?

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

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

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

241. 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

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

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

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

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

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

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

245. What is the unit of electric charge?

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

246. What is the advantage of IGBT?

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

247. 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) 2.134 v
C) 0.213 v
D) 3.567 v

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

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

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

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

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

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

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

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

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

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

253. What is the maximum drain - source voltage, VDS for

BFW10?

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

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

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

255. What is the information stored in digital registers?

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

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

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

257. 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

258. 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

259. Which step is important for soldering a joint?

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

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

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

261. What are the uses of simulation softwares?

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

262. 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

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

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

264. Which mode is used in differential amplifier?

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

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

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

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

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

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

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

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

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

269. What is the purpose of trimmer capacitor?

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

270. 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

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

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

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

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

273. Which meter uses a moving coil for measurement?

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

274. How many alternating layers are there in IGBT?

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

275. 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 melt the solder quickly
D) To help the joint to be soldered

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

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

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

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

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

A) 3ⁿ
B) 2ⁿ⁺¹
C) 2ⁿ
D) 1ⁿ

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

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

280. Which parameter is measured by a multimeter?

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

281. Which value is equal to one picofarad?

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

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

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

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

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

284. How the insulators are called?

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

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

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

286. Which material contains eight electrons in valency layer?

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

287. 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

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

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

289. Which component opposes any change in current?

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

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

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

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

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

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

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

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

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

294. What is the term stands for TRIAC?

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

295. Which battery is used for cellular phones?

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

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

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

297. 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

298. What is the input impedance of IGBT?

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

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

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

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

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

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

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

302. 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

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

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

304. What is the advantage of IGBT?

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

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

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

306. What is the advantage of MOSFET?

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

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

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

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

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

309. Which is the N - channel FET?

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

310. Which parameter is maintained constant in zener diode?

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

311. How power rating is specified for transformers?

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

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

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

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

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

314. What is the reason for electric fire?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

323. What is the use of schmitt trigger circuit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

332. Rate of change of input voltage

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

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

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

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

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

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

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

336. 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

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

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

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

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

339. Which memory device loses data on power failure?

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

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

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

341. Which is electronic simulation software?

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

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

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

343. 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

344. Which electrical property opposes the flow of electrons?

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

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

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

346. Electrical conductivity of gold is

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

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

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

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

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

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

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

350. How the single strand wire is called?

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

351. What is the unit of electric charge?

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

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

A) Mechanical energy into electrical energy
B) Electrical energy into light energy

C) Chemical energy into electrical energy
D) Electrical energy into mechanical energy

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

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

354. Which torque is used in PMMC meter movement?

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

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

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

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

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

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

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

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

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

359. What is the shape of prohibition sign?

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

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

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

361. What is the advantage of MOSFET?

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

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

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

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

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

364. Which factor influences the severity of electrical shock?

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

365. What is the purpose of wood rasp file?

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

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

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

367. How can you confirm a transistor as defective?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

381. What is the use of screw driver?

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

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

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

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

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

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

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

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

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

386. 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

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

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

388. Which factor determines the inductance value?

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

389. Which part of the relay causes most trouble?

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

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

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

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

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

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

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

393. Which formula is used to find the conductance?

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

394. Which device is a unipolar transistor?

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

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

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

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

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

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

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

398. 6 What is the input impedance of IGBT?

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

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

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

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

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

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

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

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

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

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

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

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

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

405. What is the shape of mandatory signs?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

414. Which material is used for making instrument cabinets?

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

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

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

416. 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

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

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

418. Which is the N - channel FET?

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

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

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

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

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

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

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

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

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