test

ITI Quiz - 09-Feb-2026 04:11 PM

Q. ID: ITISKILL0318JV

February 2026 | **Govt ITI Tagaduru** | Question Paper

Duration: 30 Mins | **Total Marks: 422** | **ID: ITISKILL0318JV**

Student Name: _____ Roll No: _____

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

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

2. 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

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

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

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

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

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

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

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

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

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

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

8. What is the advantage of SMPS in computer?

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

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

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

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

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

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

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

12. 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

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

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

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

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

15. 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

16. Which component opposes any change in current?

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

17. Which type of amplifier in used to operate the loud

speaker?

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

18. 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

19. 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

20. How the stationary electric charges are called?

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

21. What is the advantage of MOSFET?

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

22. 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

30. Which circuit photo SCR opto couplers are used?

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

31. How the single strand wire is called?

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

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

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

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

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

34. What is the advantage of IGBT?

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

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

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

36. Which torque is used in PMMC meter movement?

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

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

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

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

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

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

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

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

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

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

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

42. Which is the N - channel FET?

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

43. Which software is used to simulate electronic circuits?

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

44. 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

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

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

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

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

47. What is the term stands for TRIAC?

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

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

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

49. 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) 450 Degree Centigrade to 600 Degree Centigrade
D) 800 Degree Centigrade to 1000 Degree Centigrade

50. 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

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

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

52. What is the function of clipper circuit?

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

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

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

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

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

55. What type of control is used for FET?

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

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

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

57. 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) Quiescent current at mid point
D) Q point set slightly below cut-off

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

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

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

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

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

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

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

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

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

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

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

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

64. Which class of fire is classified involving metals?

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

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

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

66. Which is the property of IGBT?

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

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

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

68. 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

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

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

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

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

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

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

72. Which factor determines the inductance value?

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

73. Which materials are used for semiconductor?

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

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

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

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

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

76. What is the shape of standard wire gauge?

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

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

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

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

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

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

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

80. Which formula is used to find the conductance?

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

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

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

82. What is the shape of prohibition sign?

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

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

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

84. 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

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

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

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

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

87. 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

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

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

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

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

90. Which process the ICS are made?

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

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

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

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

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

93. Which device is a unipolar transistor?

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

94. How gate is biased in JFET?

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

95. Which insulation layer is used in MOSFET?

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

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

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

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

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

98. 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

99. 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

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

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

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

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

102. Which factor influences the severity of electrical shock?

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

103. What is the code number of TRIAC?

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

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

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

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

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

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

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

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

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

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

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

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

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

110. 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

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

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

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

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

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

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

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

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

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

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

116. 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

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

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

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

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

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

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

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

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

121. Rate of change of input voltage

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

122. What is the reason for electric fire?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

132. 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

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

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

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

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

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

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

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

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

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

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

138. 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) Deflection is inversely proportional to current
D) Deflecting and controlling torques are

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

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

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

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

141. What are the fundamental properties of insulation materials?

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

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

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

143. 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) + 4.75v to + 5.25V
D) + 7.5v to + 12V

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

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

145. Which material contains eight electrons in valency layer?

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

146. How the single strand wire is called?

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

147. How the sensitivity of voltmeter is determined?

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

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

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

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

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

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

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

151. 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

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

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

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

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

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

A) Vulnerable to electrical sources
B) Limit voltage handling capacity

C) Considerably lower sensitivity
D) Considerable greater sensitivity

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

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

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

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

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

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

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

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

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

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

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

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

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

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

162. What is the drawbacks of LDR?

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

163. 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) VCB (max) in volts
C) VCC in volts
D) VCE (max) in volts

164. What is the shape of warning sign board?

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

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

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

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

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

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

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

168. 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) Combination clipper circuit
D) Peak clipper circuit

169. Which angle is checked by the try square?

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

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

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

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

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

172. Which circuit uses the enhancement type MOSFET?

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

173. 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

184. How batteries are classified based on their working?

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

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

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

186. What is the purpose of trimmer capacitor?

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

187. What is the unit of inductance?

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

188. 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

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

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

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

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

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

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

192. What is the input impedance of IGBT?

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

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

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

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

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

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

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

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

A) 2ⁿ
B) 1ⁿ
C) 2ⁿ⁺¹
D) 3ⁿ

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

211. Which material is used as electrical insulator?

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

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

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

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

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

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

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

215. 6 What is the input impedance of IGBT?

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

216. Which part of the relay causes most trouble?

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

217. What is the purpose of using IC74LS190?

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

218. 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) Spring control
D) Air damping control

219. Which material conducts electricity?

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

220. Which cores are used in intermediate frequency transformers?

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

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

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

222. Which parameter is maintained constant in zener diode?

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

223. Electrical conductivity of gold is

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

224. What is the use of screw driver?

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

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

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

226. 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

227. Which material is used for making instrument cabinets?

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

228. How many alternating layers are there in IGBT?

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

229. In which analog meter the battery is provided?

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

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

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

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

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

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

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

233. What is the code number of TRIAC?

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

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

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

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

A) 20 mA
B) 8 mA

C) 10 mA D) 5 mA

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

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

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

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

238. 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

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

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

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

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

241. 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

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

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

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

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

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

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

245. Which is electronic simulation software?

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

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

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

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

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

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

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

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

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

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

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

251. Which is the combination of photo transistor?

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

252. Which unit is used to measure capacitance value?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

260. Which type of voltage regulator is IC 723?

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

261. 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

262. 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

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

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

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

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

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

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

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

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

267. 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 1018 electrons
D) 6.25 x 1016 electrons

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

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

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

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

270. 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) 4000 to 800 r.p.m
D) 3600 to 7200 r.p.m

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

279. 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

280. Which electrical parameter is measured by the megger?

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

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

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

282. Which memory device loses data on power failure?

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

283. Which value is equal to one picofarad?

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

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

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

285. What is the use of photo transistor?

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

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

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

287. 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

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

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

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

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

290. What are the uses of simulation softwares?

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

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

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

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

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

293. What is the advantage of using digital multimeter?

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

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

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

295. How can you confirm a transistor as defective?

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

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

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

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

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

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

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

299. Which is the N - channel FET?

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

300. Which metal coating is used on compact disk?

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

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

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

302. What is the term stands for TRIAC?

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

303. 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

304. 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

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

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

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

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

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

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

308. Which soldering instrument has hot air blowing facility?

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

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

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

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

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

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

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

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

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

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

A) Position Magnet Moving Coil meter
B) Principle Magnet Moving Coil meter

C) Parallel Magnet Moving Coil meter
D) Permanent Magnet Moving Coil meter

314. What is the unit of electric charge?

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

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

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

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

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

317. What is the shape of mandatory signs?

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

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

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

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

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

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

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

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

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

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

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

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

324. What is the type of transistor BPX81?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

336. 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

337. What is the purpose of wood rasp file?

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

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

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

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

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

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

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

341. 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 nano seconds
D) 1 to 100 milli seconds

342. Which battery is used for cellular phones?

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

343. How gate is biased in JFET?

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

344. 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) 4 Ohms
D) 2 Ohms

345. What is the unit of electric charge?

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

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

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

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

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

348. How the negative feedback is called?

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

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

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

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

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

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

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

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

A) Minimum output signal FET
B) Metal oxide semiconductor FET

C) Medium oscillator signal FET
D) Metal orgamic serial FET

353. How power rating is specified for transformers?

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

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

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

355. Which mode is used in differential amplifier?

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

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

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

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

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

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

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

359. What is the use of flip - flop?

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

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

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

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

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

362. How the insulators are called?

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

363. Which step is important for soldering a joint?

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

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

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

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

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

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

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

367. Which device is a unipolar transistor?

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

368. Which electrical property opposes the flow of electrons?

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

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

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

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

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

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

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

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

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

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

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

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

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

375. What is stationary electric charges?

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

376. At which temperature the 6040 solder start meeting?

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

377. What is the use of schmitt trigger circuit?

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

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

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

379. How the gas and liquefied gases are classified

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

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

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

381. Why the plunger desoldering tool needs periodical cleaning?

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

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

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

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

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

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

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

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

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

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

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

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

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

388. Which meter uses a moving coil for measurement?

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

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

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

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

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

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

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

392. What is the main application of photo resistor?

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

393. 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

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

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

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

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

396. Which circuit uses photo-darlington devices?

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

397. Which electrical parameter opposes the flow of electrons?

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

398. Which parameter is measured by a multimeter?

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

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

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

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

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

401. What is the information stored in digital registers?

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

402. 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 becomes greater than bias battery voltage
D) Signal voltage is lesser than bias battery voltage

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

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

404. What is the limitation of integrated circuits?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

416. What is the advantage of IGBT?

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

417. What is characteristics of instrumentation amplifier?

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

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

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

419. 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 - 6
C) ITU band - 8
D) ITU band - 4

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

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

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

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

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

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