EM-THEORY-466-MCQ-ALL-1ST-YEAR

ITI Quiz - - -2026 03:34 PM

Q. ID: ITISKILL5223VK

March 2026 | **Sri Mahalingeswara ITI** | Answer Key

Duration: 30 Mins | **Total Marks: 422** | **Q.ID: ITISKILL5223VK**

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

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

Answer: B) Junction ruptured and short circuited

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

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

Answer: D) Relaxation oscillator

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

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

Answer: A) No moving parts to wear and tear

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

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

Answer: C) Combination clipper circuit

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

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

Answer: A) Voltage across it reached the zener voltage

6. 6 What is the input impedance of IGBT?

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

Answer: C) High

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

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

Answer: A) Pulse repetition

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

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

Answer: D) 6.25 x 1018 electrons

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

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

Answer: A) One time constant

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

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

Answer: C) Protection against weather

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

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

Answer: D) TO-92

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

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

Answer: D) Capacitor Input filter

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

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

Answer: A) Mechanical energy

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

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

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

15. Which type of clipper is that a small portion of the

negative half cycle of signal is removed?

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

Answer: C) Biased negative clipper

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

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

Answer: C) 60:40:00

17. How gate is biased in JFET?

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

Answer: C) Reverse biased

18. What is the limitation of integrated circuits?

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

Answer: A) Greater flexibility

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

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

Answer: A) Zinc

20. Which soldering instrument has hot air blowing facility?

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

Answer: C) Soldering station

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

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

Answer: C) Pin number 3

22. What is the advantage of MOSFET?

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

Answer: B) Low gate signal power requirements

23. What is the shape of prohibition sign?

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

Answer: D) Circular

24. 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) To help the corrosive action
D) Remove residual flux and prevent corrosion

Answer: D) Remove residual flux and prevent corrosion

25. How batteries are classified?

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

Answer: B) Primary cells and secondary cells

26. Which circuit uses photo-darlington devices?

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

Answer: A) DC circuits

27. Which material conducts electricity?

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

Answer: B) Copper

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

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

Answer: D) At normal condition

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

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

Answer: A) 2.5 V

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

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

Answer: A) Higher thermal stability

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

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

Answer: D) LC values required is too large

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

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

Answer: B) 4.5 V to 5.5 V

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

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

Answer: D) Steel toe caps

34. Which formula is used to find the conductance?

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

Answer: D) I / V

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

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

Answer: A) 1 to 100 nano seconds

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

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

Answer: A) Electric current

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

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

Answer: B) (1276)10

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

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

Answer: A) Use abrasive method

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

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

Answer: D) 1.5 VDC

40. What is successive approximation (SAR)?

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

Answer: B) Method of D/A conversion

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

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

Answer: B) 6.666 Ohms

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

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

Answer: B) Memory

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

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

Answer: A) ITU band - 10

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

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

Answer: B) Negative resistance characteristics

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

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

Answer: A) Increased temperature

46. What is the shape of mandatory signs?

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

Answer: D) Circular

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

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

Answer: B) Double Pole Double Throw

48. 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

Answer: D) Drag and drop

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

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

Answer: A) Current

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

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

Answer: A) Metal oxide varistor

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

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

Answer: A) Dry powdered

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

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

Answer: C) All program

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

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

Answer: B) Band 9

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

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

Answer: A) Move the victim to a ventilated place

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

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

Answer: B) SCR

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

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

Answer: D) Never reach saturation

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

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

Answer: A) Hexagonal prism with pyramid at ends

58. How the insulators are called?

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

Answer: C) Dielectrics

59. Which circuit uses the enhancement type MOSFET?

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

Answer: B) Integrated MOS switching circuits

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

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

Answer: A) Fast recovery diode

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

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

Answer: A) 74 LS 138

62. Which material contains eight electrons in valency layer?

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

Answer: A) Insulators

63. What is the purpose of trimmer capacitor?

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

Answer: C) Fine tuning

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

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

Answer: D) 30 V

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

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

Answer: B) Wrong lifting technique

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

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

Answer: D) PIV voltage

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

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

Answer: D) 40%

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

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

Answer: B) Serving as an oscillator

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

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

Answer: C) Cadmium sulfide

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

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

Answer: A) Radio receivers

71. Which angle is checked by the try square?

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

Answer: C) 90 Degree

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

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

Answer: A) 1.7 V

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

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

Answer: B) Large block accessing

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

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

Answer: B) Clamper circuit

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

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

Answer: D) Relaxation oscillator

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

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

Answer: A) Schafer's method

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

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

Answer: D) Capacitor

78. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: A) To prevent clogging of the nozzle

79. Which material is used as electrical insulator?

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

Answer: A) Porcelain

80. What type of control is used for FET?

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

Answer: D) Voltage controlled device

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

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

Answer: C) Switch OFF power supply

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

A) Spring control
B) Magnetic attraction control

C) Air damping control
D) Magnetic repulsion control

Answer: A) Spring control

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

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

Answer: D) 8 V

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

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

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

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

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

Answer: C) Half of the rated output voltage

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

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

Answer: C) Printing the valves

87. 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

Answer: B) Low gain accuracy

88. Which rechargeable cell is designed with conductive polymer?

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

Answer: B) Plastic cell

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

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

Answer: C) It is non-conductive

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

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

Answer: D) By using quartz crystal

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

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

Answer: C) 90

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

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

Answer: D) Electrician's knife

93. Which is the N - channel FET?

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

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

94. What is the advantage of MOSFET?

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

Answer: A) Fast switching speed

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

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

Answer: C) Cascaded amplifier

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

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

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

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

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

Answer: D) Rectifying

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

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

Answer: B) 6V

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

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

Answer: C) Higher thermal stability

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

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

Answer: C) Sulphuric acid

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

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

Answer: B) One Op-Amp

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

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

Answer: C) 1000 and above

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

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

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

104. 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

Answer: C) 1 to 100 nano seconds

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

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

Answer: B) During switching

106. How the stationary electric charges are called?

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

Answer: D) Static charges

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

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

Answer: A) Cold joint

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

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

Answer: A) Break over voltage

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

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

Answer: D) Signal voltage becomes greater than bias battery voltage

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

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

Answer: B) 25 H

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

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

Answer: A) Very high input impedance

112. 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) DC output level is higher
D) The need of bulky transformer

Answer: D) The need of bulky transformer

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

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

Answer: A) 2.1 V

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

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

Answer: D) Plastic packaging

115. Which device is a unipolar transistor?

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

Answer: D) FET

116. Which unit is used to measure capacitance value?

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

Answer: A) Farad

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

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

Answer: B) Silicon material used

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

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

Answer: A) Mutual induction

119. 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 320 Degree Centigrade
C) Lamp is ON at 400 Degree Centigrade
D) Lamp is ON at 100 Degree Centigrade

Answer: A) Lamp is OFF at room temperature

120. 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

Answer: A) Results in dry brittle joint

121. What are the uses of simulation softwares?

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

Answer: B) Design and test a circuit

122. In which analog meter the battery is provided?

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

Answer: D) Ohm meter

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

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

Answer: D) IC/ IE

124. Which component opposes any change in current?

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

Answer: A) Inductor

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

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

Answer: A) To achieve uniformity of scale

126. How gate is biased in JFET?

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

Answer: D) Reverse biased

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

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

Answer: D) Signal diodes

128. Which meter uses a moving coil for measurement?

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

Answer: C) PMMC meter

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

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

Answer: C) When the solder is heated

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

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

Answer: A) Doping

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

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

Answer: D) Directly proportional

132. Rate of change of input voltage

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

Answer: A) Rate of change of output voltage

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

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

Answer: D) Very high

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

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

Answer: C) Considerable greater sensitivity

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

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

Answer: C) Both positive and negative feedback

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

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

Answer: C) Cadmium sulfide

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

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

Answer: D) Capacitive reactance

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

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

Answer: A) Compact Disk Read Only Memory

139. Which software is used to simulate electronic circuits?

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

Answer: D) Multi sim

140. Which device is a unipolar transistor?

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

Answer: A) FET

141. 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

Answer: C) Practically zero

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

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

Answer: C) Metal Oxide Varistor

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

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

Answer: A) 3 - 7 seconds

144. What is the term stands for TRIAC?

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

Answer: D) Triode AC semiconductor

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

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

Answer: C) NPN has higher switching speed

146. What is the advantage of using digital multimeter?

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

Answer: D) Accuracy

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

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

Answer: A) Lead selenide

148. Which step is important for soldering a joint?

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

Answer: A) Heating the joint

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

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

Answer: B) High speed switching

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

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

Answer: A) Current

151. 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

Answer: D) Dull grainy surface

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

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

Answer: D) IC 7495

153. What is the drawbacks of LDR?

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

Answer: D) Cannot be used to determine precise light levels

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

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

Answer: C) To produce oscillation

155. Which is the property of IGBT?

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

Answer: C) High efficiency and fast switching

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

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

Answer: B) Two

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

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

Answer: A) 1

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

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

Answer: D) It disturbs the chemical bonding take place

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

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

Answer: A) LCR bridge

160. Which mode is used in differential amplifier?

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

Answer: C) Common - mode operation

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

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

Answer: B) Ohmmeter

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

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

Answer: A) In hertz

163. What is characteristics of instrumentation amplifier?

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

Answer: C) High input impedance

164. Which part of the relay causes most trouble?

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

Answer: C) Relay contacts

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

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

Answer: A) Energy loss takes place

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

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

Answer: C) 5 time constants

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

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

Answer: A) Between 0.5 and 30 MhZ

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

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

Answer: B) LM 317

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

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

Answer: C) TRIAC

170. 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

Answer: B) 150 Degree Centigrade to 450 Degree Centigrade

171. Which metal coating is used on compact disk?

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

Answer: C) Aluminium

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

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

Answer: B) Tendency to fail shorted

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

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

Answer: A) Nickel metal hydride (NiMH)

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

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

Answer: A) Meter

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

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

Answer: A) Due to elastic property of insulation

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

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

Answer: B) Conductor s diameter

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

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

Answer: A) Series

178. How the sensitivity of voltmeter is determined?

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

Answer: B) Ohms per volt rating

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

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

Answer: A) Principal current

180. Which parameter is maintained constant in zener diode?

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

Answer: D) Voltage

181. 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

Answer: A) Greater than 4 Amp

182. Which value is equal to one picofarad?

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

Answer: C) 10-12 Farad

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

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

Answer: B) Light dependent resistor

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

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

Answer: A) 10 mA

185. Which is the N - channel FET?

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

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

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

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

Answer: D) Using pulse transformer

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

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

Answer: D) Provide regenerative feedback

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

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

Answer: D) Principal current

189. Which is the combination of photo transistor?

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

Answer: D) Photo diode and transistor

190. What is the use of flip - flop?

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

Answer: C) It stores binary information

191. Which electrical parameter is measured by the megger?

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

Answer: A) Insulation resistance

192. Which material is used for making instrument cabinets?

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

Answer: D) Sheet metal

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

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

Answer: A) Square wave

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

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

Answer: D) Ohmmeter

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

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

Answer: A) Four layer three junctions

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

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

Answer: A) Gelled electrolyte

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

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

Answer: C) 18 gauge rosin cored

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

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

Answer: A) 0.1 A

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

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

Answer: C) Electrodes

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

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

Answer: C) 1000 kW

201. What is the unit of electric charge?

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

Answer: C) Coulomb

202. Which torque is used in PMMC meter movement?

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

Answer: A) Moderate torque

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

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

Answer: A) IC 7905

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

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

Answer: A) 0.213 v

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

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

Answer: A) 1.2 V to 32 V

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

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

Answer: D) USB port

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

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

Answer: C) Large scale integration (LSI)

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

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

Answer: A) Soft soldering

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

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

Answer: A) Physical and sensory test

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

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

Answer: B) Common emitter configuration

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

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

Answer: D) About 50%

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

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

Answer: B) Metal oxide semiconductor FET

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

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

Answer: B) Desoldering pump

214. Which factor influences the severity of electrical shock?

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

Answer: A) Duration of current passing

215. What is the advantage of IGBT?

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

Answer: D) High efficiency and fast switching

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

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

Answer: D) Circuit work space

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

A) 3ⁿ B) 2ⁿ
C) 2ⁿ⁺¹ D) 1ⁿ

Answer: B) 2ⁿ

218. What is the cause of burnt relay contacts?

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

Answer: C) Excessive contact current

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

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

Answer: A) Absolute conversion accuracy

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

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

Answer: B) Control grid

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

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

Answer: A) Input terminal

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

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

Answer: B) Forward current conduction commences

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

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

Answer: C) Four

224. Which factor determines the inductance value?

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

Answer: D) Diameter of the coil

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

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

Answer: D) Blow horn stake

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

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

Answer: D) 10 mm to 15 mm

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

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

Answer: C) Fast switching

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

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

Answer: A) Brown, black, brown

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

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

Answer: C) Single Pole Double Throw

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

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

Answer: B) Flux

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

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

Answer: B) 300 mw

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

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

Answer: D) Focus

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

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

Answer: D) Double the input A/C frequency

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

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

Answer: B) Measure the rated output voltage

235. What is the unit of electric charge?

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

Answer: D) Coulomb

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

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

Answer: A) Trigger

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

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

Answer: D) + 4.75v to + 5.25V

238. How the gas and liquefied gases are classified

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

Answer: D) Class B fire

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

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

Answer: C) Heat

240. What is the function of clipper circuit?

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

Answer: C) Wave shaping

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

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

Answer: D) Control the swinging of the coil

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

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

Answer: C) TO-92

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

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

Answer: A) 0.56

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

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

Answer: D) Few micro Amperes

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

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

Answer: D) 20 mA

246. How batteries are classified based on their working?

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

Answer: B) Primary cells and secondary cells

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

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

Answer: D) 110

248. What is the unit of inductance?

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

Answer: A) Henry

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

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

Answer: D) 10 mA

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

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

Answer: C) Oscillator

251. Electrical conductivity of gold is

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

Answer: A) 67%

252. How the single strand wire is called?

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

Answer: A) Hook - up wire

253. What is the advantage of IGBT?

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

Answer: A) Low driving power

254. 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

Answer: A) Micro photo - lithographic process

255. What is the main application of photo resistor?

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

Answer: D) Controls of street lighting systems

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

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

Answer: B) By built-in calibration signal

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

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

Answer: C) Power Amplifier

258. What is the purpose of wood rasp file?

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

Answer: D) Preliminary rough work

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

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

Answer: B) Memory

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

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

Answer: A) Excessive contact current

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

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

Answer: C) Power good signal

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

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

Answer: C) 0.864

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

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

Answer: B) Calibration

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

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

Answer: A) Poor switching speed

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

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

Answer: D) 10 ns

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

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

Answer: D) 2.5 V

267. How can you confirm a transistor as defective?

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

Answer: D) By ohm meter testing

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

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

Answer: C) Constant voltage charging method

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

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

Answer: A) Measure diameter of wire

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

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

Answer: A) Reset

271. 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

Answer: C) Number of bits used

272. What is the term stands for TRIAC?

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

Answer: A) Triode AC semiconductor

273. How many alternating layers are there in IGBT?

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

Answer: C) 4 layers

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

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

Answer: B) Printer

275. What is the use of photo transistor?

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

Answer: A) Used as light controlled switch

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

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

Answer: C) Random Access Memory

277. Which battery is used for cellular phones?

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

Answer: D) Lithium ion

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

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

Answer: A) Chemical energy into electrical energy

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

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

Answer: C) Topping up

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

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

Answer: C) 10 mW/gate

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

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

Answer: C) Unpleasant tingling sensation

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

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

Answer: C) 2 V

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

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

Answer: A) 5A

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

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

Answer: A) Low power transistors

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

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

Answer: C) Class - A

286. 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

Answer: D) 1.8 V

287. 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 infrared range
D) Low sensitivity in the Ultraviolet range

Answer: B) High sensitivity in the infrared range

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

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

Answer: B) JEDEC standard

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

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

Answer: D) Electron from source to drain

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

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

Answer: B) Digital frequency meter circuit

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

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

Answer: D) Gallium

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

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

Answer: A) Multi turn trim pots

293. What is the code number of TRIAC?

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

Answer: B) BT136

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

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

Answer: B) Standard wire gauge

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

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

Answer: D) Jet of water

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

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

Answer: C) Pulse repetition frequency

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

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

Answer: D) Indicate the health condition of battery

298. Which electrical parameter opposes the flow of electrons?

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

Answer: D) Resistance

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

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

Answer: D) Capacitive reactance

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

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

Answer: B) Ohm meter

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

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

Answer: C) Cooler fan

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

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

Answer: B) Using analysis menu

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

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

Answer: C) 5

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

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

Answer: A) High rate discharge tester

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

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

Answer: A) Allows high current flow

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

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

Answer: D) Rosin

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

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

Answer: C) Measuring parameter

308. Which electrical property opposes the flow of electrons?

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

Answer: D) Resistance

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

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

Answer: B) Less than 1

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

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

Answer: A) PMMC meter

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

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

Answer: C) Partition table

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

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

Answer: A) 1.8 Amp

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

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

Answer: C) Higher switching repetition rates

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

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

Answer: C) For DC component restoration

315. 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

Answer: C) 1.8 V

316. Which cores are used in intermediate frequency transformers?

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

Answer: D) Ferrite

317. Which is electronic simulation software?

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

Answer: C) Macspice

318. What is the use of schmitt trigger circuit?

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

Answer: B) AC to DC converter

319. How the single strand wire is called?

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

Answer: B) Hook up wire

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

JFET BF 245B?

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

Answer: A) 30 V

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

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

Answer: A) Power supplies

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

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

Answer: A) Silver

323. What is the shape of warning sign board?

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

Answer: A) Triangular shape

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

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

Answer: D) Negative clamping circuit

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

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

Answer: B) Power amplifier

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

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

Answer: D) Superior current conduction capability

327. 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

Answer: B) 30 V

328. 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

Answer: C) 1.4 V

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

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

Answer: C) Using virtual instrumentation testing

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

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

Answer: B) RC valves should be at least ten times

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

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

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

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

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

Answer: D) Discharging

333. What is the use of screw driver?

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

Answer: C) Tighten or loosen screws

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

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

Answer: A) Silver

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

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

Answer: B) By replacing moving coil

336. What are the fundamental properties of insulation

materials?

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

Answer: C) Insulation resistance and dielectric strength

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

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

Answer: A) Aluminium frame

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

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

Answer: C) To eleminate the transformer

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

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

Answer: D) Practically zero

340. What is the information stored in digital registers?

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

Answer: B) Binary values

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

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

Answer: A) Supply power to loads

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

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

Answer: A) Measuring parameter

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

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

Answer: B) Three gauge sizes decreased

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

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

Answer: A) TO-72

345. What is the type of transistor BPX81?

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

Answer: D) NPN - Photo transistor

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

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

Answer: C) Jewelled bearings

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

Answer: B) Voltage leads current by 45 Degree

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

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

Answer: C) Permanent magnetic fields

349. What is the code number of TRIAC?

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

Answer: A) BT136

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

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

Answer: B) To minimize eddy current losses

351. Which insulation layer is used in MOSFET?

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

Answer: B) Silicon-di-oxide

352. Which circuit photo SCR opto couplers are used?

A) DC circuits
B) Amplifier circuits

C) Counter circuits D) AC powered circuits

Answer: D) AC powered circuits

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

A) Brazing B) Soft soldering

C) Welding D) Hot soldering

Answer: A) Brazing

354. 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

Answer: C) Exactly 300 Mw

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

A) Combination clipper circuit B) Peak clipper circuit

C) Negative clamping circuit D) Positive clamping circuit

Answer: D) Positive clamping circuit

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

A) 1.835 B) 1.175

C) 1.245 D) 1.945

Answer: A) 1.835

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

A) Boron B) Indium

C) Gallium D) Arsenic

Answer: D) Arsenic

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

A) Trial and error method B) Sensory test method

C) Step by step method D) Logical approach method

Answer: D) Logical approach method

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

A) Water B) Isopropyl alcohol

C) Organic flux D) Petrol

Answer: B) Isopropyl alcohol

360. Which type of voltage regulator is IC 723?

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

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

Answer: D) Three pin adjustable voltage regulator

361. What is the purpose of using IC74LS190?

A) Modulator B) Comparator

C) Attemnator D) Up/down counter

Answer: D) Up/down counter

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

A) Industry Software Architecture B) Institution Standard Architecture

C) Industry Standard Architecture D) Industry System Architecture

Answer: C) Industry Standard Architecture

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

A) 200 Hz B) 40 Hz

C) 60 Hz D) 100 Hz

Answer: D) 100 Hz

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

A) Leads to interwinding leakage B) Transformer heated up excessively

C) Delivers reduced secondary voltage D) Burn out windings

Answer: C) Delivers reduced secondary voltage

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

A) 25mA B) 45mA

C) 15mA D) 35mA

Answer: A) 25mA

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

A) 27% B) 40%

C) 12% D) 25%

Answer: A) 27%

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

A) Cache memory B) MODEM

C) Processor D) Chipset

Answer: B) MODEM

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

A) Using MCB B) Using Safety resistor

C) By soft start circuit D) By the fuse

Answer: C) By soft start circuit

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

A) Floppy drive port B) Com 2 port

C) IDE port D) Com 1 port

Answer: C) IDE port

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

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

Answer: A) Diode and resistor

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

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

Answer: A) Uses split capacitor

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

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

Answer: D) B3202

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

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

Answer: B) Memory circuits

374. Which class of fire is classified involving metals?

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

Answer: B) Class D

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

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

Answer: B) 100 to 400 Amp

376. What is the input impedance of IGBT?

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

Answer: C) High input impedance

377. What is the shape of standard wire gauge?

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

Answer: D) Circular metal disk

378. How power rating is specified for transformers?

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

Answer: D) Volt ampere (VA)

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

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

Answer: A) Photo resistors

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

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

Answer: A) Alt + F4

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

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

Answer: D) 0.2MA to 1.6MA

382. 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

Answer: C) Notches

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

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

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

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

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

Answer: D) 1000 milli watts

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

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

Answer: D) Clicking on the component group

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

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

Answer: C) TO-72

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

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

Answer: D) Conductor s diameter

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

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

Answer: B) Triangular wave output

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

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

Answer: A) PIV voltage

390. 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 the light sensitive receiver inside
D) By IR light produced inside the package

Answer: D) By IR light produced inside the package

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

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

Answer: C) Plastic packaging with metal heatsinks

392. Which materials are used for semiconductor?

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

Answer: B) Silicon and germanium

393. 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) 4 Ohms
C) 2 Ohms
D) 1 Ohm

Answer: A) 3 Ohms

394. What is stationary electric charges?

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

Answer: D) Static charges

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

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

Answer: D) 0.94

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

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

Answer: C) Smothering

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

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

Answer: B) Three Op-Amps

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

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

Answer: A) 6000 V

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

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

Answer: A) 2.0 A

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

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

Answer: C) Current

401. Which memory device loses data on power failure?

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

Answer: B) RAM

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

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

Answer: A) Signal voltage becomes greater than bias battery voltage

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

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

Answer: A) VCE (max) in volts

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

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

Answer: B) Deflection is independent of current direction

405. 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

Answer: B) Reddish brown

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

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

Answer: D) BF 194B

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

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

Answer: D) Defects the operation of switching signal

408. At which temperature the 6040 solder start meeting?

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

Answer: C) 200 Degree Centigrade

409. Which parameter is measured by a multimeter?

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

Answer: B) Voltage

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

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

Answer: D) Few micro Amperes

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

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

Answer: D) Dry solder joint

412. What is the reason for electric fire?

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

Answer: A) Overloading

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

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

Answer: A) 2.2 V

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

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

Answer: D) Permanent Magnet Moving Coil meter

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

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

Answer: D) 20 MA

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

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

Answer: C) 100 Amp

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

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

Answer: D) 6.5 mm

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

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

Answer: D) Permanent codes

419. How the negative feedback is called?

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

Answer: A) Degenerative feedback

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

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

Answer: D) 9 VDC

421. 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

Answer: A) Thyristor and transistors

422. What is the advantage of SMPS in computer?

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

Answer: B) High efficiency