

Duration: 30 Mins

Total Marks: 422

Q.ID: ITISKILL8823VF

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

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

Answer: B) 9 VDC

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

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

Answer: D) 3 - 7 seconds

3. Electrical conductivity of gold is

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

Answer: C) 67%

4. In which analog meter the battery is provided?

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

Answer: C) Ohm meter

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

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

Answer: D) Signal diodes

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

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

Answer: B) Ohmmeter

7. Which electrical parameter is measured by the megger?

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

Answer: C) Insulation resistance

8. 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

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

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

Answer: A) Power good signal

10. What is characteristics of instrumentation amplifier?

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

Answer: C) High input impedance

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

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

Answer: A) 0.94

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

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

Answer: A) Circuit work space

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

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

Answer: A) Voltage across it reached the zener voltage

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

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

Answer: C) Measuring parameter

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

- A) 3^n
- B) 2^n
- C) 2^{n+1}
- D) 1^n

Answer: B) 2^n

16. What is the advantage of IGBT?

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

Answer: D) Low driving power

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

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

Answer: C) Double Pole Double Throw

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

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

Answer: D) Very high

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

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

Answer: C) Physical and sensory test

20. How the single strand wire is called?

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

Answer: C) Hook - up wire

21. What is the process of adding impurities to a pure semiconductor material?

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

Answer: C) Doping

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

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

Answer: D) 100 to 400 Amp

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

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

Answer: A) Triangular wave output

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

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

Answer: C) Measure the rated output voltage

25. Which part of the relay causes most trouble?

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

Answer: D) Relay contacts

26. Which is the combination of photo transistor?

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

Answer: D) Photo diode and transistor

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

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

Answer: A) Power amplifier

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

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

Answer: D) 2.5 V

29. 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

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

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

Answer: B) Dry solder joint

31. What is the maximum drain-source voltage, V_{DS} for the JFET BF 245B?

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

Answer: C) 30 V

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

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

Answer: C) Schafer's method

33. What is the purpose of using IC74LS190?

- A) Modulator B) Up/down counter
C) Attenuator D) Comparator

Answer: B) Up/down counter

34. At which temperature the 6040 solder start melting?

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

Answer: B) 200 Degree Centigrade

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

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

Answer: B) LC values required is too large

36. Which step is important for soldering a joint?

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

Answer: A) Heating the joint

37. Which angle is checked by the try square?

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

Answer: B) 90 Degree

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

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

Answer: D) Jet of water

39. 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) 4000 to 800 r.p.m D) 2500 to 5000 r.p.m

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

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

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

Answer: A) Logical approach method

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

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

Answer: C) 100 Hz

42. Which gauge number of rosin-cored solder is suitable for

soldering medium sized joints?

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

Answer: B) 18 gauge rosin cored

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

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

Answer: D) (1276)₁₀

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

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

Answer: B) Directly proportional

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

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

Answer: A) Mutual induction

46. 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

47. Which soldering instrument has hot air blowing facility?

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

Answer: A) Soldering station

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

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

Answer: D) Soft soldering

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

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

Answer: D) Four layer three junctions

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

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

Answer: B) Half of the rated output voltage

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

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

Answer: C) Measure diameter of wire

52. Which material is used as electrical insulator?

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

Answer: B) Porcelain

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

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

Answer: C) Higher thermal stability

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

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

Answer: B) Random Access Memory

55. How the single strand wire is called?

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

Answer: D) Hook up wire

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

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

Answer: C) When the solder is heated

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

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

Answer: A) 1.7 V

58. What is the input impedance of darlington pair transistors?

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

Answer: C) Very high input impedance

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

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

Answer: B) Metal oxide varistor

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

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

Answer: A) Sulphuric acid

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

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

Answer: D) Aluminium frame

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

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

Answer: C) Negative resistance characteristics

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

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

Answer: D) All program

64. What is the input impedance of IGBT?

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

Answer: C) High input impedance

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

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

Answer: B) TO-72

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

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

Answer: B) 10 ns

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

- A) 20 mA B) 10 mA

C) 8 mA

D) 5 mA

Answer: B) 10 mA

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

A) Spring control

B) Air damping control

C) Magnetic attraction control

D) Magnetic repulsion control

Answer: A) Spring control

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

A) Energy

B) Voltage

C) Frequency

D) Current

Answer: D) Current

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

A) 600 Degree Centigrade to 800 Degree Centigrade

B) 450 Degree Centigrade to 600 Degree Centigrade

C) 150 Degree Centigrade to 450 Degree Centigrade

D) 800 Degree Centigrade to 1000 Degree Centigrade

Answer: C) 150 Degree Centigrade to 450 Degree Centigrade

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

A) Soft soldering

B) Welding

C) Brazing

D) Hot soldering

Answer: C) Brazing

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

A) Electrical energy into mechanical energy

B) Chemical energy into electrical energy

C) Mechanical energy into electrical energy

D) Electrical energy into light energy

Answer: B) Chemical energy into electrical energy

73. Which factor determines the inductance value?

A) Material of the coil

B) Current flow through the coil

C) Diameter of the coil

D) Frequency of the current

Answer: C) Diameter of the coil

74. What is the maximum drain current I_D for BFW10?

A) 10 mA

B) 5 mA

C) 30 mA

D) 20 mA

Answer: D) 20 mA

75. What is the maximum drain- source voltage, V_{DS} for the JFET BF 245B?

A) 30 V

B) 10 V

C) 20 V

D) 40 V

Answer: A) 30 V

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

A) Volt meter

B) Ammeter

C) Watt meter

D) Ohm meter

Answer: D) Ohm meter

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

A) Photo voltaic cells

B) Photo resistors

C) Photo diodes

D) Photo transistors

Answer: B) Photo resistors

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

A) Reverse current

B) Forward current

conduction commences

conduction commences

C) Reverse current turned off

D) Forward current

conduction stops

Answer: B) Forward current conduction commences

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

A) To decrease load current

B) To protect the load from arcing

C) Supply power to loads

D) To increase load current

Answer: C) Supply power to loads

80. 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

81. What type of control is used for FET?

A) Frequency controlled device

B) Resistance controlled device

C) Current controlled device

D) Voltage controlled device

Answer: D) Voltage controlled device

82. Which process the ICS are made?

A) Grown junction process

B) Micro photo - lithographic process

C) Point contact junction process

D) Point contact junction process

Answer: B) Micro photo - lithographic process

83. 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

Answer: A) Drag and drop

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

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

Answer: D) Silicon material used

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

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

Answer: A) 1.5 VDC

86. Which parameter is maintained constant in zener diode?

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

Answer: A) Voltage

87. What are the fundamental properties of insulation materials?

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

Answer: B) Insulation resistance and dielectric strength

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

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

Answer: C) Common emitter configuration

89. Which materials are used for semiconductor?

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

Answer: D) Silicon and germanium

90. How power rating is specified for transformers?

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

Answer: B) Volt ampere (VA)

91. Which component opposes any change in current?

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

Answer: B) Inductor

92. 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

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

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

Answer: A) Provide regenerative feedback

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

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

Answer: D) Nickel metal hydride (NiMH)

95. Which material contains eight electrons in valency layer?

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

Answer: D) Insulators

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

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

Answer: B) Steel toe caps

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

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

Answer: C) 30 V

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

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

Answer: A) It disturbs the chemical bonding take place

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

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

Answer: A) Partition table

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

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

Answer: D) 1000 milli watts

101. How many alternating layers are there in IGBT?

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

Answer: A) 4 layers

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

- A) 6.25×10^{16} electrons B) 6.25×10^{18} electrons
C) 6.25×10^{12} electrons D) 6.25×10^8 electrons

Answer: B) 6.25×10^{18} electrons

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

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

Answer: B) Reset

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

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

Answer: B) Diode and resistor

105. What is the advantage of MOSFET?

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

Answer: A) Low gate signal power requirements

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

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

Answer: A) Capacitor

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

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

Answer: C) Negative clamping circuit

108. Which formula is used to find the conductance?

- A) I / V B) V / I
C) Q / V D) $I \times R$

Answer: A) I / V

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

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

Answer: A) Remove residual flux and prevent corrosion

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

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

Answer: D) Fast switching

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

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

Answer: B) Electric current

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

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

Answer: B) Isopropyl alcohol

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

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

Answer: D) Using pulse transformer

114. 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

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

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

Answer: A) 60:40:00

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

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

Answer: C) 10 mW/gate

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

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

Answer: B) Few micro Amperes

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

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

Answer: D) Class - A

119. What is the cause of burnt relay contacts?

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

Answer: D) Excessive contact current

120. Which circuit uses the enhancement type MOSFET?

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

Answer: C) Integrated MOS switching circuits

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

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

Answer: D) 27%

122. 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

Answer: A) At normal condition

123. 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

Answer: D) 1.2 V to 32 V

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

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

Answer: C) Printing the values

125. How the gas and liquefied gases are classified

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

Answer: C) Class B fire

126. Which rechargeable cell is designed with conductive polymer?

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

Answer: B) Plastic cell

127. Which insulation layer is used in MOSFET?

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

Answer: A) Silicon-di-oxide

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

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

Answer: B) For DC component restoration

129. What is the purpose of trimmer capacitor?

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

Answer: A) Fine tuning

130. Which torque is used in PMMC meter movement?

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

Answer: D) Moderate torque

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

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

Answer: B) Cadmium sulfide

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

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

Answer: A) + 4.75v to + 5.25V

133. What is the current gain of a common ? base amplifier?

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

Answer: A) Less than 1

134. What is the information stored in digital registers?

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

Answer: A) Binary values

135. How gate is biased in JFET?

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

Answer: B) Reverse biased

136. Which memory device loses data on power failure?

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

Answer: A) RAM

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

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

Answer: C) Three Op-Amps

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

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

Answer: B) 1.8 V

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

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

Answer: A) Gelled electrolyte

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

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

Answer: B) MODEM

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

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

Answer: D) 5 time constants

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

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

Answer: A) Capacitive reactance

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

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

Answer: C) Clamper circuit

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

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

Answer: A) Lamp is OFF at room temperature

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

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

Answer: A) 25mA

146. What is the important feature of instrumentation amplifier?

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

Answer: C) Low gain accuracy

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

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

Answer: B) PIV voltage

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

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

Answer: B) PIV voltage

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

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

Answer: C) Conductor s diameter

150. Which material is used for making instrument cabinets?

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

Answer: A) Sheet metal

151. What is the code number of TRIAC?

- A) BT136
- B) 2N2646

C) BFW10

D) 2N1597

Answer: A) BT136

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

A) Transistor

B) TRIAC

C) UJT

D) Op-Amp

Answer: B) TRIAC

153. What is the unit of electric charge?

A) Volts

B) Coulomb

C) Ampere

D) Hertz

Answer: B) Coulomb

154. 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

155. What is successive approximation (SAR)?

A) Method of SMT

B) Method of D/A conversion

C) Method of D/A conversion

D) Method of IC fabrication

Answer: B) Method of D/A conversion

156. Which metal coating is used on compact disk?

A) Nickel

B) Aluminium

C) Silver

D) Chromium

Answer: B) Aluminium

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

A) Dull grainy surface

B) Poor wetting

C) Cold joint

D) Flux trapped against lead

Answer: A) Dull grainy surface

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

A) Four Op-Amps

B) Two Op-Amps

C) Two Op-Amps

D) One Op-Amp

Answer: D) One Op-Amp

159. What is the use of flip - flop?

A) It stores energy

B) It stores current

C) It stores binary information

D) It stores voltage

Answer: C) It stores binary information

160. 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

Answer: B) Metal Oxide Varistor

161. What is the advantage of SMPS in computer?

A) Servicing of SMPS is easy

B) Bulky

C) High frequency noise low

D) High efficiency

Answer: D) High efficiency

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

A) Steel bearings

B) Bush bearings

C) Gun metal bearings

D) Jewelled bearings

Answer: D) Jewelled bearings

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

A) Reset

B) "+VCC"

C) Trigger

D) Trigger

Answer: C) Trigger

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

A) Voltage regulator

B) Fast recovery diode

C) Error amplifier

D) Switching diode

Answer: B) Fast recovery diode

165. Which mode is used in differential amplifier?

A) Common - mode operation

B) Common emitter

C) Common emitter

D) Common base

Answer: A) Common - mode operation

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

A) 5.0 V to 7.5 V

B) 4.5 V to 5.5 V

C) 1.5 V to 2.2 V

D) 2.3 V to 3.6 V

Answer: B) 4.5 V to 5.5 V

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

A) Energy loss takes place

B) Magnetic flux increases

C) Back emf increases

D) Eddy current decreases

Answer: A) Energy loss takes place

168. How the insulators are called?

A) Thyristors

B) Semiconductors

C) Dielectrics

D) Molecules

Answer: C) Dielectrics

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

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

Answer: C) 0.864

170. 6 What is the input impedance of IGBT?

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

Answer: A) High

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

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

Answer: D) Tendency to fail shorted

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

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

Answer: D) 2.0 A

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

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

Answer: A) IC 7495

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

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

Answer: D) Zinc

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

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

Answer: A) Gallium

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

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

Answer: C) Principal current

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

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

Answer: B) Discharging

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

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

Answer: A) Electrodes

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

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

Answer: D) One time constant

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

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

Answer: D) Three gauge sizes decreased

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

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

Answer: B) Light dependent resistor

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

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

Answer: A) Poor switching speed

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

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

Answer: C) Clicking on the component group

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

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

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

185. Which value is equal to one picofarad?

- A) 1012 Farad
B) 10-6 Farad

C) 106 Farad D) 10-12 Farad

Answer: D) 10-12 Farad

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

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

Answer: D) Cooler fan

187. How batteries are classified based on their working?

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

Answer: A) Primary cells and secondary cells

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

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

Answer: A) Current

189. What is the reason for electric fire?

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

Answer: D) Overloading

190. What is the gate current (I_g) of the JFET, when reverse biased?

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

Answer: C) Practically zero

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

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

Answer: D) Input terminal

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

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

Answer: C) 1 to 100 nano seconds

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

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

Answer: D) Positive clamping circuit

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

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

Answer: A) Rosin

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

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

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

196. 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

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

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

Answer: C) Thyristor and transistors

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

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

Answer: C) 1.835

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

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

Answer: B) 6.5 mm

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

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

Answer: C) Compact Disk Read Only Memory

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

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

Answer: B) NPN has higher switching speed

202. What is the maximum forward gate current (I_g) for BFW10 JFET?

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

Answer: D) 10 mA

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

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

Answer: A) 10 mm to 15 mm

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

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

Answer: C) Large scale integration (LSI)

205. 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

206. Which software is used to simulate electronic circuits?

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

Answer: A) Multi sim

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

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

Answer: A) Number of bits used

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

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

Answer: B) BF 194B

209. What is the drawbacks of LDR?

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

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

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

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

Answer: D) Focus

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

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

Answer: B) 5A

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

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

Answer: A) Heat

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

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

Answer: B) Silver

214. What is the shape of mandatory signs?

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

Answer: C) Circular

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

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

Answer: C) USB port

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

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

Answer: A) High rate discharge tester

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

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

Answer: B) Move the victim to a ventilated place

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

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

Answer: B) Lead selenide

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

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

Answer: B) Arsenic

220. What is the use of photo transistor?

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

Answer: C) Used as light controlled switch

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

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

Answer: B) Unpleasant tingling sensation

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

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

Answer: D) Relaxation oscillator

223. 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 decrease to 100 Ohm
- C) Resistance will increase to 1 Kilo Ohm
- D) Resistance will increase to around 1 Mega Ohm

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

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

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

Answer: A) Ohmmeter

225. How can you confirm a transistor as defective?

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

Answer: B) By ohm meter testing

226. Which cores are used in intermediate frequency

transformers?

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

Answer: D) Ferrite

227. What is the efficiency transformer coupled class A amplifier?

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

Answer: C) About 50%

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

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

Answer: A) Few micro Amperes

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

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

Answer: D) Standard wire gauge

230. What is the advantage of PIN photo diodes?

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

Answer: C) High sensitivity in the infrared range

231. 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

Answer: C) Dry powdered

232. How the stationary electric charges are called?

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

Answer: C) Static charges

233. What is the term stands for TRIAC?

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

Answer: A) Triode AC semiconductor

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

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

Answer: D) To produce oscillation

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

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

Answer: D) 1

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

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

Answer: B) Using virtual instrumentation testing

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

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

Answer: B) Blow horn stake

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

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

Answer: A) By soft start circuit

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

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

Answer: D) To achieve uniformity of scale

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

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

Answer: B) 40%

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

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

Answer: B) Superior current conduction capability

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

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

Answer: D) Excessive contact current

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

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

Answer: A) By using quartz crystal

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

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

Answer: D) Double the input A/C frequency

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

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

Answer: A) LM 317

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

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

Answer: A) Power Amplifier

247. 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

Answer: A) 90

248. Which device is a unipolar transistor?

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

Answer: B) FET

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

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

Answer: C) B3202

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

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

Answer: C) 1.8 V

251. Which electrical quantity is directly proportional to the

current carrying capacity of the conductor?

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

Answer: A) Conductor s diameter

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

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

Answer: C) Hexagonal prism with pyramid at ends

253. Which unit is used to measure capacitance value?

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

Answer: B) Farad

254. 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) 2.134 v
- B) 1.525 v
- C) 3.567 v
- D) 0.213 v

Answer: D) 0.213 v

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

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

Answer: A) By built-in calibration signal

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

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

Answer: A) Switch OFF power supply

257. Which circuit uses photo-darlington devices?

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

Answer: A) DC circuits

258. Which battery is used for cellular phones?

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

Answer: A) Lithium ion

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

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

- C) Burn out windings
- D) Delivers reduced secondary voltage

Answer: D) Delivers reduced secondary voltage

260. How gate is biased in JFET?

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

Answer: B) Reverse biased

261. Which electrical property opposes the flow of electrons?

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

Answer: C) Resistance

262. Which factor influences the severity of electrical shock?

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

Answer: C) Duration of current passing

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

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

Answer: B) 74 LS 138

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

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

Answer: A) During switching

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

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

Answer: B) Principal current

266. Which parameter is measured by a multimeter?

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

Answer: B) Voltage

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

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

Answer: D) Cadmium sulfide

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

- A) 8 V
- B) 15 V

C) 32 V

D) 12 V

Answer: A) 8 V

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

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

Answer: B) Increased temperature

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

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

Answer: C) 2.5 V

271. What is the use of screw driver?

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

Answer: B) Tighten or loosen screws

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

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

Answer: C) Using analysis menu

273. Which is the N - channel FET?

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

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

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

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

Answer: A) Large block accessing

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

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

Answer: B) Printer

276. How batteries are classified?

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

Answer: D) Primary cells and secondary cells

277. 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

Answer: A) Control the swinging of the coil

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

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

Answer: B) PMMC meter

279. What is the shape of prohibition sign?

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

Answer: B) Circular

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

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

Answer: B) Measuring parameter

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

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

Answer: C) 1000 kW

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

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

Answer: B) 2.2 V

283. Which is the N - channel FET?

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

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

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

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

Answer: C) Memory

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

Answer: C) Digital frequency meter circuit

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

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

Answer: C) Results in dry brittle joint

304. 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) 2 Ohms
- C) 1 Ohm
- D) 4 Ohms

Answer: A) 3 Ohms

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

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

Answer: D) VCE (max) in volts

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

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

Answer: A) To eliminate the transformer

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

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

Answer: A) 6V

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

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

Answer: C) 1.4 V

309. Why the plunger desoldering tool needs periodical cleaning?

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

Answer: C) To prevent clogging of the nozzle

310. What are the uses of simulation softwares?

- A) Design a circuit
- B) Replace defective components

- C) Design and test a circuit
- D) Solder and desolder components

Answer: C) Design and test a circuit

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

- A) I_E / I_C
- B) I_E / I_C
- C) I_C / I_E
- D) I_B / I_E

Answer: C) I_C / I_E

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

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

Answer: C) Metal oxide semiconductor FET

313. 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

Answer: B) Absolute conversion accuracy

314. What is the shape of standard wire gauge?

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

Answer: C) Circular metal disk

315. What is stationary electric charges?

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

Answer: A) Static charges

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

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

Answer: C) Biased negative clipper

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

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

Answer: B) Reddish brown

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

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

Answer: A) Square wave

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

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

Answer: C) Allows high current flow

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

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

Answer: A) Memory circuits

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

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

Answer: A) Defects the operation of switching signal

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

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

Answer: C) TO-92

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

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

Answer: A) RC values should be at least ten times

324. What is the purpose of wood rasp file?

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

Answer: B) Preliminary rough work

325. Which is electronic simulation software?

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

Answer: B) Macspice

326. Which type of voltage regulator is IC 723?

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

Answer: A) Three pin adjustable voltage regulator

327. Which band is used for UHF in International

Telecommunication System?

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

Answer: C) Band 9

328. What is the gate current (I_g) of the JFET, when reverse biased?

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

Answer: D) Practically zero

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

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

Answer: B) Pulse repetition frequency

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

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

Answer: D) TO-92

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

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

Answer: C) Relaxation oscillator

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

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

Answer: B) ITU band - 10

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

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

Answer: B) Low power transistors

334. Which device is a unipolar transistor?

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

Answer: D) FET

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

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

Answer: D) 6000 V

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

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

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

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

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

Answer: D) Break over voltage

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

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

Answer: B) Capacitive reactance

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

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

Answer: D) Both positive and negative feedback

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

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

Answer: A) 0.1 A

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

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

Answer: D) Silver

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

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

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

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

- A) Three
- B) Four

C) Five

D) Two

Answer: D) Two

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

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

Answer: B) Single Pole Double Throw

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

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

Answer: A) LCR bridge

346. What is the advantage of using digital multimeter?

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

Answer: B) Accuracy

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

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

Answer: B) Memory

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

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

Answer: D) JEDEC standard

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

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

Answer: C) IDE port

350. What is the shape of warning sign board?

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

Answer: B) Triangular shape

351. What is the function of clipper circuit?

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

Answer: C) Wave shaping

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

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

Answer: B) Higher switching repetition rates

353. What is the unit of electric charge?

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

Answer: C) Coulomb

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

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

Answer: C) High speed switching

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

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

Answer: B) Topping up

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

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

Answer: D) Capacitor Input filter

357. 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

Answer: A) Serving as an oscillator

358. What is the limitation of integrated circuits?

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

Answer: B) Greater flexibility

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

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

Answer: B) Protection against weather

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

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

Answer: C) Control grid

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

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

Answer: D) Use abrasive method

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

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

Answer: B) 300 mw

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

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

Answer: C) Flux

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

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

Answer: A) 6.666 Ohms

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

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

Answer: B) No moving parts to wear and tear

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

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

Answer: A) Desoldering pump

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

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

Answer: D) 20 MA

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

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

Answer: B) Series

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

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

Answer: D) Permanent codes

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

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

Answer: C) 1.8 Amp

371. Which electrical parameter opposes the flow of electrons?

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

Answer: A) Resistance

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

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

Answer: D) It is non-conductive

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

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

Answer: A) Rectifying

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

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

Answer: A) Permanent magnetic fields

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

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

Answer: B) Four

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

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

Answer: C) Considerable greater sensitivity

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

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

Answer: C) Multi turn trim pots

378. How the negative feedback is called?

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

Answer: A) Degenerative feedback

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

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

Answer: A) 5

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

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

Answer: A) Never reach saturation

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

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

Answer: C) In hertz

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

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

Answer: B) Pin number 3

383. What is the term stands for TRIAC?

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

Answer: D) Triode AC semiconductor

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

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

Answer: B) Higher thermal stability

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

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

Answer: C) The need of bulky transformer

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

- A) Oscillator
- B) Amplifier

C) Demodulator D) Multiplexed

Answer: A) Oscillator

387. Which class of fire is classified involving metals?

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

Answer: C) Class D

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

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

Answer: B) Brown, black, brown

389. What is the type of transistor BPX81?

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

Answer: C) NPN - Photo transistor

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

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

Answer: B) 2.1 V

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

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

Answer: C) Wrong lifting technique

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

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

Answer: B) Alt + F4

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

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

Answer: B) Combination clipper circuit

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

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

Answer: C) 0.56

395. What is the use of schmitt trigger circuit?

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

Answer: C) AC to DC converter

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

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

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

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

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

Answer: D) SCR

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

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

Answer: B) Uses split capacitor

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

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

Answer: B) Plastic packaging with metal heatsinks

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

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

Answer: A) 100 Amp

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

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

Answer: B) Plastic packaging

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

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

Answer: D) Voltage leads current by 45 Degree

403. Which is the drain current (I_d) in JFET?

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

Answer: C) Electron from source to drain

404. Rate of change of input voltage

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

Answer: C) Rate of change of output voltage

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

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

Answer: C) Constant voltage charging method

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

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

Answer: B) Exactly 300 Mw

407. 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

408. Which circuit photo SCR opto couplers are used?

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

Answer: A) AC powered circuits

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

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

Answer: A) 1000 and above

410. How the sensitivity of voltmeter is determined?

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

Answer: A) Ohms per volt rating

411. How the light sensitive photo transistor enclosed inside

a tight package is activated?

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

Answer: B) By IR light produced inside the package

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

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

Answer: B) Cold joint

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

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

Answer: A) Indicate the health condition of battery

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

- A) Between 0.1 and 1MHz
- B) Between 0.5 and 25 MHz
- C) Between 0.5 and 30 Mhz
- D) Between 0.1 and 10 MHz

Answer: C) Between 0.5 and 30 Mhz

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

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

Answer: C) To minimize eddy current losses

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

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

Answer: A) Current

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

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

Answer: B) Notches

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

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

Answer: B) Radio receivers

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

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

Answer: C) Due to elastic property of insulation

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

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

Answer: C) 110

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

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

Answer: A) Meter

422. 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) 0.2MA to 1.6MA
- D) 0.1MA to 1.2MA

Answer: C) 0.2MA to 1.6MA
