

July 2026

Question Paper

Duration: 30 Mins

Total Marks: 176

ID: ITISKILL8621GP

Student Name: _____	Roll No: _____
---------------------	----------------

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

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

2. How the negative feedback is called?

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

3. What is the term stands for TRIAC?

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

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

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

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

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

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

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

7. Which value is equal to one picofarad?

- | | |
|--------------------|---------------------|
| A) 10^{12} Farad | B) 10^6 Farad |
| C) 10^{-6} Farad | D) 10^{-12} Farad |

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

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

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

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

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

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

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

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

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

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

13. 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_B / I_E | D) I_C / I_E |

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

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

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

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

16. What is the term stands for TRIAC?

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

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

- A) Water vapour
C) Heat

- B) Fire
D) Cool air

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

- A) LM 105
C) LM 100

- B) LM 305
D) LM 317

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

- A) DC voltmeter
C) Hydrometer

- B) High rate discharge tester
D) Multimeter

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

- A) Electric current
C) Inductance

- B) Conductance
D) Resistance

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

- A) Oscillator
C) Amplifier

- B) Multiplexed
D) Demodulator

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

- A) Principle Magnet Moving Coil meter
C) Parallel Magnet Moving Coil meter

- B) Position Magnet Moving Coil meter
D) Permanent Magnet Moving Coil meter

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

- A) Brazing
C) Welding

- B) Soft soldering
D) Hot soldering

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

- A) No current flows through the junction
C) Increases the cut - in - voltage

- B) Barrier width of junction increases
D) Junction ruptured and short circuited

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

- A) Between 0.1 and 10 MHz
C) Between 0.5 and 25 MHz

- B) Between 0.5 and 30 MHz
D) Between 0.1 and 1MHz

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

- A) By the light sensitive receiver inside

- B) By IR light produced inside the package

- C) By the bias voltage to the photo transistor

- D) By the external signal to the transistor

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

- A) 0.7 V
C) 1.4 V

- B) 0.3 V
D) 0.2 V

28. What is the use of flip - flop?

- A) It stores energy
C) It stores binary information

- B) It stores voltage
D) It stores current

29. How the insulators are called?

- A) Thyristors
C) Dielectrics

- B) Semiconductors
D) Molecules

30. What is the limitation of integrated circuits?

- A) Increased reliability
C) Greater flexibility

- B) Drains more current
D) Greater flexibility

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

- A) 5.0 Amp
C) 2.0 Amp

- B) 1.8 Amp
D) 0.9 Amp

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

- A) Cadmium sulfide
C) Aluminium sulfide

- B) Copper sulfide
D) Zinc sulfide

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

- A) Input terminal
C) Output terminal

- B) Pointer mechanism
D) Output terminal

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

- A) Up/down counter circuit
C) Digital frequency meter circuit

- B) Digital frequency meter circuit
D) Schmitt trigger circuit

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

- A) IC 7486
C) 74 LS 138

- B) 74 LS 151
D) IC 7483

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

- A) Carbon-di-oxide
C) Dry powdered

- B) Foam type
D) Jet of water

37. What is the use of screw driver?

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

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

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

39. How power rating is specified for transformers?

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

40. 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

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

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

42. 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

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

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

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

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

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

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

46. What is the information stored in digital registers?

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

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

- A) Carbon film resistor B) Metal oxide varistor

- C) Wire wound resistor D) Metal film resistor

48. Which metal coating is used on compact disk?

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

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

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

50. What is the use of photo transistor?

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

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

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

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

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

53. What is the minimum forward current I_f for single colour LEDs?

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

54. Which circuit uses the enhancement type MOSFET?

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

55. What is the maximum power dissipation P_{max} for BF 245B?

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

56. 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

57. Which insulation layer is used in MOSFET?

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

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

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

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

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

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

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

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

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

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

62. What is the advantage of MOSFET?

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

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

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

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

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

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

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

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

67. What is the use of schmitt trigger circuit?

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

68. Why the plunger desoldering tool needs periodical cleaning?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

78. What is the cause of burnt relay contacts?

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

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

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

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

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

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

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

82. How gate is biased in JFET?

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

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

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

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

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

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

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

86. Which part of the relay causes most trouble?

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

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

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

88. At which temperature the 6040 solder start meeting?

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

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

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

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

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

91. Which is the property of IGBT?

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

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

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

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

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

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

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

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

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

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

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

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

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

98. 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

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

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

100. Which circuit uses photo-darlington devices?

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

101. Which torque is used in PMMC meter movement?

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

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

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

103. What type of control is used for FET?

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

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

- A) Connectivity Digital Read Only Memory
- B) Computer Disk Read Only Memory

- C) Compact Disk Read Only Memory
- D) Classified Device Read Only Memory

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

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

106. What is the unit of inductance?

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

107. What is the unit of electric charge?

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

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

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

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

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

110. What are the uses of simulation softwares?

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

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

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

112. What is the advantage of MOSFET?

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

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

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

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

A) 0 to 30 V

B) 1.2 V to 32 V

C) 0 to 25 V

D) 0 to 32 V

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

A) Sine wave

B) Saw tooth wave

C) Triangular wave

D) Square wave

116. What is the code number of TRIAC?

A) BFW10

B) 2N2646

C) 2N1597

D) BT136

117. What is the maximum drain current, I_D for BF 245B?

A) 15mA

B) 35mA

C) 25mA

D) 45mA

118. 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

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

A) 10 mm to 15 mm

B) 5 mm to 8 mm

C) 16 mm to 25 mm

D) 2 mm to 4 mm

120. Which electrical parameter is measured by the megger?

A) Current

B) Insulation resistance

C) Frequency

D) Voltage

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

A) In ampere

B) In volts

C) In hertz

D) In hertz

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

A) Quiescent current beyond the cut-off point

B) Q point set slightly below cut-off

C) Quiescent current at mid point

D) Quiescent current over the cut-off value

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

A) Leather toe caps

B) Rubber toe caps

C) Steel toe caps

D) Plastic toe caps

124. What is the maximum drain - source voltage, V_{DS} for BFW10?

A) 20 V

B) 40 V

C) 50 V

D) 30 V

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

A) IC 7404

B) IC 7493

C) IC 7447

D) IC 7495

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

A) Exactly 300 Mw

B) Exactly 300 Mw

C) Below 500 mW

D) Above 800 mW

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

A) Deflecting and controlling torques are

B) Weight of the soft iron pieces

C) Deflection is independent of current direction

D) Deflection is inversely proportional to current

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

A) 2.5 VDC

B) 4.0 VDC

C) 1.5 VDC

D) 1.0 VDC

129. 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) Double the time of signal frequency

C) Half the time period of signal

D) Five times the time period of signal

130. 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

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

A) 63:37:00

B) 20:40

C) 60:40:00

D) 40:60

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

A) 20 mA

B) 10 mA

C) 5 mA

D) 8 mA

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

A) Band 9

B) Band 11

C) Band 4

D) Band 6

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

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

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

135. Which mode is used in differential amplifier?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

151. Which type of voltage regulator is IC 723?

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

142. What are the fundamental properties of insulation materials?

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

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

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

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

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

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

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

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

154. How the insulation coating stays without damage, even

on bending the wire?

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

155. Which formula is used to find the conductance?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

165. Which material is used as electrical insulator?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- A) Using logic circuitry
- B) Using pulse transformer

C) Direct coupling method D) Using transistors

174. 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
-

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

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

176. Which material conducts electricity?

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