

July 2026

Question Paper

Duration: 30 Mins

Total Marks: 176

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Student Name: _____	Roll No: _____
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1. What is the full of the abbreviation DPDT used in switches?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

9. 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 |

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

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

11. Which factor determines the inductance value?

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

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

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

13. Rate of change of input voltage

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

14. What is the term stands for TRIAC?

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

15. 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 |

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

- | | |
|------------|------------|
| A) IC 7495 | B) IC 7447 |
|------------|------------|

C) IC 7493

D) IC 7404

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

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

18. 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) Five times the time period of signal
- D) Half the time period of signal

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

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

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

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

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

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

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

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

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

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

24. What is the information stored in digital registers?

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

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

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

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

A) Vernier caliper

B) Tester

C) Tester

D) Meter

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

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

28. What is the unit of electric charge?

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

29. 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

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

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

31. What is the advantage of MOSFET?

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

32. 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

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

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

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

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

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

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

36. 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) Proportional to the binary weight | D) Degree of accuracy |

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

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

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

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

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

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

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

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

41. What is the use of flip - flop?

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

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

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

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

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

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

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

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

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

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

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

47. What are the uses of simulation softwares?

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

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

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

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

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

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

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

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

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

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

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

53. What are the fundamental properties of insulation materials?

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

54. Which is the property of IGBT?

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

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

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

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

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

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

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

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

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

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

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

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

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

61. 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 |

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

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

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

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

64. Which material is used to make LDR for higher end

requirements?

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

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

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

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

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

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

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

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

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

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

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

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

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

71. How the insulators are called?

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

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

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

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

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

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

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

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

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

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

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

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

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

78. 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) Rubber toe caps | D) Plastic toe caps |

79. Which electrical parameter is measured by the megger?

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

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

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

81. Why the plunger desoldering tool needs periodical cleaning?

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

82. 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 |

83. What is the cause of burnt relay contacts?

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

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

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

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

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

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

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

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

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

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

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

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

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

90. What is the use of photo transistor?

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

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

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

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

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

93. 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

94. 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

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

A) 2.1 V

B) 2.2 V

C) 2 V

D) 1.8 V

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

A) + 4.75v to + 5.25V

B) + 1.5v to +2.5V

C) + 7.5v to + 12V

D) - 1.5v to - 2.5V

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

A) Combination clipper

B) Biased negative clipper

C) Positive clamper

D) Biased positive clipper

98. Which part of the relay causes most trouble?

A) Frame and core

B) Relay coil

C) Hinges

D) Relay contacts

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

A) Multi turn trim pots

B) Single turn dual pots

C) Single turn trim pots

D) Multi turn dual pots

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

A) Above 800 mW

B) Exactly 300 Mw

C) Exactly 300 Mw

D) Below 500 mW

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

A) Schmitt trigger circuit

B) Up/down counter circuit

C) Digital frequency meter circuit

D) Digital frequency meter circuit

102. What is the use of screw driver?

A) Hold the screws

B) Tighten or loosen screws

C) Tighten or loosen rivets

D) Tighten or loosen bolts

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

A) IDE port

B) Floppy drive port

C) Com 1 port

D) Com 2 port

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

A) Right clicking

B) Drag and drop

C) Double clicking

D) Left clicking

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

A) Forward break down voltage

B) PIV voltage

C) Break down voltage

D) Knee voltage

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

A) 1.5 A

B) 0.55 A

C) 1.0 A

D) 2.0 A

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

A) 0.5

B) 0.4

C) 0.632

D) 0.864

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

A) Electric current

B) Conductance

C) Resistance

D) Inductance

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

A) Oscillator

B) Demodulator

C) Multiplexed

D) Amplifier

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

A) Few micro Amperes

B) 100 milli Ampere

C) 50 milli Ampere

D) 10 milli Ampere

111. At which temperature the 6040 solder start meeting?

A) 300 Degree Centigrade

B) 200 Degree Centigrade

C) 100 Degree Centigrade

D) 380 Degree Centigrade

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

A) 5 MA

B) 30 MA

C) 20 MA

D) 10 MA

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

A) Spark generated during switching

B) Slower in operations

C) Bulky profile

D) No moving parts to wear and tear

114. Which type of voltage regulator is IC 723?

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

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

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

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

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

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

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

118. What is the limitation of integrated circuits?

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

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

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

120. Which metal coating is used on compact disk?

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

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

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

122. What is the use of schmitt trigger circuit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

130. Which torque is used in PMMC meter movement?

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

131. Which material is used as electrical insulator?

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

132. Which value is equal to one picofarad?

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

133. How gate is biased in JFET?

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

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

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

135. Which circuit uses photo-darlington devices?

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

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

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

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

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

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

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

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

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

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

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

141. Which circuit uses the enhancement type MOSFET?

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

142. How power rating is specified for transformers?

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

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

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

144. What is the unit of inductance?

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

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

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

146. 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 feed back |

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

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

148. Which formula is used to find the conductance?

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

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

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

150. What is the code number of TRIAC?

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

151. What type of control is used for FET?

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

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

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

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

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

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

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

155. Which mode is used in differential amplifier?

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

156. 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

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

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

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

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

159. Which insulation layer is used in MOSFET?

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

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

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

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

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

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

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

163. Which material conducts electricity?

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

164. 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

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

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

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

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

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

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

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

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

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

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

170. What is the term stands for TRIAC?

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

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

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

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

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

173. How the negative feedback is called?

- A) Regenerative feedback B) Voltage controlled feedback

- C) Degenerative feedback D) Current controlled feedback

174. What is the advantage of MOSFET?

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

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

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

176. What is successive approximation (SAR)?

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