

Duration: 30 Mins

Total Marks: 100

Q.ID: ITISKILL4957KI

1. What is the shape of prohibition sign?

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

Answer: A) Circular

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

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

Answer: B) Focus

3. What is the advantage of using digital multimeter?

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

Answer: A) Accuracy

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

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

Answer: C) To achieve uniformity of scale

5. What is the reason for electric fire?

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

Answer: A) Overloading

6. Which torque is used in PMMC meter movement?

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

Answer: D) Moderate torque

7. Which angle is checked by the try square?

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

Answer: B) 90 Degree

8. What is the shape of warning sign board?

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

Answer: C) Triangular shape

9. What is the shape of mandatory signs?

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

Answer: A) Circular

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

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

Answer: A) Voltage leads current by 45 Degree

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

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

Answer: D) Memory circuits

12. Which value is equal to one picofarad?

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

Answer: A) 10-12 Farad

13. What is the unit of electric charge?

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

Answer: B) Coulomb

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

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

Answer: A) PMMC meter

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

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

Answer: B) Supply power to loads

16. How the single strand wire is called?

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

Answer: D) Hook - up wire

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

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

Answer: D) 1000 milli watts

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

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

Answer: D) Calibration

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

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

Answer: A) Fast switching

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

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

Answer: D) Control the swinging of the coil

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

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

Answer: C) Capacitor Input filter

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

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

Answer: B) Move the victim to a ventilated place

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

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

Answer: C) 10 mW/gate

24. What is the unit of inductance?

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

Answer: A) Henry

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

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

Answer: A) Jet of water

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

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

Answer: C) Dry powdered

27. Which factor influences the severity of electrical shock?

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

Answer: D) Duration of current passing

28. Which component opposes any change in current?

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

Answer: C) Inductor

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

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

Answer: C) Silver

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

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

Answer: D) 6.25×10^{18} electrons

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

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

Answer: A) Notches

32. 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

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

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

Answer: B) Capacitive reactance

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

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

Answer: C) Electric current

35. Which material contains eight electrons in valency layer?

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

Answer: D) Insulators

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

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

Answer: C) + 4.75v to + 5.25V

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

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

Answer: C) Smothering

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

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

Answer: C) Deflection is independent of current direction

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

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

Answer: C) To minimize eddy current losses

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

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

Answer: A) (1276)₁₀

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

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

Answer: C) Wrong lifting technique

42. Which class of fire is classified involving metals?

- A) Class A
- B) Class C

C) Class B

D) Class D

Answer: D) Class D

43. Find the value of shunt resistance required for 1 mA meter to extend the range and measure 10 mA (RM = 27 Ohm) ?

- A) 2 Ohms
- B) 3 Ohms
- C) 4 Ohms
- D) 1 Ohm

Answer: B) 3 Ohms

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

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

Answer: C) 6.5 mm

45. Which parameter is measured by a multimeter?

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

Answer: B) Voltage

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

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

Answer: C) Multi turn trim pots

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

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

Answer: C) 10 ns

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

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

Answer: C) 1

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

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

Answer: D) 6.666 Ohms

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

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

Answer: D) LCR bridge

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

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

Answer: D) Permanent magnetic fields

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

- A) Magnetic attraction control B) Magnetic repulsion control
C) Air damping control D) Spring control

Answer: D) Spring control

53. How the gas and liquefied gases are classified

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

Answer: B) Class B fire

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

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

Answer: D) Delivers reduced secondary voltage

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

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

Answer: C) Protection against weather

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

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

Answer: D) 1000 kW

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

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

Answer: C) Four

58. How power rating is specified for transformers?

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

Answer: A) Volt ampere (VA)

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

- A) Excessive number of operations B) Excessive contact current

- C) Chatter during a slow release D) Low contact current

Answer: B) Excessive contact current

60. 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

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

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

Answer: A) Lamp is OFF at room temperature

62. Which material is used for making instrument cabinets?

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

Answer: B) Sheet metal

63. Electrical conductivity of gold is

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

Answer: C) 67%

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

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

Answer: C) Aluminium frame

65. Which unit is used to measure capacitance value?

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

Answer: A) Farad

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

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

Answer: B) Mutual induction

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

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

Answer: B) 5

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

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

Answer: C) Blow horn stake

69. What is the use of flip - flop?

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

Answer: B) It stores binary information

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

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

Answer: B) Control grid

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

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

Answer: B) Switch OFF power supply

72. Which cores are used in intermediate frequency transformers?

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

Answer: B) Ferrite

73. 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

Answer: D) Diameter of the coil

74. What is the purpose of wood rasp file?

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

Answer: A) Preliminary rough work

75. What is the cause of burnt relay contacts?

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

Answer: B) Excessive contact current

76. Which electrical property opposes the flow of electrons?

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

Answer: A) Resistance

77. What is the use of screw driver?

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

Answer: D) Tighten or loosen screws

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

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

Answer: C) 74 LS 138

79. Which material conducts electricity?

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

Answer: C) Copper

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

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

Answer: C) Square wave

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

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

Answer: C) Brown, black, brown

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

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

Answer: C) 25 H

83. How the single strand wire is called?

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

Answer: B) Hook up wire

84. Which meter uses a moving coil for measurement?

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

Answer: B) PMMC meter

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

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

Answer: C) Schafer's method

86. Which part of the relay causes most trouble?

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

Answer: D) Relay contacts

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

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

Answer: A) Energy loss takes place

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

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

Answer: B) Ohm meter

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

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

Answer: A) Steel toe caps

90. What is the purpose of trimmer capacitor?

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

Answer: A) Fine tuning

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

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

Answer: B) 110

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

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

Answer: A) 0.56

93. What is stationary electric charges?

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

Answer: A) Static charges

94. Which material is used as electrical insulator?

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

Answer: C) Porcelain

95. How the sensitivity of voltmeter is determined?

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

Answer: D) Ohms per volt rating

96. In which analog meter the battery is provided?

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

Answer: C) Ohm meter

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

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

Answer: A) Unpleasant tingling sensation

98. Which electrical parameter opposes the flow of electrons?

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

Answer: A) Resistance

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

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

Answer: A) 0.94

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

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

Answer: A) Permanent Magnet Moving Coil meter