

**Student: Preetham NB**

**Score: 90/100 (90.00%)**

**Code: 0772**

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

- A) Steel bearings                      B) Bush bearings  
**C) Jewelled bearings (Correct)**                      D) Gun metal bearings

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

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

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

- A) Sine wave (Incorrect)                      **B) Square wave (Correct)**  
 C) Saw tooth wave                      D) Triangular wave

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

- A) LCR bridge (Correct)**                      B) Wein bridge  
 C) Kelvin bridge                      D) Wheatstone bridge

5. In which analog meter the battery is provided?

- A) Ammeter                      B) Voltmeter  
**C) Ohm meter (Correct)**                      D) Watt meter (Incorrect)

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

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

7. Which meter uses a moving coil for measurement?

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

8. What is the advantage of using digital multimeter?

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

9. How power rating is specified for transformers?

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

10. Which component opposes any change in current?

- A) Diode                      B) Resistor  
**C) Inductor (Correct)**                      D) Capacitor

11. What is the unit of inductance?

- A) Joule                      B) Farad  
**C) Henry (Correct)**                      D) Watts

12. Which value is equal to one picofarad?

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

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

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

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

- A) 10 kW                      B) 100 kW  
**C) 1000 kW (Correct)**                      D) 2000 kW

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

- A) Dielectric (Incorrect)                      B) Capacitance  
 C) Stray capacitance                      **D) Capacitive reactance (Correct)**

16. Which unit is used to measure capacitance value?

- A) Mho                      B) Ohm  
**C) Farad (Correct)**                      D) Henry

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

- A) Ammeter                      B) Volt meter  
**C) Ohm meter (Correct)**                      D) Watt meter

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

- A) 6.666 Ohms (Correct)**                      B) 66.66 Ohms  
 C) 666.6 Ohms                      D) 6666 Ohms

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

- A) 05 H                      B) 10 H  
 C) 15 H                      **D) 25 H (Correct)**

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

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

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

- A) Coupling  
B) Induction  
C) Self induction  
D) **Mutual induction (Correct)**

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

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

23. Which part of the relay causes most trouble?

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

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

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

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

- A) 100  
B) 101  
C) **110 (Correct)**  
D) 111

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

- A) 4  
B) **5 (Correct)**  
C) 6  
D) 7

27. How the gas and liquefied gases are classified

- A) Class A fire  
B) **Class B fire (Correct)**  
C) Class C fire  
D) Class D fire

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

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

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

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

30. What is the shape of mandatory signs?

- A) Square  
B) **Circular (Correct)**  
C) Triangular  
D) Rectangular

31. Which material is used for making instrument cabinets?

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

32. What is the shape of warning sign board?

- A) Square shape  
B) Circular shape  
C) **Triangular shape (Correct)**  
D) Hexagonal shape

33. Which class of fire is classified involving metals?

- A) Class A  
B) Class B  
C) Class C  
D) **Class D (Correct)**

34. What is the shape of prohibition sign?

- A) Square  
B) **Circular (Correct)**  
C) Triangular  
D) Rectangular

35. Which angle is checked by the try square?

- A) 45 Degree  
B) 60 Degree  
C) 75 Degree  
D) **90 Degree (Correct)**

36. What is the use of screw driver?

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

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

- A) 0.35 mm  
B) 1.5 mm  
C) 3.5 mm  
D) **6.5 mm (Correct)**

38. What is the purpose of wood rasp file?

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

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

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

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

- A) **Schafer's method (Correct)**  
B) Mouth-to-nose method

C) Nose-to-mouth method    D) Mouth-to-mouth method

A) Gallium and indium

B) Silver and aluminium

C) Arsenic and antimony

**D) Silicon and germanium (Correct)**

41. Electrical conductivity of gold is

A) 56%

**B) 67% (Correct)**

C) 94%

D) 100%

42. Which material is used as electrical insulator?

A) Gallium

**B) Porcelain (Correct)**

C) Aluminium

D) Germanium

43. Which electrical parameter opposes the flow of electrons?

A) Power

B) Voltage

C) Current

**D) Resistance (Correct)**

44. How the single strand wire is called?

A) Flexible wire

B) Twisted wire

**C) Hook up wire (Correct)**

D) Multi strand wire

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

A) Increase current flow

B) Reduce current flow

C) Decrease voltage rating (Incorrect)

**D) Protection against weather**

46. Which material conducts electricity?

A) Mica

B) Paper

C) Glass

**D) Copper (Correct)**

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

A)  $6.25 \times 10^8$  electrons

B)  $6.25 \times 10^{12}$  electrons

C)  $6.25 \times 10^{16}$  electrons

**D)  $6.25 \times 10^{18}$  electrons (Correct)**

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

A) 0.56

B) 0.67

C) 0.94

**D) 1 (Correct)**

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

A) Resistance

B) Inductance (Incorrect)

C) Conductance

**D) Electric current**

50. Which formula is used to find the conductance?

A)  $Q / V$

B)  $I \times R$

C)  $V / I$

**D)  $I / V$  (Correct)**

51. Which materials are used for semiconductor?

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

A) Measure current

B) Measure voltage

**C) Measure diameter of wire (Correct)**

D) Measure insulation of wire

53. How the insulators are called?

A) Thyristors

B) Molecules

**C) Dielectrics (Correct)**

D) Semiconductors

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

**A) Electrician's knife (Correct)**

B) Manual wire stripper

C) Thermal wire stripper

D) Mechanical wire stripper

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

A) Cathode

B) Electrolyte

**C) Electrodes (Correct)**

D) Carbon rod

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

A) Zinc chloride

**B) Sulphuric acid (Correct)**

C) Alkaline solution

D) Potassium hydroxide solution

57. How batteries are classified?

A) Dry cells and alkaline cells

B) Button cells and lithium cells

**C) Primary cells and secondary cells (Correct)**

D) Cylindrical cells and rectangular cells

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

A) 1.0 VDC

**B) 1.5 VDC (Correct)**

C) 2.5 VDC

D) 4.0 VDC

59. Which battery is used for cellular phones?

A) Nickel ion

**B) Lithium ion (Correct)**

C) Zinc chloride

D) Sodium sulphur

60. What is the unit of electric charge?

A) Volts

B) Hertz

C) Ampere

**D) Coulomb (Correct)**

61. How batteries are classified based on their working?

A) Dry cells and alkaline cells

B) Button cells and lithium cells

**C) Primary cells and secondary cells (Correct)**

D) Cylindrical cells and rectangular cells

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

A) Red colour

B) Grey colour

**C) Reddish brown (Correct)** D) Spongy grey colour

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

A) Electrical energy into light energy

**B) Chemical energy into electrical energy (Correct)**

C) Mechanical energy into electrical energy

D) Electrical energy into mechanical energy

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

A) 3 VDC

B) 6 VDC

**C) 9 VDC (Correct)**

D) 12 VDC

65. Which parameter is maintained constant in zener diode?

A) Power

B) Current

**C) Voltage (Correct)**

D) Resistance

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

**A) PIV voltage (Correct)**

B) Knee voltage

C) Break down voltage

D) Reverse break down voltage

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

A) When bias voltage reached 0.7V

B) After the barrier voltage cancelled

C) Voltage across zener reached 0.3V

**D) Voltage across it reached the zener voltage (Correct)**

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

A) 40 Hz

B) 60 Hz

**C) 100 Hz (Correct)**

D) 200 Hz

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

A) DC output level is higher

B) The ripple frequency is higher

**C) The need of bulky transformer (Correct)**

D) Each diode carries half the load current

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

**A) Doping (Correct)**

B) Etching

C) Forming

D) Diffusion

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

A) Arsenic

**B) Gallium**

C) Antimony

D) Phosphorus (Incorrect)

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

A) Half of the input A/C frequency

**B) Double the input A/C frequency (Correct)**

C) Same frequency of the A/C input

D) Three times the input A/C frequency

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

A) Inverting

**B) Rectifying (Correct)**

C) Amplifying

D) Demodulating

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

A) Oil

**B) Flux (Correct)**

C) Acid

D) Grease

75. Which step is important for soldering a joint?

**A) Heating the joint (Correct)**

B) Cooling the joint

C) Pasting the joint

D) Cleaning the joint

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

**A) Two (Correct)**

B) Five

C) Four

D) Three

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

A) Single Phase Dual Throw

B) Single Pole Single Throw

**C) Single Pole Double Throw (Correct)**

D) Shared Pole Double Throw

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

A) 40:60

B) 20:40

**C) 60:40:00 (Correct)**

D) 63:37:00

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

A) After the solder melts

B) When the solder is melting

**C) During the solder is melting (Incorrect)**

**D) When the solder is heated**

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

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

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

- A) Brazing  
B) **Soft soldering**  
C) Hot soldering (Incorrect)  
D) Hard soldering

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

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

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

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

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

- A) Low  
B) High  
C) Medium  
**D) Very high (Correct)**

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

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

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

- A) Cascoded amplifier  
B) **Cascaded amplifier**  
C) Complementary symmetry amplifier (Incorrect)  
D) Darlington pair amplifier

87. How the negative feedback is called?

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

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

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

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

A) Complex design

**B) Higher thermal stability (Correct)**

C) Requires complicated bias arrangement

D) Silicon transistor needs low cut-in-voltage

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

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

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

- A) IF amplifier  
B) RF amplifier  
C) **Power amplifier (Correct)**  
D) Voltage amplifier

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

- A) IF Amplifier  
B) RF Amplifier  
C) **Power Amplifier (Correct)**  
D) Voltage Amplifier

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

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

94. How can you confirm a transistor as defective?

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

95. Jobs that have become outdated in the past 5 years \_\_\_\_\_ . | ಕಳೆದ 5 ವರ್ಷಗಳಲ್ಲಿ ಹಳತಾದ ಕೆಲಸಗಳು \_\_\_\_\_

- A) **STD booth | STD ಬೂತ್ (Correct)**  
B) ola | ಓಲಾ  
C) uber | ಉಬರ್  
D) swiggy | ಸ್ವಿಗ್ಗಿ

96. Ethics means \_\_\_\_\_. | ನೀತಿಶಾಸ್ತ್ರ ಎಂದರೆ \_\_\_\_\_

- A) **decide what is right and wrong for a human conduct | ಮಾನವ ನಡವಳಿಗೆಗೆ ಯಾವುದು ಸರಿ ಮತ್ತು ತಪ್ಪು ಎಂದು ನಿರ್ಧರಿಸಿ (Correct)**  
B) name of a city | ಒಂದು ನಗರದ ಹೆಸರು  
C) employability skills | ಉದ್ಯೋಗ ಕೌಶಲ್ಯಗಳು  
D) not relevant to society | ಸಮಾಜಕ್ಕೆ ಸಂಬಂಧಿಸಿಲ್ಲ

97. Time management \_\_\_\_\_. | ಸಮಯ ನಿರ್ವಹಣೆ \_\_\_\_\_

A) complete your task on

time | ನಿಮ್ಮ ಕೆಲಸವನ್ನು ಸಮಯಕ್ಕೆ ಪೂರ್ಣಗೊಳಿಸಿ (Correct)

C) hard skill | ಕಠಿಣ ಕೌಶಲ್ಯ

B) managing time | ಸಮಯವನ್ನು ನಿರ್ವಹಿಸುವುದು  
D) problem solving | ಸಮಸ್ಯೆ ಪರಿಹರಿಸುವ

98. \_\_\_\_\_ is major changes takes place in manufacturing. | \_\_\_\_\_ ತಯಾರಿಕೆಯಲ್ಲಿ ಪ್ರಮುಖ ಬದಲಾವಣೆಗಳು ನಡೆಯುತ್ತವೆ.

A) Green revolution | ಹಸಿರು ಕ್ರಾಂತಿ

B) Industry revolution | ಕೈಗಾರಿಕಾ ಕ್ರಾಂತಿ (Correct)

C) Water revolution | ಜಲ ಕ್ರಾಂತಿ

D) Food revolution | ಆಹಾರ ಕ್ರಾಂತಿ

99. 1st industrial revolution started in \_\_\_\_\_. | 1 ನೇ ಕೈಗಾರಿಕಾ ಕ್ರಾಂತಿ ಪ್ರಾರಂಭವಾಯಿತು \_\_\_\_\_

A) 18th century | 18 ನೇ ಶತಮಾನ (Correct)

B) 19th century | 19 ನೇ ಶತಮಾನ

C) 20th century | 20 ನೇ ಶತಮಾನ

D) 21st century | 21 ನೇ ಶತಮಾನ

100. Which of these should be considered while making decisions? | ನಿರ್ಧಾರಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುವಾಗ ಇವುಗಳಲ್ಲಿ ಯಾವುದನ್ನು ಪರಿಗಣಿಸಬೇಕು?

A) Your mood | ನಿಮ್ಮ ಮನಸ್ಥಿತಿ

B) The choices of your friends | ನಿಮ್ಮ ಸ್ನೇಹಿತರ ಆಯ್ಕೆಗಳು

C) The rules of your community | ನಿಮ್ಮ ಸಮುದಾಯದ ನಿಯಮಗಳು

D) Your personal priorities | ನಿಮ್ಮ ವೈಯಕ್ತಿಕ ಆದ್ಯತೆಗಳು (Correct)