

17. Which is the unit electrical power?

- A) Watts
B) Volts
C) Ohms
D) Ampere

Answer: A) Watts

18. What is the product of 0.003×0.5 ?

- A) 0.15
B) 0.015
C) 0.00015
D) 0.0015

Answer: D) 0.0015

19. What is the length of each part is a copper wire of 225 metre long is cut into 900 equal parts?

- A) 0.29 metre
B) 0.25 metre
C) 0.23 metre
D) 0.28 metre

Answer: B) 0.25 metre

20. What is the square root of decimal number 550.37?

- A) 23.46
B) 22.46
C) 21.26
D) 22.26

Answer: A) 23.46

21. Simplify: $(17.49 \times 5.2) / (6.5)$

- A) 13.89
B) 13.99
C) 13.69
D) 13.79

Answer: B) 13.99

22. Which statement is correct according to ohm's law?

- A) $I = R/V$
B) $I = 1/V$
C) $I = R$
D) $I = V/R$

Answer: D) $I = V/R$

23. How many hours will take for a 100 watts bulb to consume 1 kwh energy?
 $W = 1 \text{ Kwh}$
 $P = 100 \text{ Watts}$
 $t = \text{___Hours}$

- A) 24 hours
B) 18 hours
C) 12 hours
D) 10 hours

Answer: D) 10 hours

24. Convert 52% into fraction?

- A) $(13/25)$
B) $(9/25)$
C) $(17/25)$
D) $(11/25)$

Answer: A) $(13/25)$

25. Simplify: $(3/4) + (2/5) - (5/20)$

- A) $(3/10)$
B) $(13/10)$
C) $(12/10)$
D) $(9/10)$

Answer: D) $(9/10)$

26. Which metal contains iron as a major content?

- A) Bronze metal
B) Zinc

- C) Ferrous metal
D) Brass metal

Answer: C) Ferrous metal

27. Which insulator is used in over head lines?

- A) Porcelain
B) Mica
C) P.V.C
D) Rubber

Answer: A) Porcelain

28. Which property of material enables to formation of permanent deformation without fracture?

- A) Ductility
B) Elasticity
C) Brittleness
D) Plasticity

Answer: D) Plasticity

29. Which insulating material is used for making switches?

- A) Bakelite
B) Ebonite
C) PVC
D) Porcelain

Answer: A) Bakelite

30. What is the formual for induced emf?

- A) $B^2 L \sin^2 \theta$ volts
B) $BLV \sin^2 \theta$ volts
C) $BL \sin^2 \theta$ volts
D) $B^2 V \sin^2 \theta$ volts

Answer: B) $BLV \sin^2 \theta$ volts

31. Which property of a substance is opposing the flow of electric current?

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

Answer: D) Resistance

32. Which law states about electromagnetic induction?

- A) Lenz's law
B) Faraday's law
C) Hooke's law
D) Ohm's law

Answer: B) Faraday's law

33. What is the total resistance if two resistances of 4 ohms and 6 ohms are connected in parallel?

- A) 2.4
B) 4
C) 5
D) 10

Answer: A) 2.4

34. What is the total resistance if three resistances of 3 ohms, 9 ohms and 5 ohms are connected in series?

- A) $1/17$ ohms
B) 11 ohms
C) 7 ohm
D) 17 ohms

Answer: D) 17 ohms

35. How much power does it consumes if an electric heater draws a current of 10 amps at 200 volts?

- A) 2020 watts B) 2010 watts
C) 2030 watts D) 2000 watts

Answer: D) 2000 watts

36. Which is same in series connection of resistors in a circuit?

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

Answer: B) Current

37. What is the square root of 529?

- A) 43 B) 23
C) 12 D) 33

Answer: B) 23

38. Which cast iron cannot be welded?

- A) White cast iron B) Grey cast iron
C) Malleable cast iron D) Nodular cast iron

Answer: A) White cast iron

39. What is the ratio of 4 kg to 800 grams?

- A) 02:04 B) 08:04
C) 04:08 D) 05:01

Answer: D) 05:01

40. Which among the following is an insulator?

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

Answer: D) Mica

41. Which is the unit of current?

- A) Watt B) Ampere
C) Volt D) Ohm

Answer: B) Ampere

42. What is the decimal fraction of conversion of 18.5%?

- A) 0.195 B) 0.165
C) 0.185 D) 0.175

Answer: C) 0.185

43. What is the name of furnace to obtained cast iron?

- A) Mild steel - Blast furnace B) Cupola
C) Steel - Rever battery D) Alloy metal - Electric furnace

Answer: B) Cupola

44. What is the square root of 0.017?

- A) 0.001 B) 0.00001
C) 0.000001 D) 0.13

Answer: D) 0.13

45. What denotes letter M in MKS system?

- A) Meter B) Millimeter
C) Mile D) Micron

Answer: A) Meter

46. Which is the unit of resistance?

- A) Volt B) Ampere
C) Ohm D) Watt

Answer: C) Ohm

47. What are the two classifications of system of units?

- A) British and Metric B) Gravitational and non-gravitational
C) Metric and International D) Fundamental and derived

Answer: D) Fundamental and derived

48. What is the improper fraction for the given mixed fraction ? $7 \frac{3}{7}$

- A) " $\frac{7}{28}$ " B) " $\frac{7}{52}$ "
C) " $\frac{52}{7}$ " D) " $\frac{28}{7}$ "

Answer: C) ($\frac{52}{7}$)

49. What is the other name of low carbon steel?

- A) Mild steel B) High alloy steel
C) Low alloy steel D) High speed steel

Answer: A) Mild steel

50. Which machine converts mechanical energy into electrical energy?

- A) Generator B) Iron box
C) Heater D) Battery

Answer: A) Generator

51. Which metal cannot be forged?

- A) Steel B) Alloy steel
C) Mild steel D) Cast iron

Answer: D) Cast iron

52. Which is the example for statically induced emf?

- A) Generator B) Transformer
C) Refrigerator D) Motor

Answer: B) Transformer

53. A motor cycle tyre is sold for Rs 300/- what is the purchase price if 25% profit is added to it.

- A) Rs 200 B) Rs 220
C) Rs 240 D) Rs 260

Answer: C) Rs 240

54. Which is the example for dynamically induced Emf?

- A) Motor
C) Motor bike
- B) Car
D) Generator

Answer: D) Generator

55. Convert decimal 0.000659 to fraction?

- A) (659/1000000) B) (659/100000)
C) (659/10000) D) (659/1000)

Answer: A) (659/1000000)

56. How much voltage will be required to illuminate a 40 watts fluorescent lamp draws a current of 0.10 amperes?

- A) 390 volts B) 400 volts
C) 405 volts D) 395 volts

Answer: B) 400 volts

57. What is the HCF of 18, 42, 24?

- A) 18 B) 24
C) 6 D) 2

Answer: C) 6

58. Which law states that at constant temperature the current passing through a closed circuit is directly proportional to the potential difference and inversely proportional to the resistance?

- A) Hooke's law B) Newton's law
C) Lenz's law D) Ohm's law

Answer: D) Ohm's law

59. Which rubber is used as insulator for power cables and control wires?

- A) Butyl B) Nitrite butadiene
C) Hypalone D) Silicon

Answer: D) Silicon

60. Which one of the following properties is the mechanical properties of metal?

- A) Structure B) Corrosion
C) Fusibility D) Ductility

Answer: D) Ductility

61. Which steel is used for making files and cold chisel?

- A) High carbon steel B) Stainless steel
C) Low carbon steel D) Midium carbon steel

Answer: A) High carbon steel

62. How many days a mechanic takes to assemble 64 machines if he assembles 8 machines in 3 days?

- A) 20 days B) 22 days
C) 24 days D) 26 days

Answer: C) 24 days

63. What does EMF stands for?

- A) Electromated Force B) Electronic Magnetic Force
C) Electro Motive Force D) Electro Magnetic Force

Answer: C) Electro Motive Force

64. Which furnace is used to get pig iron from iron ore?

- A) Cupola B) Electric furnace
C) Blast furnace D) Mild steel - Rever battery

Answer: C) Blast furnace

65. What is the resistance? $I = 11.5$ Amps $V = 380$ Volts $R = \underline{\hspace{2cm}}$ Ohms

- A) 13 ohms B) 43 ohms
C) 23 ohms D) 33 ohms

Answer: D) 33 ohms

66. What is the voltage of the immersion heater? $P = 500$ watts $I = 2.27$ Amps $V = \underline{\hspace{2cm}}$ Volts

- A) 210.3 volts B) 230.3 volts
C) 200.3 volts D) 220.3 volts

Answer: D) 220.3 volts

67. Which is mineral insulator

- A) Mica B) Glass
C) Porcelain D) Quartz

Answer: A) Mica

68. How many millimetres are there in 1 inch?

- A) 2.54 mm B) 25.4 mm
C) 24.5 mm D) 2.45 mm

Answer: B) 25.4 mm

69. Divide $(20/31)/(15/62)$

- A) $2(4/3)$ B) $2(3/2)$
C) $2(2/3)$ D) $2(1/3)$

Answer: C) $2(2/3)$

70. Which mechanical property of a metal offers resistance to elastic deformation in a cutting tool?

- A) Toughness B) Ductility
C) Hardness D) Malleability

Answer: C) Hardness

71. What are fundamental units?

- A) Length, Mass, Area B) Length, Pressure, Volume
C) Length, Mass, Volume D) Length, Mass, Time

Answer: D) Length, Mass, Time

72. Which metal is widely used for making casting of machinery parts?

- A) Malleable cast iron B) Wrought iron
C) White cast iron D) Grey cast iron

Answer: D) Grey cast iron

73. What is the carbon percentage in low carbon steel?

- A) 0.02% to 0.03% B) 0.25% to 0.50%
C) 0.50% to 1.50% D) 0.15% to 0.25%

Answer: D) 0.15% to 0.25%

74. What is the power if an emf of one volt causes a current flow of 1 ampere?

- A) 1 Kilowatt hour B) 1 watt
C) 1 kilowatt D) 1 HP

Answer: B) 1 watt

75. Which alloy steel is using for making precious instrument?

- A) Vanadium B) Silicon steel
C) Manganese steel D) Invar steel

Answer: D) Invar steel

76. What is the percentage of copper if the casting weight of copper 42.3 kg and tin weight 2.7 kg?

- A) Cu 94% B) Cu 96%
C) Cu 98% D) Cu 92%

Answer: A) Cu 94%

77. What percentage of 80 is 20?

- A) 0.2 B) 0.25
C) 0.8 D) 0.4

Answer: B) 0.25

78. What is the definition of ratio?

- A) Equality between two ratios B) Inequality between two ratios
C) Relation of two quantities of the same kind D) Relation of two quantities of the different kind

Answer: C) Relation of two quantities of the same kind

79. Which property of metal has its power of returning to its original shape after the applied force is released?

- A) Tenacity B) Elasticity
C) Plasticity D) Malleability

Answer: B) Elasticity

80. Which alloy used in electric lamp as filament?

- A) Tungsten B) Silicon
C) Cobalt D) Vanadium

Answer: A) Tungsten

81. What is the resistance of an electric iron if the rating of

electric iron is 220 V and 500 watts?

- A) 97.8 ohms B) 95.8 ohms
C) 94.8 ohms D) 96.8 ohms

Answer: D) 96.8 ohms

82. What is the unit of intensity of magnetic field?

- A) wb/m B) Coloumb
C) Hertz D) m/wb

Answer: A) wb/m

83. What is the voltage? $R = 250 \text{ Ohms}$ $I = 0.44 \text{ Amps}$ $V = \text{___Volts}$

- A) 105 Volts B) 110 Volts
C) 100 Volts D) 108 Volts

Answer: B) 110 Volts

84. Convert 0.456 decimal fraction into percentage?

- A) 0.000456 B) 0.0456
C) 45.6 D) 0.456

Answer: C) 45.6

85. Which alloy steel is used to make permanent magnets?

- A) Vanadium steel B) Silicon steel
C) Manganese steel D) Cobalt steel

Answer: D) Cobalt steel

86. What is the ore of aluminium?

- A) Mallatite B) Hematite
C) Bauxite D) Lemonite

Answer: C) Bauxite

87. Which property of a metal possessed by it melts when heat is applied?

- A) Tenacity B) Malleability
C) Fusibility D) Conductivity

Answer: C) Fusibility

88. What is the current? $R = 50 \text{ Ohms}$ 220 Volts $I = \text{___Amps}$

- A) 4.3 Amps B) 4.2 Amps
C) 4.4 Amps D) 4.1 Amps

Answer: C) 4.4 Amps

89. Which is equal to electric power?

- A) IR B) I^2R watts
C) RI D) R^2I watts

Answer: B) I^2R watts

90. Which property of a metal enables it by which it can be drawn out into wires under tension without rupture?

- A) Ductility
- C) Malleability

- B) Brittleness
- D) Hardness

Answer: A) Ductility
