

Duration: 30 Mins

Total Marks: 186

Q.ID: ITISKILL22388J

1. What is the current Flow in the bulb? $P = 550 \text{ watts}$
 $R = 22 \text{ Ohms}$ $I = \underline{\hspace{1cm}}$ Amps

- A) 4 Amps
 C) 2 Amps
 B) 5 Amps
 D) 3 Amps

Answer: B) 5 Amps

2. Which one is non-metal?

- A) Mercury
 C) Graphite
 B) Iron
 D) Brass

Answer: C) Graphite

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

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

Answer: D) Rs 240

4. What is the density of aluminium?

- A) 4.7 g/cm^3
 C) 3.7 g/cm^3
 B) 5.7 g/cm^3
 D) 2.7 g/cm^3

Answer: D) 2.7 g/cm^3

5. Convert 0.456 decimal fraction into percentage? | 0.456 ದಶಮಾಂಶ ಭಾಗವನ್ನು ಶೇಕಡಾವಾರು ಆಗಿ ಪರಿವರ್ತಿಸಿ?

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

Answer: C) 45.6%

6. Which is mineral insulator

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

Answer: D) Mica

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

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

Answer: D) Fundamental and derived

8. What is called if a force of 1Newton acts on a body and moves it through a distance of 1 metre?

- A) 1 dyne
 C) 10 dynes
 B) 1 Joule
 D) 10 Joules

Answer: B) 1 Joule

9. What is the formula for speed?

- A) Change in velocity/Time
 C) Distance in definite direction /Time
 B) Change in momentum/Time
 D) Distance covered/Time

Answer: D) Distance covered/Time

10. What are the two classifications of system of units? | ಮೂಲಮಾನಗಳ ವ್ಯವಸ್ಥೆಯ ಎರಡು ವರ್ಗೀಕರಣಗಳು ಯಾವುವು?

- A) British and Metric | ಬ್ರಿಟಿಷ್ ಮತ್ತು ಮೆಟ್ರಿಕ್
 C) Gravitational and non-gravitational | ಗುರುತ್ವ ಮತ್ತು ಗುರುತ್ವಾಕರ್ಷಣೆಯಿಲ್ಲದ
 B) Metric and International | ಮೆಟ್ರಿಕ್ ಮತ್ತು ಅಂತರರಾಷ್ಟ್ರೀಯ
 D) Fundamental and derived | ಮೂಲಭೂತ ಮತ್ತು ಪಡೆಯಲಾಗಿದೆ

Answer: D) Fundamental and derived | ಮೂಲಭೂತ ಮತ್ತು ಪಡೆಯಲಾಗಿದೆ

11. What is the volume of mercury in cm^3 , if the mass (m) of mercury is 136 grams (g) and density (r) of mercury is 13.6 g/cm^3 ?

- A) 10.6 cm^3
 C) 136 cm^3
 B) 13.6 cm^3
 D) 10.0 cm^3

Answer: D) 10.0 cm^3

12. How many newtons for 1 kilogram?

- A) 98.1 Newtons
 C) 9.81 Newtons
 B) 981 Newtons
 D) 0.981 Newtons

Answer: C) 9.81 Newtons

13. Which metal contains iron as a major content?

- A) Zinc
 C) Brass metal
 B) Bronze metal
 D) Ferrous metal

Answer: D) Ferrous metal

14. What is the filament resistance if a 6 volt bulb draws a current of 0.5 Amps?

- A) 12 W
 C) 3 W
 B) 1.2 W
 D) 10 W

Answer: A) 12 W

15. What is the area of a circle of diameter 50 cm?

- A) 1932.5 cm^2
 B) 1952.5 cm^2

C) 1962.5 cm^2 D) 1942.5 cm^2

Answer: C) 1962.5 cm^2

16. What is the formula for finding volume of a hollow cylinder having outer radius 'R' inner radius 'r' and height 'h'?

A) $\frac{4}{3} \pi (R^2 - r^2)h$ B) $\pi (R^2 - r^2)h$

C) $\frac{2}{3} \pi (R^2 - r^2)h$ D) $\frac{\pi}{3} (R^2 - r^2)h$

Answer: B) $\pi (R^2 - r^2)h$

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

A) 5 B) 2.4

C) 4 D) 10

Answer: B) 2.4

18. What is the work done in joules if a load of 15.5 kg is lifted through a height of 4.4 metres?

A) 669 Joules B) 639 Joules

C) 659 Joules D) 649 Joules

Answer: A) 669 Joules

19. What is the name of the property of an insulation that should brake down or puncture on application of high voltage?

A) Non absorption B) Mechanical strength

C) Specific resistance D) Di-electric strength

Answer: D) Di-electric strength

20. What denotes letter $\square$ M $\square$ in MKS system ವ್ಯವಸ್ಥೆಯಲ್ಲಿ $\square$ ಎಂ $\square$ ಅಕ್ಷರ ಏನನ್ನು ಸೂಚಿಸುತ್ತದೆ?

A) Millimeter B) Meter

C) Micron D) Mile

Answer: B) Meter

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

A) Ductility B) Fusibility

C) Corrosion D) Structure

Answer: A) Ductility

22. What is the boiling point of water? ನೀರಿನ ಕುದಿಯುವ ಬಿಂದು ಯಾವುದು?

A) 32°C B) 212°C

C) 0°C D) 100°C

Answer: D) 100°C

23. What is the block weighs (W) in kg, if volume (V) is 320 cm^3 and density 8.9 g/cm^3 ?

A) 2.448 B) 2.948 kg

C) 2.848 kg

D) 2.648 kg

Answer: C) 2.848 kg

24. What is the area of a square whose side is 18 cm?

A) 72 cm^2 B) 36 cm^2

C) 324 cm^2 D) 26 cm^2

Answer: C) 324 cm^2

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

A) Cu 98%

B) Cu 94%

C) Cu 96%

D) Cu 92%

Answer: B) Cu 94%

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

A) High carbon steel

B) Medium carbon steel

C) Stainless steel

D) Low carbon steel

Answer: A) High carbon steel

27. What is the total surface area of a cylinder having radius 2 metres and height 5 metres?

A) 86 sq.metre

B) 90 sq.metre

C) 92 sq.metre

D) 88 sq.metre

Answer: D) 88 sq.metre

28. What is velocity of a body travels a distance of 168 metres in a line in 21 seconds?

A) 12 m/sec

B) 6 m/sec

C) 8 m/sec

D) 10 m/sec

Answer: C) 8 m/sec

29. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm^3 ?

A) 19.5

B) 18.5

C) 8

D) 19

Answer: A) 19.5

30. What is the formula for induced emf?

A) $B^2 L \sin \theta$ volts

B) $BLV \sin \theta$ volts

C) $B^2 L V \sin \theta$ volts

D) $BL \sin \theta$ volts

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

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

A) $2(3/2)$

B) $2(2/3)$

C) $2(1/3)$

D) $2(4/3)$

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

32. Which is equal to electric power?

A) $I^2 R$ watts

B) IR

C) R^2 watts D) RI

Answer: A) $I^2 R$ watts

33. What is known for the temperature at which any solid melts into liquid? | ಯಾವುದೇ ಘನ ದ್ರವಕ್ಕೆ ಕರಗುವ ತಾಪಮಾನಕ್ಕೆ ಏನು ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ?

A) Melting point | ಕರಗುವ ಬಿಂದು B) Boiling point | ಕುದಿಯುವ ಬಿಂದು

C) Latent heat of fusion | ಸುಷ್ಪ ಶಾಖ D) Latent heat of vaporisation | ಆವಿಯಾಗುವಿಕೆಯ ಸುಷ್ಪ ಶಾಖ

Answer: A) Melting point | ಕರಗುವ ಬಿಂದು

34. What is the name of the metal which do not contain iron?

A) Insulating metals B) Ferrous metals
C) Non-Insulating metals D) Non-ferrous metals

Answer: D) Non-ferrous metals

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

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

Answer: C) Silicon

36. What is called if a body changes its position with respect to its surroundings?

A) Speed B) Body at motion
C) Velocity D) Body at rest

Answer: B) Body at motion

37. What is the square root of 529? | 529 ರ ವರ್ಗಮೂಲ ಯಾವುದು?

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

Answer: D) 23

38. What is the current? $R = 50 \text{ Ohms}$ $V = 220 \text{ Volts}$
 $I = \text{_____Amps}$

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

Answer: D) 4.4 Amps

39. How many watts for 1 horse power in British system?

A) 726 watts B) 756 watts
C) 746 watts D) 736 watts

Answer: C) 746 watts

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

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

Answer: B) Resistance

41. What is the carbon percentage in medium carbon steel?

A) 0.5% to 1.5% B) 0.05% to 0.15%
C) 0.15% to 0.25% D) 0.25% to 0.5%

Answer: D) 0.25% to 0.5%

42. What is the formula for total surface area of a cylinder?

A) $2 \pi r h$ B) $\pi r h$
C) $\pi r (h + r)$ D) $2 \pi r (h + r)$

Answer: D) $2 \pi r (h + r)$

43. What is the x value for $x^2 + 62 = 126$?

A) 6 B) 10
C) 4 D) 8

Answer: D) 8

44. What is the specific gravity of the metal, if the piece of metal weighs 150 grams in air and 125 grams in water?

A) 25 B) 6
C) 10 D) 15

Answer: B) 6

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

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

Answer: C) 05:01

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

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

Answer: B) Current

47. What is the voltage of the immersion heater? $P = 500 \text{ watts}$ $I = 2.27 \text{ Amps}$ $V = \text{_____Volts}$

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

Answer: C) 220.3 volts

48. What are fundamental units?

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

Answer: C) Length, Mass, Time

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

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

Answer: D) wb/m

50. What is the perimeter of scalene. Triangle having sides of 40mm, 20mm and 28mm?

- A) 78 mm B) 88 mm
C) 68 mm D) 98 mm

Answer: B) 88 mm

51. What is the LCM of 12, 18, 6, 36?

- A) 18 B) 36
C) 12 D) 42

Answer: B) 36

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

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

Answer: A) 0.185

53. What is the unit of acceleration of an object?

- A) Metre/second B) Metre/minutes
C) D)
Metre/minutes² Metre/second²

Answer: D) Metre/second²

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

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

Answer: D) $\frac{52}{7}$

55. Which insulator is used in over head lines?

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

Answer: D) Porcelain

56. What is the unit of speed?

- A) Metre/second² B) Metre/minute
C) Metre/second D) Metre/hour

Answer: C) Metre/second

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

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

Answer: D) Cupola

58. What is called mass per unit volume of a substances? |
ವಸ್ತುವಿನ ಪ್ರತಿ ಯೂನಿಟ್ ಪರಿಮಾಣದ ದ್ರವ್ಯರಾಶಿಗೆ ಏನು ಎಂದು
ಕರೆಯಲಾಗುತ್ತದೆ?

- A) Weight | ತೂಕ B) Mass | ದ್ರವ್ಯರಾಶಿ
C) Volume | ಗಾತ್ರ D) Density | ಸಾಂದ್ರತೆ

Answer: D) Density | ಸಾಂದ್ರತೆ

59. What is the acceleration of an aeroplane taking off from landing field has to run 700 metres if it leaves the ground in 10 seconds from the start?

- A) 14 B) 10
metre/sec² metre/sec²
C) 12 D) 8
metre/sec² metre/sec²

Answer: C) 12 metre/sec²

60. Which among the following is an insulator?

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

Answer: B) Mica

61. Which alloy used in electric lamp as filament?

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

Answer: A) Tungsten

62. What is the area of an equilateral triangle of side 450 mm?

- A) 886.82 cm² B) 876.82 cm²
C) 856.82 cm² D) 866.82 cm²

Answer: B) 876.82 cm²

63. 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) Newton's law B) Hooke's law
C) Lenz's law D) Ohm's law

Answer: D) Ohm's law

64. Which is the example for dynamically induced Emf?

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

Answer: B) Generator

65. How many millimetres are there in 1 inch?

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

Answer: A) 25.4 mm

66. What is the product of 0.003×0.5 ?

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

Answer: C) 0.0015

67. What is the mass if the density of a body is 7.6 g/cm^3 and its volume is 25 cm^3 ?

- A) 190 grams B) 210 grams
C) 200 grams D) 220 grams

Answer: A) 190 grams

68. How many watts for 1 horse power in British system? | ಬ್ರಿಟಿಷ್ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ 1 ಕುದುರೆ ಶಕ್ತಿಗಾಗಿ (HP) ಎಷ್ಟು ವ್ಯಾಟ್?

- A) 726 watts B) 756 watts
C) 736 watts D) 746 watts

Answer: D) 746 watts

69. Which insulating material is used for making switches?

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

Answer: C) Bakelite

70. What is the volume of sphere of radius 7 cm?

- A) 1463 cm^3 B) 1346 cm^3
C) 1436 cm^3 D) 1636 cm^3

Answer: C) 1436 cm^3

71. Convert 0.456 decimal fraction into percentage?

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

Answer: A) 45.6

72. Find the total surface area of a cast iron bar whose length, width and height are 20m, 15m and 12m.

- A) 1540 m^2 B) 1340 m^2
C) 1640 m^2 D) 1440 m^2

Answer: D) 1440 m^2

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

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

Answer: B) 0.25 metre

74. How much watt second in 1 watt hour?

- A) 3600 watt sec B) 1000 watt sec
C) 4000 watt sec D) 2000 watt sec

Answer: A) 3600 watt sec

75. Which is equal to $\sin \theta$? | ಯಾವುದು $\sin \theta$ ಗೆ ಸಮಾನ?

(A) $\frac{\text{Opposite side}}{\text{Hypotenuse}}$

(B) $\frac{\text{Hypotenuse}}{\text{Opposite side}}$

(C) $\frac{\text{Adjacent side}}{\text{Hypotenuse}}$

(D) $\frac{\text{Hypotenuse}}{\text{Adjacent side}}$

A) A

B) D

C) C

D) B

Answer: A) A

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

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

Answer: A) $I = V/R$

77. How many millimetres are there in 1 inch? | 1 ಇಂಚಿನಲ್ಲಿ ಎಷ್ಟು ಮಿಲಿಮೀಟರ್‌ಗಳಿವೆ?

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

Answer: D) 25.4 mm

78. What is the cross sectional area of a circular ring of $D = 38 \text{ mm}$ $d = 32 \text{ mm}$?

- A) 350 mm^2 B) 340 mm^2
C) 330 mm^2 D) 320 mm^2

Answer: C) 330 mm^2

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

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

Answer: B) Cobalt steel

80. What metals contained in brass alloy?

- A) Copper and tin B) Copper and aluminium
C) Copper and zinc D) Copper and lead

Answer: C) Copper and zinc

81. What is the resistance? $I = 11.5 \text{ Amps}$ $V = 380 \text{ Volts}$ $R = \text{_____ Ohms}$

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

Answer: A) 33 ohms

82. How many watts for 1 horse power in metric system?

- A) 735.5 watts B) 745.5 watts
C) 755.5 watts D) 725.5 watts

Answer: A) 735.5 watts

83. Which is the unit electrical power?

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

Answer: D) Watts

84. What is the area of a right angled triangle having a base 10 cm and height 5 cm?

- A) 30 sq.cm B) 25 sq.cm
C) 20 sq.cm D) 35 sq.cm

Answer: B) 25 sq.cm

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

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

Answer: B) Blast furnace

86. 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

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

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

Answer: D) 6

88. What maximum height a stone will reach if it is thrown upwords with a velocity of 20m/sec?(g = 10m/sec²)

- A) 40 m B) 10 m
C) 20 m D) 30 m

Answer: C) 20 m

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

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

Answer: C) Mild steel

90. Simplify: (17.49x5.2)/(6.5)

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

Answer: D) 13.99

91. How many liters of water a cylindrical tank of radius 75 cm and height 100 cm can hold?

- A) 1768.25 liters B) 1766.25 liters
C) 1769.25 liters D) 1767.25 liters

Answer: B) 1766.25 liters

92. Which is the example for statically induced emf?

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

Answer: B) Transformer

93. Which metal cannot be forged?

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

Answer: B) Cast iron

94. What is the side of a square whose area is 625 mm²? | 625 ಎಂಎಂ² ವಿಸ್ತೀರ್ಣವಿರುವ ಚೌಕದ ಬದಿ ಎಷ್ಟು?

- A) 15 mm B) 25 mm
C) 30 mm D) 20 mm

Answer: B) 25 mm

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

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

Answer: D) 2000 watts

96. Which is brittle metal?

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

Answer: C) Cast iron

97. What is the speed of a train of 80 metre long train passes a railway station platform of 120 metres length in 20 seconds?

- A) 32 km/hour B) 34 km/hour
C) 36 km/hour D) 30 km/hour

Answer: C) 36 km/hour

98. Find the curved surface area of a cylinder 10 cm dia and 20 cm height?

- A) 620 cm² B) 630 cm²
C) 638 cm² D) 628 cm²

Answer: D) 628 cm²

99. What is the area of a rectangle, whose length and breadth are 10cm and 8cm respectively? | ಉದ್ದ ಮತ್ತು ಅಗಲ ಕ್ರಮವಾಗಿ 10 ಸೆಂ.ಮೀ ಮತ್ತು 8 ಸೆಂ.ಮೀ. ಇರುವ ಆಯತದ ವಿಸ್ತೀರ್ಣ ಎಷ್ಟು?

- A) 75 cm² B) 85 cm²
C) 90 cm² D) 80 cm²

Answer: D) 80 cm²

100. What is the capacity of a conical tank of radius 2 m and height 5m?

- A) 11 m³ B) 31 m³

- C) 41 m^3 D) 21 m^3

Answer: D) 21 m^3

101. What is the rate of change of displacement of a body?

- A) Velocity B) Body at rest
C) Speed D) Body at motion

Answer: A) Velocity

102. What is the power required? $I = 0.455 \text{ Amps}$
 $R = 484 \text{ Ohms}$ $P = \text{ ______ Watts}$

- A) 98.2 watts B) 101.2 watts
C) 100.2 watts D) 99.2 watts

Answer: C) 100.2 watts

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

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

Answer: C) Grey cast iron

104. What denotes letter M in MKS system?

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

Answer: D) Meter

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

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

Answer: A) Fusibility

106. What is the force with which a body is attracted by the earth towards its centre?

- A) Density B) Volume
C) Mass D) Weight

Answer: D) Weight

107. What is the formula for velocity?

- A) Change in velocity/Time B) Distance covered/Time
C) Displacement/Time D) Change of momentum/Time

Answer: C) Displacement/Time

108. What is the formula for kinetic energy?

- A) $(1/2) mv \text{ joule}$ B) $(2/3) mv^2 \text{ joule}$
C) $(2/3) mv \text{ joule}$ D) $(1/2) mv^2 \text{ joule}$

Answer: D) $(1/2) mv^2 \text{ joule}$

109. What is the unit for velocity?

- A) Metre/second B) Metre/second²
C) Metre/hour D) Metre/minute

Answer: A) Metre/second

110. Which is the unit of resistance?

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

Answer: B) Ohm

111. What is the square root of 0.017?

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

Answer: C) 0.13

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

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

Answer: B) 23.46

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

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

Answer: D) Elasticity

114. What is the retardation of a car moving with a velocity of 50 km/hr is brought to rest in 45 seconds?

- A) 0.40 m/sec^2 B) 0.20 m/sec^2
C) 0.30 m/sec^2 D) 0.10 m/sec^2

Answer: C) 0.30 m/sec^2

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

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

Answer: A) 400 volts

116. What is the definition of ratio?

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

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

117. What is the volume of a rectangular tank of 30 m length, 20m width and 10m height?

- A) 6100 m^3 B) 6000 m^3
C) 5900 m^3 D) 6200 m^3

Answer: B) 6000 m^3

118. What is called mass per unit volume of a substances?

- A) Weight B) Mass
C) Density D) Volume

Answer: C) Density

119. What is the area of an ellipse if the major and minor axes are 5 cm and 3 cm respectively?

- A) 47 cm^2 B) 57 cm^2
C) 27 cm^2 D) 37 cm^2

Answer: A) 47 cm^2

120. What is the flow of electrons in any conductor?

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

Answer: D) Current

121. What is the flow of electrons in any conductor? | ಯಾವುದೇ ಕಂಡಕ್ಟರ್‌ನಲ್ಲಿ ಎಲೆಕ್ಟ್ರಾನ್‌ಗಳ ಹರಿವನ್ನು ಏನು ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ? ?

- A) Power | ಶಕ್ತಿ B) Current | ಕರೆಂಟ್
C) Voltage | ವೋಲ್ಟೇಜ್ D) Resistance | ಪ್ರತಿರೋಧ

Answer: B) Current | ಕರೆಂಟ್

122. What is called if a body does not change its position with respect to its surroundings?

- A) Body at motion B) Body at rest
C) Velocity D) Speed

Answer: B) Body at rest

123. What percentage of 80 is 20?

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

Answer: C) 0.25

124. What is the potential energy, if a body of mass 250 kg is at a height of 30 metre?

- A) 74.57 KJ B) 72.57 KJ
C) 73.57 KJ D) 75.57 KJ

Answer: C) 73.57 KJ

125. What is the area of a (A) semicircle whose dia is 20 cm (d)?

- A) 157.1 cm^2 B) 177.1 cm^2
C) 147.1 cm^2 D) 167.1 cm^2

Answer: A) 157.1 cm^2

126. Convert 52% into fraction?

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

Answer: C) (13/25)

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

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

Answer: D) 110 Volts

128. What is the ratio of power output to power input?

- A) Acceleration B) Energy
C) Work D) Efficiency

Answer: D) Efficiency

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

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

Answer: C) (9/10)

130. What is the mass in gram, if a force of 15 dyres acting on a mass m producing an acceleration of 2.5 cm/sec^2 ?

- A) 9 grams B) 7 grams
C) 8 grams D) 6 grams

Answer: D) 6 grams

131. What is termed as the quantity of matter contained in a body? | ವಸ್ತುವಿನಲ್ಲಿ ಇರುವ ದ್ರವ್ಯದ ಪರಿಮಾಣವನ್ನು ಎಂದು ಏನು ಕರೆಯಲಾಗುತ್ತದೆ?

- A) Specific gravity | ವಿಶಿಷ್ಟ ಗುರುತ್ವ B) Volume | ಗಾತ್ರ
C) Mass | ದ್ರವ್ಯರಾಶಿ D) Density | ಸಾಂದ್ರತೆ

Answer: C) Mass | ದ್ರವ್ಯರಾಶಿ

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

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

Answer: C) Hardness

133. What is called if a body posses only magnitude or size alone?

- A) Velocity B) Speed
C) Vector quantity D) Scalar quantity

Answer: D) Scalar quantity

134. What is called if a body posses both magnitude and direction of velocity?

- A) Vector quantity B) Velocity
C) Scalar quantity D) Speed

Answer: A) Vector quantity

135. Which is the unit of current?

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

Answer: C) Ampere

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

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

Answer: B) Plasticity

137. Convert decimal 0.000659 to fraction?

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

Answer: C) (659/1000000)

138. What is the volume (V) of mercury in cm³, if mass (m) of mercury is 1 kg and density (ρ) is 13.6 g/cm³?

- A) 73.53 cm³
C) 73.33 cm³
- B) 73.43 cm³
D) 73.23 cm³

Answer: A) 73.53 cm³

139. What is the kinetic energy of a bullet of mass 5gm travels with a speed of 500 m/sec?

- A) 630 Joules
C) 625 Joules
- B) 635 Joules
D) 620 Joules

Answer: C) 625 Joules

140. Which cast iron cannot be welded?

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

Answer: D) White cast iron

141. How many ergs for 1 Joule?

- A) 10³ ergs
C) 10⁷ ergs
- B) 10⁹ ergs
D) 10⁵ ergs

Answer: C) 10⁷ ergs

142. What is the ore of aluminium?

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

Answer: D) Bauxite

143. What is the specific gravity of the metal, if the weighs 6.5 kgf in air and 3.5 kgf in water?

- A) 2.166
C) 1.166
- B) 3.166
D) 6.166

Answer: A) 2.166

144. Find the total surface area of cube whose side is 25 cm.

- A) 3750 cm²
B) 3740 cm²

- C) 3755 cm²
D) 3745 cm²

Answer: A) 3750 cm²

145. What is the value of tan 45° if sin 45° = 1/√2? | Sin 45° = 1/√2 ಆಗಿದ್ದರೆ tan 45° ಮೌಲ್ಯವೆಷ್ಟು?

(A) $\frac{1}{\sqrt{2}}$

(B) $\frac{\sqrt{3}}{2}$

(C) 1

(D) $\frac{1}{\sqrt{3}}$

- A) A
C) C
- B) B
D) D

Answer: C) C

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

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

Answer: B) 24 days

147. What is the area of a rectangle, whose length and breadth are 10cm and 8cm respectively?

- A) 75 cm²
C) 90 cm²
- B) 85 cm²
D) 80 cm²

Answer: D) 80 cm²

148. What is the work done in unit time?

- A) Force
C) Acceleration
- B) Energy
D) Power

Answer: D) Power

149. What is the formula for potential energy?

- A) mgh joule
C) 1/2 mgh joule
- B) 2/3 mgh joule
D) mgh² joule

Answer: A) mgh joule

150. How much is 8% of 40 kg?

- A) 5.2 kg
C) 2.2 kg
- B) 4.2 kg
D) 3.2 kg

Answer: D) 3.2 kg

151. What is the capacity of a body to do work is called?

- A) Force
C) Energy
- B) Power
D) Acceleration

Answer: C) Energy

152. What is termed as the quantity of matter contained in a body?

- A) Density
B) Mass
C) Volume
D) Specific gravity

Answer: B) Mass

153. What is the side of a square whose area is 625 mm^2 ?

- A) 15 mm
B) 25 mm
C) 30 mm
D) 20 mm

Answer: B) 25 mm

154. What is called the ratio between the density of a substance and density of water at 4 Degree Centigrade?

- A) Mass
B) Specific gravity
C) Density
D) Weight

Answer: B) Specific gravity

155. What is the equivalent unit for 1 horse power in metric system?

- A) 77 kg.m/sec
B) 75 kg.m/sec
C) 76 kg.m/sec
D) 78 kg.m/sec

Answer: B) 75 kg.m/sec

156. How much work done in one hour, if a pump can raise 100 liters of water through a height of 200 meters in one minutes?

- A) $12 \times 10^6 \text{ kg meter}$
B) $12 \times 10^4 \text{ kg meter}$
C) $12 \times 10^5 \text{ kg meter}$
D) $12 \times 10^7 \text{ kg meter}$

Answer: C) $12 \times 10^5 \text{ kg meter}$

157. Which machine converts mechanical energy into electrical energy?

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

Answer: A) Generator

158. What is the formula for acceleration?

- A) Metre/second^2
B) Metre/hour
C) Metre/minute
D) Metre/second

Answer: A) Metre/second^2

159. What is the weight force of a car has a mass of 800 kg? (Take $g = 9.81 \text{ m/sec}^2$)

- A) 7848 Newton
B) 7487 Newton
C) 7847 Newton
D) 7748 Newton

Answer: A) 7848 Newton

160. What is the ratio of power output to power input? | ವಿದ್ಯುತ್ ಉತ್ಪಾದನೆಯ ವಿದ್ಯುತ್ ಇನ್ಪುಟ್ ಅನುಪಾತ ಎಷ್ಟು?

- A) Acceleration
B) Efficiency
C) Work
D) Energy

Answer: B) Efficiency

161. What is the S.I unit of heat? | ಶಾಖದ ಎಸ್‌ಐ ಮೂಲಮಾನ ಯಾವುದು?

- A) Joule | ಜೌಲ್
B) Calorie | ಕ್ಯಾಲೋರಿ
C) Centigrade heat unit | ಸೆಂಟಿಗ್ರೇಡ್ ಶಾಖ ಘಟಕ
D) British thermal unit | ಬ್ರಿಟಿಷ್ ಉಷ್ಣ ಘಟಕ

Answer: A) Joule | ಜೌಲ್

162. What is the potential energy in a body of mass 10 kg kept on the top of a pole 20 metres height?

- A) 1952 Joules
B) 1962 Joules
C) 1942 Joules
D) 1972 Joules

Answer: B) 1962 Joules

163. What are fundamental units? | ಮೂಲಭೂತ ಮೂಲಮಾನಗಳು ಯಾವುವು?

- A) Length, Pressure, Volume | ಉದ್ದ, ಒತ್ತಡ, ಘನ ಫಲ
B) Length, Mass, Volume | ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ಘನ ಫಲ
C) Length, Mass, Area | ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ವಿಸ್ತೀರ್ಣ
D) Length, Mass, Time | ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ಸಮಯ

Answer: D) Length, Mass, Time | ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ಸಮಯ

164. What is the work done, if a force of 250 newtons acted upon a body and the body has been moved through a distance of 15 metres?

- A) 3750 Joules
B) 3740 Joules
C) 3730 Joules
D) 3720 Joules

Answer: A) 3750 Joules

165. Which is very good conductor?

- A) Cast iron
B) Steel
C) Copper
D) Wrought iron

Answer: C) Copper

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

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

Answer: B) Ductility

167. What is the ratio of mechanical advantage to the velocity ratio of a simple machine? | ಸರಳ ಯಂತ್ರದ ಯಾಂತ್ರಿಕ ಲಾಭ ಮತ್ತು ವೇಗ ಅನುಪಾತ ದ ಅನುಪಾತ ಏನು?

- A) Power | ಶಕ್ತಿ
B) Load | ಲೋಡ್
C) Effort | ಪ್ರಯತ್ನ
D) Efficiency | ದಕ್ಷತೆ

Answer: D) Efficiency | ದಕ್ಷತೆ

168. What is the square root of 529?

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

Answer: D) 23

169. What is the resistance of an electric iron if the rating of electric iron is 220 V and 500 watts?

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

Answer: C) 96.8 ohms

170. What is the acceleration of a car if the speed of the car has increased from 25 km per hour to 40 km per hour in one minute?

- A) 0.059 m/sec² B) 0.69 m/sec²
C) 0.59 m/sec² D) 0.069 m/sec²

Answer: D) 0.069 m/sec²

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

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

Answer: D) Invar steel

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

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

Answer: B) 1 watt

173. Which is the unit of current? | ಪ್ರವಾಹದ ಮೂಲಮಾನ ಯಾವುದು?

- A) Volt | ವೋಲ್ಟ್ B) Watt | ವ್ಯಾಟ್
C) Ohm | ಓಂ D) Ampere | ಆಂಪಿಯರ್

Answer: D) Ampere | ಆಂಪಿಯರ್

174. What is volume of the cylinder whose radius is 7 cm and height 12 cm?

- A) 1846 c.c B) 1842 c.c
C) 1844 c.c D) 1847 c.c

Answer: D) 1847 c.c

175. 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) 17 ohms D) 7 ohm

Answer: C) 17 ohms

176. What is the area of a sector of a circle of radius 5 cm

and its angle is 96 Degree?

- A) 20.39 cm² B) 20.93 cm²
C) 20.89 cm² D) 20.98 cm²

Answer: B) 20.93 cm²

177. What is the length L2, if total length (L) is 2.75 metre and L1:L2 = 2:3?

- A) 1.75 metre B) 1.1 metre
C) 1.25 metre D) 1.65 metre

Answer: D) 1.65 metre

178. Which law states about electromagnetic induction?

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

Answer: D) Faraday's law

179. How many hours will take for a 100 watts bulb to consume 1 kwh energy?
 W = 1 Kwh
 P = 100 Watts
 t = ____Hours

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

Answer: D) 10 hours

180. What is the carbon percentage in high carbon steel?

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

Answer: D) 0.50% to 1.50%

181. What is the perimeter of a rectangle whose length and breadth are 20 cm and 18 cm?

- A) 76 cm B) 86 mm
C) 66 cm D) 56 cm

Answer: A) 76 cm

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

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

Answer: C) 0.15% to 0.25%

183. What will be the rpm of smaller gear if a 180 mm dia meshes with 60 mm dia gear and the bigger gear makes 60 rpm?

- A) 120 rpm B) 140 rpm
C) 180 rpm D) 160 rpm

Answer: C) 180 rpm

184. What is the diagonal of a square plate whose side is 28 cm?

- A) 39.29 cm B) 39.39 cm
C) 39.49 cm D) 39.59 cm

Answer: D) 39.59 cm

185. What is the density (ρ) in g/cm³ of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm³?

- A) 7.5 g/cm³ B) 6.9 g/cm³
C) 7.2 g/cm³ D) 6.6 g/cm³

Answer: A) 7.5 g/cm³

186. What is the rated power if an adjustable resistor bears the following label 1.5 k ohms/ 0.08A?

- A) 9.6 watts B) 9.4 watts
C) 9.8 watts D) 9.2 watts

Answer: A) 9.6 watts
