

Duration: 60 Mins

Total Marks: 186

Q.ID: ITISKILL66291F

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

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

Answer: C) 25 sq.cm

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

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

Answer: B) 13.99

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

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

Answer: C) Non-ferrous metals

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

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

Answer: B) Plasticity

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

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

Answer: B) 45.6%

6. 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) 3740 Joules B) 3750 Joules
C) 3730 Joules D) 3720 Joules

Answer: B) 3750 Joules

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

- A) 620 cm^2 B) 638 cm^2
C) 630 cm^2 D) 628 cm^2

Answer: D) 628 cm^2

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

- A) 8 m/sec B) 10 m/sec

- C) 6 m/sec D) 12 m/sec

Answer: A) 8 m/sec

9. 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) C B) D
C) A D) B

Answer: C) A

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

- A) 2.648 kg B) 2.948 kg
C) 2.848 kg D) 2.448

Answer: C) 2.848 kg

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

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

Answer: B) 36

12. 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) 96.8 ohms
C) 95.8 ohms D) 94.8 ohms

Answer: B) 96.8 ohms

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

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

Answer: B) Fundamental and derived

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

- A) "28/7" B) (52/7)
C) "7/28" D) "7/52"

Answer: B) (52/7)

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

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

Answer: C) 5 Amps

16. What is the value of $\tan 45^\circ$ if $\sin 45^\circ = \frac{1}{\sqrt{2}}$? | $\sin 45^\circ = \frac{1}{\sqrt{2}}$ ಆಗಿದ್ದರೆ $\tan 45^\circ$ ಮೌಲ್ಯವೆಷ್ಟು?

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

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

(C) 1

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

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

Answer: D) C

17. What is the square root of 529?

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

Answer: C) 23

18. What is the area of a sector of a circle of radius 5 cm and its angle is 96 Degree?

- A) 20.39 cm^2 B) 20.89 cm^2
C) 20.93 cm^2 D) 20.98 cm^2

Answer: C) 20.93 cm^2

19. 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

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

- A) 100°C B) 0°C
C) 212°C D) 32°C

Answer: A) 100°C

21. What is the volume (V) of mercury in cm^3 , if mass (m) of mercury is 1 kg and density (r) is 13.6 g/cm^3 ?

- A) 73.53 cm^3 B) 73.43 cm^3
C) 73.23 cm^3 D) 73.33 cm^3

Answer: A) 73.53 cm^3

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

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

Answer: D) $I = V/R$

23. What is called the ratio between the density of a substances density of water at 4 Degree Centigrade?

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

Answer: B) Specific gravity

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

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

Answer: A) 400 volts

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

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

Answer: C) 47 cm^2

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

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

Answer: D) Cupola

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

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

Answer: B) Mild steel

28. What is the ore of aluminium?

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

Answer: B) Bauxite

29. What metals contained in brass alloy?

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

Answer: A) Copper and zinc

30. What is the formula for speed?

- A) Change in momentum/Time B) Distance covered/Time

- C) Change in velocity/Time D) Distance in definite direction /Time

Answer: B) Distance covered/Time

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

- A) 1952.5 cm^2 B) 1932.5 cm^2
C) 1962.5 cm^2 D) 1942.5 cm^2

Answer: C) 1962.5 cm^2

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

- A) $\pi/3 (R^2 - r^2) h$ B) $4/3 \pi (R^2 - r^2) h$
C) $2/3 \pi (R^2 - r^2) h$ D) $\pi (R^2 - r^2) h$

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

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

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

Answer: D) 9.6 watts

34. Which cast iron cannot be welded?

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

Answer: D) White cast iron

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

- A) 11 m^3 B) 31 m^3
C) 41 m^3 D) 21 m^3

Answer: D) 21 m^3

36. 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) 160 rpm B) 180 rpm
C) 120 rpm D) 140 rpm

Answer: B) 180 rpm

37. Which is the example for dynamically induced Emf?

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

Answer: A) Generator

38. Which insulating material is used for making switches?

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

Answer: C) Bakelite

39. What is the definition of ratio?

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

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

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

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

Answer: B) 23.46

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

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

Answer: D) 0.50% to 1.50%

42. 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 cm^2 B) 85 cm^2
C) 90 cm^2 D) 80 cm^2

Answer: D) 80 cm^2

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

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

Answer: C) Elasticity

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

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

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

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

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

Answer: D) Density

46. Which machine converts mechanical energy into electrical energy?

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

Answer: D) Generator

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

- A) British thermal unit | ಬ್ರಿಟಿಷ್ ಉಷ್ಣ ಘಟಕ B) Centigrade heat unit | ಸೆಂಟಿಗ್ರೇಡ್ ಶಾಖ ಘಟಕ

C) Calorie | ಕ್ಯಾಲೋರಿ D) Joule | ಜೋಲ್

Answer: D) Joule | ಜೋಲ್

48. How many millimetres are there in 1 inch?

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

Answer: B) 25.4 mm

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

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

Answer: D) 2000 watts

50. What is the product of 0.003×0.5 ?

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

Answer: C) 0.0015

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

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

Answer: A) Metre/second²

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

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

Answer: D) 0.185

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

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

Answer: D) 6

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

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

Answer: B) 25.4 mm

55. 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

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

- A) 90 sq.metre B) 86 sq.metre
C) 88 sq.metre D) 92 sq.metre

Answer: C) 88 sq.metre

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

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

Answer: D) 24 days

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

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

Answer: D) 4.4 Amps

59. Which is the unit of resistance?

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

Answer: A) Ohm

60. 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) 30 km/hour D) 36 km/hour

Answer: D) 36 km/hour

61. Which is brittle metal?

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

Answer: D) Cast iron

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

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

Answer: C) Cu 94%

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

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

Answer: B) 88 mm

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

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

Answer: D) 2.166

65. What is the unit of speed?

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

Answer: A) Metre/second

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

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

Answer: D) 6

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

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

Answer: D) 75 kg.m/sec

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

- A) 36 cm² B) 26 cm²
C) 324 cm² D) 72 cm²

Answer: C) 324 cm²

69. 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

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

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

Answer: C) 1766.25 liters

71. Which is the unit electrical power?

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

Answer: C) Watts

72. What is the square root of 0.017?

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

Answer: C) 0.13

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

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

Answer: A) Ductility

74. What is the cross sectional area of a circular ring of D = 38 mm d = 32mm?

- A) 350 mm² B) 320 mm²
C) 340 mm² D) 330 mm²

Answer: D) 330 mm²

75. What denotes letter M in MKS system?

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

Answer: A) Meter

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

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

Answer: B) Efficiency | ದಕ್ಷತೆ

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

- A) 5900 m³ B) 6000 m³
C) 6100 m³ D) 6200 m³

Answer: B) 6000 m³

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

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

Answer: B) 05:01

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

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

Answer: A) wb/m

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

- A) 1636 cm³ B) 1436 cm³
C) 1463 cm³ D) 1346 cm³

Answer: B) 1436 cm³

81. What denotes letter □ M□ in MKS system? | ಏಕಮಾನ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ □ ಎಂ □ ಅಕ್ಷರ ಏನನ್ನು ಸೂಚಿಸುತ್ತದೆ?

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

Answer: B) Meter

82. What is the kinetic energy of a bullet of mass 5gm travels

with a speed of 500 m/sec?

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

Answer: D) 625 Joules

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

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

Answer: C) 25 mm

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

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

Answer: D) 10 hours

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

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

Answer: C) Efficiency

86. 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) 12 metre/sec²
C) 14 metre/sec²
B) 10 metre/sec²
D) 8 metre/sec²

Answer: A) 12 metre/sec²

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

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

Answer: B) Velocity

88. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm³?

- A) 18.5
C) 19
B) 19.5
D) 8

Answer: B) 19.5

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

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

Answer: D) Current | ಕರೆಂಟ್

90. What is the diagonal of a square plate whose side is 28

cm?

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

Answer: B) 39.59 cm

91. What percentage of 80 is 20?

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

Answer: D) 0.25

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

- A) 167.1 cm²
C) 177.1 cm²
B) 157.1 cm²
D) 147.1 cm²

Answer: B) 157.1 cm²

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

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

Answer: C) Current

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

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

Answer: A) Ampere | ಆಂಪಿಯರ್

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

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

Answer: D) Blast furnace

96. What is the formula for potential energy?

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

Answer: B) mgh joule

97. What is the formula for acceleration?

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

Answer: B) Metre/second²

98. What is the unit for velocity?

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

Answer: D) Metre/second

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

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

Answer: B) 12 W

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

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

Answer: B) 23

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

- A) Latent heat of fusion | ಸುಷ್ಪ ಶಾಖ B) Latent heat of vaporisation | ಆವಿಯಾಗುವಿಕೆಯ ಸುಷ್ಪ ಶಾಖ
C) Boiling point | ಕುದಿಯುವ ಬಿಂದು D) Melting point | ಕರಗುವ ಬಿಂದು

Answer: D) Melting point | ಕರಗುವ ಬಿಂದು

102. How many ergs for 1 Joule?

- A) 10^9 ergs B) 10^7 ergs
C) 10^5 ergs D) 10^3 ergs

Answer: B) 10^7 ergs

103. Which law states about electromagnetic induction?

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

Answer: A) Faraday's law

104. Which alloy used in electric lamp as filament?

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

Answer: A) Tungsten

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

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

Answer: C) Weight

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

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

Answer: A) Rs 240

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

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

Answer: D) 76 cm

108. Convert decimal 0.000659 to fraction?

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

Answer: C) (659/1000000)

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

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

Answer: B) Ductility

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

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

Answer: D) Energy

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

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

Answer: B) 1440 m^2

112. How much is 8% of 40 kg?

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

Answer: C) 3.2 kg

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

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

Answer: C) 25 mm

114. 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) 8 grams
C) 7 grams D) 6 grams

Answer: D) 6 grams

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

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

Answer: C) Mass

116. What is volume of the cylinder whose radius is 7 cm and

height 12 cm?

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

Answer: D) 1847 c.c

117. 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 x 104 kg meter B) 12 x 107 kg meter
C) 12 x 105 kg meter D) 12 x 106 kg meter

Answer: C) 12 x 105 kg meter

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

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

Answer: D) 20 m

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

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

Answer: D) 33 ohms

120. What is the density of aluminium?

- A) 5.7 g/cm³ B) 2.7 g/cm³
C) 3.7 g/cm³ D) 4.7 g/cm³

Answer: B) 2.7 g/cm³

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

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

Answer: A) Resistance

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

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

Answer: B) 876.82 cm²

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

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

Answer: D) 0.15% to 0.25%

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

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

Answer: A) Current

125. 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) 220.3 volts
C) 230.3 volts D) 200.3 volts

Answer: B) 220.3 volts

126. Which insulator is used in over head lines?

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

Answer: B) Porcelain

127. Which one is non-metal?

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

Answer: C) Graphite

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

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

Answer: A) Density | ಸಾಂದ್ರತೆ

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

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

Answer: A) 2.4

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

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

Answer: C) Body at rest

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

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

Answer: D) High carbon steel

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

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

Answer: B) 8

133. Convert 52% into fraction?

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

Answer: B) (13/25)

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

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

Answer: C) Fundamental and derived | ಮೂಲಭೂತ ಮತ್ತು ಪಡೆಯಲಾಗಿದೆ

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

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

Answer: B) Body at motion

136. Which metal cannot be forged?

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

Answer: D) Cast iron

137. 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) 0.59 m/sec²
C) 0.69 m/sec²
D) 0.069 m/sec²

Answer: D) 0.069 m/sec²

138. What is the work done in unit time?

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

Answer: D) Power

139. Which is the example for statically induced emf?

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

Answer: B) Transformer

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

- A) 639 Joules
B) 669 Joules
C) 659 Joules
D) 649 Joules

Answer: B) 669 Joules

141. 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) Specific resistance
C) Di-electric strength
D) Mechanical strenth

Answer: C) Di-electric strength

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

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

Answer: B) 17 ohms

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

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

Answer: B) Grey cast iron

144. 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

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

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

Answer: C) Cobalt steel

146. 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

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

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

Answer: B) 73.57 KJ

148. What is the volume of mercury in cm³, if the mass (m) of mercury is 136 grams (g) and density (r) of mercury is 13.6 g/cm³?

- A) 10.6 cm³
B) 136 cm³
C) 10.0 cm³
D) 13.6 cm³

Answer: C) 10.0 cm³

149. What is the formula for induced emf?

- A) BLV sinq volts
B) B²V sinq volts
C) B²L sinq volts
D) BL sinq volts

Answer: A) BLV sinq volts

150. What is the formula for kinetic energy?

- A) $(1/2) mv$ joule B) $(1/2) mv^2$ joule
C) $(2/3) mv^2$ joule D) $(2/3) mv$ joule

Answer: B) $(1/2) mv^2$ joule

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

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

Answer: C) Invar steel

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

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

Answer: B) 746 watts

153. 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

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

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

Answer: C) 746 watts

155. What is the density (ρ) in g/cm^3 of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm^3 ?

- A) 6.9 g/cm^3 B) 7.2 g/cm^3
C) 6.6 g/cm^3 D) 7.5 g/cm^3

Answer: D) 7.5 g/cm^3

156. Which is equal to electric power?

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

Answer: D) $I^2 R$ watts

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

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

Answer: A) 100.2 watts

158. 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

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

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

Answer: D) 1 Joule

160. How many newtons for 1 kilogram?

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

Answer: B) 9.81 Newtons

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

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

Answer: A) 0.25% to 0.5%

162. What is called if a body possesses only magnitude or size alone?

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

Answer: A) Scalar quantity

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

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

Answer: C) $(9/10)$

164. Which metal contains iron as a major content?

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

Answer: A) Ferrous metal

165. Convert 0.456 decimal fraction into percentage?

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

Answer: D) 45.6

166. Which among the following is an insulator?

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

Answer: B) Mica

167. 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) 220 grams
C) 200 grams D) 210 grams

Answer: A) 190 grams

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

Answer: A) Ohm's law

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

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

Answer: B) Fusibility

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

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

Answer: C) Efficiency

171. 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) 0.30 m/sec^2
- C) 0.10 m/sec^2
- D) 0.20 m/sec^2

Answer: B) 0.30 m/sec^2

172. Which is very good conductor?

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

Answer: A) Copper

173. Which is the unit of current?

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

Answer: B) Ampere

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

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

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

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

- A) 3750 cm^2
- B) 3740 cm^2
- C) 3745 cm^2
- D) 3755 cm^2

Answer: A) 3750 cm^2

176. How much watt second in 1 watt hour?

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

Answer: D) 3600 watt sec

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

- A) Silicon
- B) Butyl

C) Nitrite butadiene

D) Hypalone

Answer: A) Silicon

178. 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

179. 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

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

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

Answer: C) 1.65 metre

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

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

Answer: A) 735.5 watts

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

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

Answer: B) Vector quantity

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

- A) 80 cm^2
- B) 75 cm^2
- C) 85 cm^2
- D) 90 cm^2

Answer: A) 80 cm^2

184. Which is mineral insulator

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

Answer: A) Mica

185. What does EMF stands for?

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

Answer: D) Electro Motive Force

186. What is the formula for velocity?

- A) Distance covered/Time
- B) Change in velocity/Time

C) Displacement/Time

D) Change of
momentum/Time

Answer: C) Displacement/Time
