

Duration: 30 Mins

Total Marks: 186

Q.ID: ITISKILL49373Y

1. How much watt second in 1 watt hour?

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

Answer: A) 3600 watt sec

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

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

Answer: B) 88 sq.metre

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

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

Answer: D) Current

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

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

Answer: B) Ductility

5. What metals contained in brass alloy?

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

Answer: D) Copper and zinc

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

- A) 12 m/sec B) 10 m/sec
C) 8 m/sec D) 6 m/sec

Answer: C) 8 m/sec

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

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

Answer: D) Velocity

8. What is the formula for velocity?

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

Answer: D) Displacement/Time

9. Which insulating material is used for making switches?

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

Answer: A) Bakelite

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

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

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

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

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

Answer: D) 0.25% to 0.5%12. What is the length L₂, if total length (L) is 2.75 metre and L₁:L₂ = 2:3?

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

Answer: B) 1.65 metre

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

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

Answer: B) 13.99

14. Which metal contains iron as a major content?

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

Answer: C) Ferrous metal

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

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

Answer: A) 24 days

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

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

Answer: B) Vector quantity

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

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

Answer: D) 400 volts

18. How many millimetres are there in 1 inch?

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

Answer: D) 25.4 mm

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

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

Answer: A) Weight

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

Answer: C) Ohm's law

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

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

Answer: B) 6

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

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

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

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

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

Answer: C) 80 cm^2

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

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

Answer: A) 1436 cm^3

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

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

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

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

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

Answer: B) Efficiency

27. Which is the unit of current?

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

Answer: D) Ampere

28. What is the square root of 0.017?

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

Answer: B) 0.13

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

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

Answer: C) Mild steel

30. What is the formula for kinetic energy?

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

Answer: A) $\frac{1}{2} mv^2$ joule

31. Which among the following is an insulator?

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

Answer: D) Mica

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

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

Answer: B) Cu 94%

33. Which is mineral insulator

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

Answer: A) Mica

34. 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) 0.28 metre
D) 0.23 metre

Answer: B) 0.25 metre

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

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

Answer: B) 73.57 KJ

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

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

Answer: A) 220.3 volts

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

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

Answer: B) 3750 cm^2

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

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

Answer: B) Grey cast iron

39. 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) 7.5 g/cm^3 B) 6.9 g/cm^3
C) 6.6 g/cm^3 D) 7.2 g/cm^3

Answer: A) 7.5 g/cm^3

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

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

Answer: C) Mass

41. How many newtons for 1 kilogram?

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

Answer: B) 9.81 Newtons

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

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

Answer: B) 746 watts

43. Which law states about electromagnetic induction?

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

Answer: C) Faraday's law

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

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

Answer: A) 330 mm^2

45. What denotes letter M in MKS system?

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

Answer: C) Meter

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

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

Answer: C) Blast furnace

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

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

Answer: D) 25 mm

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

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

Answer: C) 12 W

49. What is the definition of ratio?

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

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

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

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

Answer: D) 669 Joules

51. Convert decimal 0.000659 to fraction?

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

Answer: A) $(659/1000000)$

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

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

Answer: A) Hardness

53. Convert 52% into fraction?

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

Answer: C) (13/25)

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

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

Answer: C) 75 kg.m/sec

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

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

Answer: A) Fundamental and derived | ಮೂಲಭೂತ ಮತ್ತು ಪಡೆಯಲಾಗಿದೆ

56. 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) 20 m
C) 40 m D) 10 m

Answer: B) 20 m

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

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

Answer: D) Body at rest

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

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

Answer: D) 8

59. 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) 0.069 m/sec² B) 0.59 m/sec²
C) 0.69 m/sec² D) 0.059 m/sec²

Answer: A) 0.069 m/sec²

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

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

Answer: C) Resistance

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

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

Answer: A) Meter

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

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

Answer: D) Energy

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

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

Answer: B) 25.4 mm

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

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

Answer: B) 1 Joule

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

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

Answer: A) 1766.25 liters

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

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

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

67. 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) 140 rpm
C) 180 rpm D) 120 rpm

Answer: C) 180 rpm

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

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

Answer: C) 9.6 watts

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

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

Answer: D) 625 Joules

70. Which is the unit of resistance?

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

Answer: B) Ohm

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

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

Answer: A) 735.5 watts

72. 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) B
C) D
D) A

Answer: D) A

73. Which machine converts mechanical energy into electrical energy?

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

Answer: A) Generator

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

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

Answer: B) 25 mm

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

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

Answer: D) Density | ಸಾಂದ್ರತೆ

76. What is the work done in unit time?

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

Answer: B) Power

77. 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 106 kg meter
D) 12 x 105 kg meter

Answer: D) 12 x 105 kg meter

78. Convert 0.456 decimal fraction into percentage?

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

Answer: A) 45.6

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

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

Answer: C) 23.46

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

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

Answer: C) 80 cm²

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

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

Answer: C) Silicon

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

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

Answer: B) Fusibility

83. 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 metre/sec²
B) 10 metre/sec²
C) 12 metre/sec²
D) 8 metre/sec²

Answer: C) 12 metre/sec²

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

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

Answer: B) 746 watts

85. 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) 10 hours B) 12 hours
C) 18 hours D) 24 hours

Answer: A) 10 hours

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

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

Answer: B) 20.93 cm^2

87. Which alloy used in electric lamp as filament?

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

Answer: A) Tungsten

88. How many ergs for 1 Joule?

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

Answer: B) 10^7 ergs

89. What is the formula for potential energy?

- A) mgh joule B) $\frac{2}{3} mgh$ joule
C) $\frac{1}{2} mgh$ joule D) mgh joule

Answer: D) mgh joule

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

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

Answer: B) 1847 c.c

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

- A) 876.82 cm^2 B) 856.82 cm^2
C) 886.82 cm^2 D) 866.82 cm^2

Answer: A) 876.82 cm^2

92. 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) 200 grams
C) 210 grams D) 220 grams

Answer: A) 190 grams

93. 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

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

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

Answer: A) 0.15% to 0.25%

95. Which is the example for statically induced emf?

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

Answer: B) Transformer

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

- A) 212°C B) 32°C
C) 100°C D) 0°C

Answer: C) 100°C

97. 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

98. What is the formula for speed?

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

Answer: D) Distance covered/Time

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

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

Answer: C) Efficiency

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

- A) wb/m B) Coloumb

C) m/wb

D) Hertz

Answer: A) wb/m

C) Metre/minute

D) Metre/hour

Answer: A) Metre/second

101. What is the density of aluminium?

A) 2.7 g/cm³

B) 5.7 g/cm³

C) 3.7 g/cm³

D) 4.7 g/cm³

Answer: A) 2.7 g/cm³

110. Which metal cannot be forged?

A) Steel

B) Alloy steel

C) Mild steel

D) Cast iron

Answer: D) Cast iron

102. Which is brittle metal?

A) Mild steel

B) Steel

C) Alloy steel

D) Cast iron

Answer: D) Cast iron

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

A) Manganese steel

B) Silicon steel

C) Vanadium

D) Invar steel

Answer: D) Invar steel

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

A) $I = V/R$

B) $I = R$

C) $I = R/V$

D) $I = 1/V$

Answer: A) $I = V/R$

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

A) 17 ohms

B) 1/17 ohms

C) 7 ohm

D) 11 ohms

Answer: A) 17 ohms

104. What does EMF stands for?

A) Electronic Magnetic Force

B) Electro Motive Force

C) Electromated Force

D) Electro Magnetic Force

Answer: B) Electro Motive Force

113. What are fundamental units?

A) Length, Mass, Time

B) Length, Mass, Area

C) Length, Mass, Volume

D) Length, Pressure, Volume

Answer: A) Length, Mass, Time

105. How much is 8% of 40 kg?

A) 3.2 kg

B) 2.2 kg

C) 4.2 kg

D) 5.2 kg

Answer: A) 3.2 kg

114. 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 240

C) Rs 220

D) Rs 260

Answer: B) Rs 240

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

A) Volt | ವೋಲ್ಟ್

B) Ampere | ಆಂಪಿಯರ್

C) Watt | ವ್ಯಾಟ್

D) Ohm | ಓಂ

Answer: B) Ampere | ಆಂಪಿಯರ್

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

A) 7847 Newton

B) 7487 Newton

C) 7748 Newton

D) 7848 Newton

Answer: D) 7848 Newton

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

A) 25 sq.cm

B) 30 sq.cm

C) 20 sq.cm

D) 35 sq.cm

Answer: A) 25 sq.cm

116. 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) Power | ಶಕ್ತಿ

B) Load | ಲೋಡ್

C) Efficiency | ದಕ್ಷತೆ

D) Effort | ಪ್ರಯತ್ನ

Answer: C) Efficiency | ದಕ್ಷತೆ

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

A) 1 watt

B) 1 HP

C) 1 kilowatt

D) 1 Kilowatt hour

Answer: A) 1 watt

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

A) 0.15% to 0.25%

B) 0.50% to 1.50%

C) 0.25% to 0.50%

D) 0.02% to 0.03%

Answer: B) 0.50% to 1.50%

109. What is the formula for acceleration?

A)

Metre/second²

B) Metre/second

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

 I = ____Amps

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

Answer: D) 4.4 Amps

119. What is the resistance?
 I = 11.5 Amps
 V = 380 Volts
 R = ____ Ohms

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

Answer: A) 33 ohms

120. What is the mass in gram, if a force of 15 dynes acting on a mass m producing an acceleration of 2.5 cm/sec²?

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

Answer: D) 6 grams

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

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

Answer: C) 628 cm²

122. 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) 3720 Joules
C) 3730 Joules
B) 3740 Joules
D) 3750 Joules

Answer: D) 3750 Joules

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

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

Answer: B) Specific gravity

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

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

Answer: B) Cupola

125. 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) 34 km/hour
C) 30 km/hour
B) 32 km/hour
D) 36 km/hour

Answer: D) 36 km/hour

126. 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/sec²
C) 0.20 m/sec²
B) 0.30 m/sec²
D) 0.10 m/sec²

Answer: B) 0.30 m/sec²

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

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

Answer: B) Metre/second²

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

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

Answer: B) 88 mm

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

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

Answer: C) 2.166

130. What is the S.I unit of heat? | ಶಾಖದ ಎಸ್‌ಐ ಒಳಮಾನ್ಯ ಯಾವುದು?

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

Answer: D) Joule | ಜೌಲ್

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

- A) 27 cm²
C) 57 cm²
B) 47 cm²
D) 37 cm²

Answer: B) 47 cm²

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

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

Answer: A) 157.1 cm²

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

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

Answer: B) Ductility

134. What is the square root of 529?

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

Answer: A) 23

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

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

Answer: D) Current | ಕರೆಂಟ್

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

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

Answer: C) 05:01

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

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

Answer: B) 39.59 cm

138. Which one is non-metal?

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

Answer: B) Graphite

139. Which insulator is used in over head lines?

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

Answer: C) Porcelain

140. 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) 1640 m^2
C) 1340 m^2 D) 1440 m^2

Answer: D) 1440 m^2

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

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

Answer: C) 21 m^3

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

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

Answer: D) $(9/10)$

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

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

Answer: B) 6000 m^3

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

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

Answer: B) Mass | ದ್ರವ್ಯರಾಶಿ

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

Answer: C) Melting point | ಕರಗುವ ಬಿಂದು

146. What is the current Flow in the bulb? $P = 550$ watts $R = 22$ Ohms $I = \text{_____}$ Amps

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

Answer: B) 5 Amps

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

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

Answer: C) 76 cm

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

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

Answer: C) Fundamental and derived

149. What is the product of 0.003×0.5 ?

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

Answer: C) 0.0015

150. What is the unit of speed?

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

Answer: B) Metre/second

151. Which is the example for dynamically induced Emf?

- A) Generator B) Car

C) Motor bike D) Motor

Answer: A) Generator

152. 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) 10.0 cm^3 B) 13.6 cm^3
C) 10.6 cm^3 D) 136 cm^3

Answer: A) 10.0 cm^3

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

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

Answer: C) Scalar quantity

154. 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) 73.43 cm^3 B) 73.33 cm^3
C) 73.53 cm^3 D) 73.23 cm^3

Answer: C) 73.53 cm^3

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

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

Answer: B) 2.4

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

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

Answer: B) 45.6%

157. What is the formula for induced emf?

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

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

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

- A) Dielectric strength B) Non absorption
C) Specific resistance D) Mechanical strength

Answer: A) Dielectric strength

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

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

Answer: A) 19.5

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

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

Answer: D) 36

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

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

Answer: C) Current

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

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

Answer: B) 23

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

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

Answer: A) 1962 Joules

164. How much power does it consume 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

165. Which property of material enables the formation of permanent deformation without fracture?

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

Answer: B) Plasticity

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

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

Answer: D) 1962.5 cm^2

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

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

Answer: B) Cobalt steel

168. 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) 96.8 ohms
C) 95.8 ohms D) 97.8 ohms

Answer: B) 96.8 ohms

169. What percentage of 80 is 20?

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

Answer: D) 0.25

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

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

Answer: B) 6

171. What is the block weighs (W) in kg, if volume (V) is 320 cm³ and density 8.9 g/cm³?

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

Answer: A) 2.848 kg

172. Which is very good conductor?

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

Answer: C) Copper

173. What is the voltage?
 R = 250 Ohms
 I = 0.44 Amps
 V = ____Volts

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

Answer: C) 110 Volts

174. Which is the unit electrical power?

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

Answer: B) Watts

175. Which is equal to electric power?

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

Answer: D) I^2R watts

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

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

Answer: C) Density

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

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

Answer: C) 0.185

178. What is the power required?
 I = 0.455 Amps
 R = 484 Ohms
 P = ____Watts

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

Answer: A) 100.2 watts

179. What is the ore of aluminium?

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

Answer: A) Bauxite

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

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

Answer: B) High carbon steel

181. Which cast iron cannot be welded?

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

Answer: C) White cast iron

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

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

Answer: D) Elasticity

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

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

Answer: A) Body at motion

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

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

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

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

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

Answer: C) Non-ferrous metals

186. What is the unit for velocity?

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

Answer: A) Metre/second