

Duration: 120 Mins

Total Marks: 152

ID: ITISKILL7792SY

Student Name: _____ Roll No: _____

1. How many ergs for 1 Joule?

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

2. 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 260 D) Rs 220

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

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

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

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

5. 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) 12 m/sec D) 6 m/sec

6. Convert 52% into fraction?

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

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

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

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

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

9. What percentage of 80 is 20?

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

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

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

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

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

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

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

13. 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) 20.93 cm^2
C) 20.98 cm^2 D) 20.89 cm^2

14. 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) 90 cm^2 D) 85 cm^2

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

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

16. Which cast iron cannot be welded?

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

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

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

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

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

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

20. What is the ore of aluminium?

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

21. 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) 120 rpm
C) 140 rpm D) 180 rpm

22. 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) 0.20 m/sec^2 D) 0.10 m/sec^2

23. What is the density of aluminium?

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

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

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

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

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

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

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

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

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

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

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

29. 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) Gravitational and non-gravitational | ಗುರುತ್ವ ಮತ್ತು ಗುರುತ್ವಾಕರ್ಷಣೆಯಿಲ್ಲದ D) British and Metric | ಬ್ರಿಟಿಷ್ ಮತ್ತು ಮೆಟ್ರಿಕ್

30. 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) 1942 Joules
C) 1952 Joules D) 1972 Joules

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

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

32. 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) 15
C) 6 D) 25

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

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

34. What denotes letter M in MKS system?

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

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

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

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

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

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

- A) 13.79 B) 13.89

C) 13.99

D) 13.69

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

ಬ್ರಿಟಿಷ್ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ 1 ಕುದುರೆ ಶಕ್ತಿಗಾಗಿ (HP) ಎಷ್ಟು ವ್ಯಾಟ್?

A) 736 watts

B) 726 watts

C) 756 watts

D) 746 watts

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

A) Non-Insulating metals

B) Insulating metals

C) Ferrous metals

D) Non-ferrous metals

40. 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) 220 grams

D) 200 grams

41. 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

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

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

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

A) 25 mm

B) 15 mm

C) 20 mm

D) 30 mm

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

A) 0.02% to 0.03%

B) 0.15% to 0.25%

C) 0.25% to 0.50%

D) 0.50% to 1.50%

45. 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) 1340 m^2 C) 1540 m^2 D) 1440 m^2

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

A) 25 sq.cm

B) 35 sq.cm

C) 20 sq.cm

D) 30 sq.cm

47. 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) Efficiency | ದಕ್ಷತೆ

B) Power | ಶಕ್ತಿ

C) Effort | ಪ್ರಯತ್ನ

D) Load | ಲೋಡ್

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

A) Hardness

B) Malleability

C) Toughness

D) Ductility

49. 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) 90 cm^2 C) 80 cm^2 D) 75 cm^2

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

A) 0.05% to 0.15%

B) 0.15% to 0.25%

C) 0.5% to 1.5%

D) 0.25% to 0.5%

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

52. 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) Density | ಸಾಂದ್ರತೆ

C) Mass | ದ್ರವ್ಯರಾಶಿ

D) Volume | ಗಾತ್ರ

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

A) Body at rest

B) Speed

C) Velocity

D) Body at motion

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

A) Specific gravity

B) Mass

C) Density

D) Weight

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

A) Energy

B) Acceleration

C) Efficiency

D) Work

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

A) Resistance | ಪ್ರತಿರೋಧ

B) Current | ಕರೆಂಟ್

C) Voltage | ವೋಲ್ಟೇಜ್

D) Power | ಶಕ್ತಿ

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

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

58. 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

59. 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) 30 km/hour B) 36 km/hour
C) 32 km/hour D) 34 km/hour

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

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

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

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

62. 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 B) 6.166
C) 1.166 D) 3.166

63. What is the formula for velocity?

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

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

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

65. What is the formula for acceleration?

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

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

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

67. 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

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

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

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

- A) 1932.5 cm² B) 1962.5 cm²
C) 1942.5 cm² D) 1952.5 cm²

70. Which insulator is used in over head lines?

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

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

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

72. 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

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

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

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

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

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

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

76. How many newtons for 1 kilogram?

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

77. What are fundamental units?

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

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

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

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

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

80. 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) 10.0 cm³
C) 136 cm³ D) 13.6 cm³

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

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

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

(C) 1

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

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

82. What are fundamental units? | ಮೂಲಭೂತ ಮೂಲಮಾನಗಳು ಯಾವವು?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

91. What is the weight force of a car has a mass of 800 kg?(Take g = 9.81m/sec)

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

92. What is the x value for x² + 62 = 126?

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

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

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

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

- A) 100°C B) 212°C
C) 32°C D) 0°C

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

A) Alloy metal - Electric furnace

B) Mild steel - Blast furnace

C) Cupola

D) Steel - Rever battery

96. Convert decimal 0.000659 to fraction?

A) (659/1000)

B) (659/100000)

C) (659/1000000)

D) (659/10000)

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

A) 39.39 cm

B) 39.29 cm

C) 39.59 cm

D) 39.49 cm

98. Which is brittle metal?

A) Alloy steel

B) Mild steel

C) Steel

D) Cast iron

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

A) Silicon steel

B) Manganese steel

C) Vanadium steel

D) Cobalt steel

100. How much is 8% of 40 kg?

A) 5.2 kg

B) 3.2 kg

C) 4.2 kg

D) 2.2 kg

101. Which insulating material is used for making switches?

A) Ebonite

B) Porcelain

C) PVC

D) Bakelite

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

A) Density

B) Weight

C) Mass

D) Volume

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

A) Watt | ವ್ಯಾಟ್

B) Ohm | ಓಂ

C) Ampere | ಆಂಪಿಯರ್

D) Volt | ವೋಲ್ಟ್

104. Which metal contains iron as a major content?

A) Bronze metal

B) Zinc

C) Brass metal

D) Ferrous metal

105. Which one is non-metal?

A) Mercury

B) Iron

C) Graphite

D) Brass

106. 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) 10

metre/sec²

C) 14

metre/sec²

B) 12

metre/sec²

D) 8

metre/sec²

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

A) 24

B) 18

C) 6

D) 2

108. What is the formula for potential energy?

A) $\frac{2}{3} mgh$ joule

B) $\frac{1}{2} mgh$ joule

C) mgh joule

D) mgh^2 joule

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

A) Brittleness

B) Plasticity

C) Ductility

D) Elasticity

110. 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 96%

C) Cu 92%

D) Cu 94%

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

A) 13

B) 23

C) 43

D) 33

112. How many millimetres are there in 1 inch?

A) 25.4 mm

B) 24.5 mm

C) 2.45 mm

D) 2.54 mm

113. Which metal cannot be forged?

A) Mild steel

B) Alloy steel

C) Cast iron

D) Steel

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

A) 0.25 metre

B) 0.23 metre

C) 0.28 metre

D) 0.29 metre

115. What metals contained in brass alloy?

A) Copper and aluminium

B) Copper and zinc

C) Copper and lead

D) Copper and tin

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

A)

Metre/second²

B) Metre/second

C)

Metre/minutes²

D) Metre/minutes

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

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

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

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

119. 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) 7 grams
B) 9 grams
C) 6 grams
D) 8 grams

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

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

121. What is the unit for velocity?

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

122. What is the unit of speed?

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

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

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

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

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

125. Convert 0.456 decimal fraction into percentage?

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

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

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

127. 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) 0.59 m/sec^2
B) 0.69 m/sec^2
C) 0.069 m/sec^2
D) 0.059 m/sec^2

128. What is the formula for speed?

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

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

- A) Mechanical strenth
B) Di-electric strength
C) Specific resistance
D) Non absorption

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

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

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

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

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

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

133. What is the side of a square whose area is 625 mm^2 ? | 625 ಎಂಎಂ^2 ವಿಸ್ತೀರ್ಣವಿರುವ ಚೌಕದ ಬದಿ ಎಷ್ಟು?

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

134. What is the product of 0.003×0.5 ?

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

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

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

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

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

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

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

138. What is the work done in unit time?

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

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

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

140. Which among the following is an insulator?

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

141. Which alloy used in electric lamp as filament?

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

142. What is the formula for kinetic energy?

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

143. What is the square root of 0.017?

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

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

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

145. 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) 37 cm^2
- C) 47 cm^2
- D) 27 cm^2

146. What is the square root of 529?

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

147. 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) 24 days
- D) 22 days

148. 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) 1.65 metre
- D) 1.25 metre

149. 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) 3730 Joules
- B) 3750 Joules
- C) 3720 Joules
- D) 3740 Joules

150. What is the definition of ratio?

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

151. 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) D
- B) A
- C) C
- D) B

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

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