

Duration: 60 Mins

Total Marks: 186

ID: ITISKILL66291F

Student Name: _____ Roll No: _____

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

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

2. How many newtons for 1 kilogram?

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

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

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

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

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

5. What is the value of $\tan 45^\circ$ if $\sin 45^\circ = \frac{1}{\sqrt{2}}$? $\sin 45^\circ = \frac{1}{\sqrt{2}}$ ಆಗಿದ್ದರೆ $\tan 45^\circ$ ಮೌಲ್ಯ ಎಷ್ಟು?

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

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

(C) 1

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

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

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

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

7. What is the work done in unit time?

- A) Acceleration B) Power

C) Force

D) Energy

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

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

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

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

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

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

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

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

12. Which cast iron cannot be welded?

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

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

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

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

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

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

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

16. 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

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

A) 4.2 Amps

B) 4.4 Amps

C) 4.1 Amps

D) 4.3 Amps

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

A) 7487 Newton

B) 7748 Newton

C) 7848 Newton

D) 7847 Newton

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

A) 1767.25 liters

B) 1766.25 liters

C) 1768.25 liters

D) 1769.25 liters

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

A) 330 mm^2

B) 320 mm^2

C) 350 mm^2

D) 340 mm^2

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

A) Metre/minutes

B)

Metre/minutes²

C)

Metre/second²

D) Metre/second

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

A) 12

B) 36

C) 18

D) 42

23. 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) Melting point | ಕರಗುವ ಬಿಂದು

C) Boiling point | ಕುದಿಯುವ ಬಿಂದು

D) Latent heat of vaporisation | ಆವಿಯಾಗುವಿಕೆಯ ಸುಷ್ಪ ಶಾಖ

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

A) $I = R/V$

B) $I = V/R$

C) $I = 1/V$

D) $I = R$

25. Which property of material enables to formation of

permanent deformation without fracture?

A) Elasticity

B) Brittleness

C) Ductility

D) Plasticity

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

A) 100°C

B) 0°C

C) 32°C

D) 212°C

27. 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%

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

A) 15 mm

B) 30 mm

C) 25 mm

D) 20 mm

29. What is the length L_2 , if total length (L) is 2.75 metre and $L_1:L_2 = 2:3$?

A) 1.1 metre

B) 1.75 metre

C) 1.65 metre

D) 1.25 metre

30. 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) 147.1 cm^2

D) 167.1 cm^2

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

A) 2000 watts

B) 2020 watts

C) 2030 watts

D) 2010 watts

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

A) Tenacity

B) Conductivity

C) Fusibility

D) Malleability

33. 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) 200.3 volts

C) 220.3 volts

D) 230.3 volts

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

A) Speed

B) Scalar quantity

C) Velocity

D) Vector quantity

35. What is the unit for velocity?

- A) Inequality between two ratios

C) Relation of two quantities of the same kind D) Relation of two quantities of the different kind

A) 0.001
C) 0.13

B) 0.000001
D) 0.00001

57. What is the unit of speed?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

66. What is the square root of 0.017?

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

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

68. 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) 6.166
B) 1.166
D) 3.166

69. Which is the example for dynamically induced Emf?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

77. 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
C) B
- B) D
D) A

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

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

79. What is the formula for speed?

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

80. 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
C) 7 grams
- B) 6 grams
D) 8 grams

81. Which law states about electromagnetic induction?

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

82. What are fundamental units?

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

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

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

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

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

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

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

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

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

87. 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) 85 cm^2
C) 90 cm^2
- B) 80 cm^2
D) 75 cm^2

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

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

89. What is the formual for induced emf?

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

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

- A) 324 cm^2
C) 72 cm^2
- B) 36 cm^2
D) 26 cm^2

91. Which is equal to electric power?

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

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

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

93. What is the formula for acceleration?

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

94. Which is the unit of current?

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

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

- A) 755.5 watts
B) 745.5 watts

C) 725.5 watts

D) 735.5 watts

96. Which is the unit electrical power?

A) Watts

B) Volts

C) Ohms

D) Ampere

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

A) 3 Amps

B) 5 Amps

C) 2 Amps

D) 4 Amps

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

A) Voltage | ವೋಲ್ಟೇಜ್

B) Current | ಕರೆಂಟ್

C) Resistance | ಪ್ರತಿರೋಧ

D) Power | ಶಕ್ತಿ

99. 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

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

A) Hooke's law

B) Lenz's law

C) Ohm's law

D) Newton's law

101. How much watt second in 1 watt hour?

A) 4000 watt sec

B) 1000 watt sec

C) 3600 watt sec

D) 2000 watt sec

102. What is the ore of aluminium?

A) Hematite

B) Lemonite

C) Mallatite

D) Bauxite

103. How many millimetres are there in 1 inch?

A) 24.5 mm

B) 2.54 mm

C) 2.45 mm

D) 25.4 mm

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

A) Ferrous metals

B) Insulating metals

C) Non-ferrous metals

D) Non-Insulating metals

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

A) Hypalone

B) Butyl

C) Nitrite butadiene

D) Silicon

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

A) 22 days

B) 26 days

C) 20 days

D) 24 days

107. 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) 3720 Joules

C) 3740 Joules

D) 3750 Joules

108. How many ergs for 1 Joule?

A) 10^9 ergs

B) 10^7 ergs

C) 10^3 ergs

D) 10^5 ergs

109. 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) 73.23 cm^3

B) 73.53 cm^3

C) 73.43 cm^3

D) 73.33 cm^3

110. Convert 52% into fraction?

A) $(13/25)$

B) $(17/25)$

C) $(9/25)$

D) $(11/25)$

111. Which insulator is used in over head lines?

A) P.V.C

B) Porcelain

C) Mica

D) Rubber

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

A) Volume | ಗಾತ್ರ

B) Specific gravity | ವಿಶಿಷ್ಟ ಗುರುತ್ವ

C) Mass | ದ್ರವ್ಯರಾಶಿ

D) Density | ಸಾಂದ್ರತೆ

113. Which is very good conductor?

A) Cast iron

B) Copper

C) Wrought iron

D) Steel

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

A) 24

B) 6

C) 18

D) 2

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

A) Millimeter

B) Micron

C) Mile

D) Meter

116. Convert decimal 0.000659 to fraction?

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

117. Which is the unit of resistance?

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

118. What percentage of 80 is 20?

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

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

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

120. 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) 649 Joules
C) 669 Joules D) 659 Joules

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

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

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

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

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

124. 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) 20.89 cm^2 D) 20.98 cm^2

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

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

126. 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) 27 cm^2
C) 57 cm^2 D) 37 cm^2

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

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

128. What is the formula for potential energy?

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

129. Which metal cannot be forged?

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

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

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

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

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

132. What does EMF stands for?

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

133. What is the formula for velocity?

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

134. Which alloy used in electric lamp as filament?

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

135. 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 B) 32 km/hour
C) 36 km/hour D) 30 km/hour

136. Which machine converts mechanical energy into electrical energy?

- A) Iron box B) Heater

C) Battery D) Generator

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

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

138. 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

139. Which is brittle metal?

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

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

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

141. 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) 220 grams D) 210 grams

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

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

143. 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) $\pi r (h + r)$

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

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

145. 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) 180 rpm D) 140 rpm

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

A) Length, Pressure, Volume | B) Length, Mass, Volume |
ಉದ್ದ, ಒತ್ತಡ, ಘನ ಫಲ ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ಘನ ಫಲ

C) Length, Mass, Area | ಉದ್ದ, D) Length, Mass, Time |
ದ್ರವ್ಯರಾಶಿ, ವಿಸ್ತೀರ್ಣ ಉದ್ದ, ದ್ರವ್ಯರಾಶಿ, ಸಮಯ

147. Which insulating material is used for making switches?

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

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

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

149. What is the square root of 529?

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

150. 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 dynes
C) 10 Joules D) 1 Joule

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

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

152. Which is the example for statically induced emf?

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

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

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

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

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

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

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

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

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

157. 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 98%
C) Cu 94% D) Cu 96%

158. What denotes letter M in MKS system?

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

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

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

160. 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) 92 sq.metre D) 88 sq.metre

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

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

162. 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

163. 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/sec^2 B) 8 metre/sec^2
C) 12 metre/sec^2 D) 10 metre/sec^2

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

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

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

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

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

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

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

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

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

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

169. Simplify: $(\frac{3}{4}) + (\frac{2}{5}) - (\frac{5}{20})$

- A) $(\frac{9}{10})$ B) $(\frac{12}{10})$
C) $(\frac{3}{10})$ D) $(\frac{13}{10})$

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

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

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

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

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

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

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

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

174. 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) $\pi/3 (R^2 - r^2)h$ D) $\pi (R^2 - r^2)h$

175. What is the density of aluminium?

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

176. Which is mineral insulator

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

177. 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) Efficiency ದಕ್ಷತೆ |
| C) Effort ಪ್ರಯತ್ನ | D) Load ಲೋಡ್ |

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

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

179. 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 |

180. What metals contained in brass alloy?

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

181. 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) Specific resistance |
| C) Non absorption | D) Di-electric strength |

182. 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 106 kg meter | B) 12 x 105 kg meter |
| C) 12 x 104 kg meter | D) 12 x 107 kg meter |

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

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

184. What is the product of 0.003×0.5 ?

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

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

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

186. 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) Speed | D) Velocity |