# ITI Quiz - 04-Apr-2026 11:50 AM

Q. ID: ITISKILL4742JZ

April 2026 | **Govt ITI (W) Yelburga** | Question Paper

**Duration: 30 Mins** | **Total Marks: 166** | **ID: ITISKILL4742JZ**

Student Name: _____ Roll No: _____

**1.** What is the power required? <br> I = 0.455 Amps <br> R = 484 Ohms <br> P = _____Watts

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

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

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

**3.** Which is the example for dynamicallly induced Emf?

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

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

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

**5.** What denotes letter M in MKS system?

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

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

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

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

A) 2/3 Pi (R<sup>2</sup> - r<sup>2</sup>) h
B) Pi (R<sup>2</sup> - r<sup>2</sup>)h
C) 4/3 Pi (R<sup>2</sup> - r<sup>2</sup>)h
D) Pi/3 (R<sup>2</sup> - r<sup>2</sup>) h

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

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

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

A) 167.1 cm<sup>2</sup>
B) 177.1 cm<sup>2</sup>
C) 147.1 cm<sup>2</sup>
D) 157.1 cm<sup>2</sup>

**10.** Convert 52% into fraction?

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

**11.** What is the volume of sphere of radius 7 cm?

A) 1346 cm<sup>3</sup>
B) 1463 cm<sup>3</sup>
C) 1636 cm<sup>3</sup>
D) 1436 cm<sup>3</sup>

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

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

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

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

**14.** Convert decimal 0.000659 to fraction?

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

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

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

**16.** Which metal contains iron as a major content?

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

**17.** 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<sup>2</sup>
B) 8 metre/sec<sup>2</sup>

C) 10 metre/sec<sup>2</sup>
D) 12 metre/sec<sup>2</sup>

**18.** 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 107 kg meter
B) 12 x 104 kg meter
C) 12 x 105 kg meter
D) 12 x 106 kg meter

**19.** What is the formula for kinetic energy?

A) (2/3) mv<sup>2</sup> joule
B) (1/2) mv<sup>2</sup> joule
C) (1/2) mv joule
D) (2/3) mv joule

**20.** What is the specific gravity of the solid, if density of the solid is 19.5 g/cm<sup>3</sup>?

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

**21.** Which insulator is used in over head lines?

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

**22.** What is the other name of low carbon steel?

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

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

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

**24.** 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) 2.166
C) 3.166
D) 6.166

**25.** What is the unit of acceleration of an object?

A) Metre/second<sup>2</sup>
B) Metre/second
C) Metre/minutes
D) Metre/minutes<sup>2</sup>

**26.** What is the square root of decimal number 550.37?

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

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

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

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

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

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

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

**30.** 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

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

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

**32.** 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

**33.** 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<sup>2</sup>?

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

**34.** What is the decimal fraction of conversion of 18.5%?

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

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

A) 340 mm<sup>2</sup>
B) 320 mm<sup>2</sup>
C) 350 mm<sup>2</sup>
D) 330 mm<sup>2</sup>

**36.** How much is 8% of 40 kg?

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

**37.** Which is equal to electric power?

A) R<sup>2</sup>I watts
B) RI
C) IRA
D) I<sup>2</sup>R watts

**38.** What is the specific gravity of the metal, if the piece of

metal weighs 150 grams in air and 125 grams in water?

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

**39.** Which is mineral insulator

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

**40.** 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) 36 km/hour B) 32 km/hour
C) 30 km/hour D) 34 km/hour

**41.** What metals contained in brass alloy?

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

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

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

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

A) 0.10 m/sec<sup>2</sup> B) 0.30 m/sec<sup>2</sup>
C) 0.40 m/sec<sup>2</sup> D) 0.20 m/sec<sup>2</sup>

**44.** What are fundamental units?

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

**45.** Wha is the mass if the density of a body is 7.6 g/cm<sup>3</sup> and its volume is 25 cm<sup>3</sup>?

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

**46.** 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) 120 rpm D) 180 rpm

**47.** 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/sec<sup>2</sup> B) 0.069 m/sec<sup>2</sup>
C) 0.69 m/sec<sup>2</sup> D) 0.59 m/sec<sup>2</sup>

**48.** What is the voltage of the immersion heater? <br>P = 500 watts <br> I = 2.27 Amps <br> V = _____Volts

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

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

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

**50.** 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

**51.** What is the ore of aluminium?

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

**52.** 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) 0.29 metre
C) 0.28 metre D) 0.23 metre

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

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

**54.** Which law states about electromagnetic induction?

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

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

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

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

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

**57.** Which one is non-metal?

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

**58.** Which machine converts mechanical energy into electrical energy?

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

**59.** Which among the following is an insulator?

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

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

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

**61.** Which alloy used in electric lamp as filament?

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

**62.** Which is the unit of current?

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

**63.** Which is brittle metal?

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

**64.** What is the density (r) in g/cm3 of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm,<sup>3</sup>?

A) 6.6 g/cm<sup>3</sup> B) 7.2 g/cm<sup>3</sup>
C) 6.9 g/cm<sup>3</sup> D) 7.5 g/cm<sup>3</sup>

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

A) 57 cm<sup>2</sup> B) 47 cm<sup>2</sup>
C) 37 cm<sup>2</sup> D) 27 cm<sup>2</sup>

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

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

**67.** What is the formula for potential energy?

A) 2/3 mgh joule B) 1/2 mgh joule
C) mgh<sup>2</sup> joule D) mgh joule

**68.** What are the two classifications of system of units?

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

**69.** What is the product of 0.003 x 0.5?

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

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

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

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

A) 6200 m<sup>3</sup> B) 6100 m<sup>3</sup>
C) 6000 m<sup>3</sup> D) 5900 m<sup>3</sup>

**72.** What is the resistance? <br> I = 11.5 Amps <br> V = 380 Volts <br> R = _____Ohms

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

**73.** Which is very good conductor?

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

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

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

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

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

**76.** What is the carbon percentage in medium carbon steel?

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

**77.** What is the unit of speed?

A) Metre/second B) Metre/minute
C) Metre/hour D) Metre/second<sup>2</sup>

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

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

**79.** What is the density of aluminium?

A) 3.7 g/cm<sup>3</sup> B) 2.7 g/cm<sup>3</sup>
C) 4.7 g/cm<sup>3</sup> D) 5.7 g/cm<sup>3</sup>

**80.** What is the current? <br> R = 50 Ohms <br> 220 Volts <br> I =_____Amps

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

**81.** Which is the example for statically induced emf?

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

**82.** What maximum height a stone will reach if it is thrown upwords with a velocity of 20m/sec?(g = 10m/sec<sup>2</sup>)

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

**83.** What is the current Flow in the bulb? <br> P = 550 watts <br> R = 22 Ohms <br> I = _____Amps

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

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

A) 866.82 cm<sup>2</sup> B) 886.82 cm<sup>2</sup>
C) 876.82 cm<sup>2</sup> D) 856.82 cm<sup>2</sup>

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

A) 3745 cm<sup>2</sup> B) 3740 cm<sup>2</sup>
C) 3755 cm<sup>2</sup> D) 3750 cm<sup>2</sup>

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

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

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

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

**88.** Which is the unit electrical power?

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

**89.** 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

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

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

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

A) 75 cm<sup>2</sup> B) 85 cm<sup>2</sup>
C) 90 cm<sup>2</sup> D) 80 cm<sup>2</sup>

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

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

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

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

**94.** 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

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

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

**96.** Which law states that at constant termperature 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) Newton's law
C) Lenz's law D) Hooke's law

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

A) 1952.5 cm<sup>2</sup> B) 1932.5 cm<sup>2</sup>
C) 1942.5 cm<sup>2</sup> D) 1962.5 cm<sup>2</sup>

**98.** 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) 136 cm<sup>3</sup> B) 10.6 cm<sup>3</sup>
C) 10.0 cm<sup>3</sup> D) 13.6 cm<sup>3</sup>

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

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

**100.** How many newtons for 1 kilogram?

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

**101.** What is the formula for velocity?

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

**102.** What does EMF stands for?

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

**103.** Simplify: (17.49x5.2)/(6.5)

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

**104.** 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 98%
C) Cu 94%
D) Cu 92%

**105.** What is the x value for x<sup>2</sup> + 62 = 126?

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

**106.** How many hours will take for a 100 watts bulb to consume 1 kwh energy? <br> W = 1 Kwh <br> P = 100 Watts <br> t = _____Hours

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

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

A) 20.39 cm<sup>2</sup>
B) 20.93 cm<sup>2</sup>
C) 20.89 cm<sup>2</sup>
D) 20.98 cm<sup>2</sup>

**108.** Which cast iron cannot be welded?

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

**109.** What is the ratio of power output to power input?

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

**110.** How many ergs for 1 Joule?

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

**111.** Which insulating material is used for making switches?

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

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

A) 21 m<sup>3</sup>
B) 31 m<sup>3</sup>
C) 41 m<sup>3</sup>
D) 11 m<sup>3</sup>

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

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

**114.** 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

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

A) 638 cm<sup>2</sup>
B) 620 cm<sup>2</sup>
C) 630 cm<sup>2</sup>
D) 628 cm<sup>2</sup>

**116.** How many millimetres are there in 1 inch?

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

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

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

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

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

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

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

**120.** What percentage of 80 is 20?

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

**121.** What is the rate of change of displacement of a body?

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

**122.** What is the improper fraction for the given mixed fraction ? 7 x (3/7)

A) "28/7"
B) (52/7)

C) "7/28" D) "7/52"

**123.** Convert 0.456 decimal fraction into percentage?

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

**124.** Divide (20/31)/(15/62)

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

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

A) Pi r (h + r) B) 2 Pi rh
C) 2 Pi r (h + r) D) Pi rh

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

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

**127.** 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) 94.8 ohms
C) 95.8 ohms D) 96.8 ohms

**128.** Simplify: (3/4)+(2/5)-(5/20)

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

**129.** What is the formula for acceleration?

A) Metre/minute B) Metre/second<sup>2</sup>
C) Metre/hour D) Metre/second

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

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

**131.** What is the flow of electrons in any conductor?

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

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

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

**133.** What is the formual for induced emf?

A) BLV sinq volts B) B<sup>2</sup>L sinq volts
C) B<sup>2</sup>V sinq volts D) BL sinq volts

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

A) 1340 m<sup>2</sup> B) 1640 m<sup>2</sup>
C) 1540 m<sup>2</sup> D) 1440 m<sup>2</sup>

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

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

**136.** What is the unit for velocity?

A) Metre/second<sup>2</sup> B) Metre/second
C) Metre/minute D) Metre/hour

**137.** How much watt second in 1 watt hour?

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

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

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

**139.** What is the side of a square whose area is 625 mm<sup>2</sup>?

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

**140.** Which is the unit of resistance?

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

**141.** 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) 3740 Joules
C) 3750 Joules D) 3720 Joules

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

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

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

A) Mass B) Volume

C) Density D) Weight

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

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

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

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

**146.** Which metal cannot be forged?

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

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

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

**148.** 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%

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

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

**150.** What is the unit of intensity of magnetic field?

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

**151.** Which one of the following properties is the mechanical properties of metal?

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

**152.** What is the carbon percentage in low carbon steel?

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

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

**154.** What is the square root of 0.017?

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

**155.** What is the voltage? <br> R = 250 Ohms <br> I = 0.44 Amps <br> V = ____Volts

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

**156.** What is the square root of 529?

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

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

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

**158.** Which alloy steel is used to make permanent magnets?

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

**159.** What is the formula for speed?

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

**160.** What is the volume (V) of mercury in cm3, if mass (m) of mercury is 1 kg and density (r) is 13.6 g/cm<sup>3</sup>?

A) 73.33 cm<sup>3</sup> B) 73.23 cm<sup>3</sup>
C) 73.43 cm<sup>3</sup> D) 73.53 cm<sup>3</sup>

**161.** Which alloy steel is using for making precious instrument?

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

**162.** 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) 92 sq.metre D) 90 sq.metre

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

A) 324 cm<sup>2</sup> B) 36 cm<sup>2</sup>
C) 72 cm<sup>2</sup> D) 26 cm<sup>2</sup>

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

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

**165.** 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) 1972 Joules
D) 1942 Joules

**166.** What is the work done in unit time?

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