

Duration: 30 Mins

Total Marks: 25

Q.ID: ITISKILL3225XS

1. What is the weight of the iron ball has volume of 250 cc and density 7.5 gm/cc?

- A) 1750 gram B) 1785 gram
C) 1875 gram D) 1975 gram

Answer: C) 1875 gram

2. Which instrument is used to measure heat?

- A) Thermometer B) Barometer
C) Pyrometer D) Calorie meter

Answer: D) Calorie meter

3. What is the ratio of ultimate load to area of original cross section?

- A) Factor of safety B) Ultimate stress
C) Yield point D) Youngs modulus

Answer: B) Ultimate stress

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

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

Answer: D) 1766.25 liters

5. What is the total cost to assemble 10 personal computer systems, spares cost as given for one system: 1 TB hard disc Rs.4500/-, Intel i3 mother board Rs.7000/-, SMPS Rs.2500/-, monitor Rs.6000/-, keyboard Rs.1000/-, other material cost (Switches, USB, Cabl

- A) Rs.275000/- B) Rs.250000/-
C) Rs.225000/- D) Rs.265000/-

Answer: A) Rs.275000/-

6. What is the current? $R = 50 \text{ Ohms}$ $V = 220 \text{ Volts}$
 $I = \underline{\hspace{2cm}}$ Amps

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

Answer: D) 4.4 Amps

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

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

Answer: D) Hardness

8. What is the value of adding $(5x+2y)$, $(4x - 7z)$ and $(15z - 3y)$?

- A) $9x + y - 8z$ B) $x - 9y + 8z$
C) $x + 9y + 8z$ D) $9x - y + 8z$

Answer: D) $9x - y + 8z$

9. What is the formula to find Profit %?

- A) $\frac{(S.P-C.P)}{(Profit)} \times 100$ B) $\frac{(Profit)}{(S.P)} \times 100$
C) $\frac{(C.P)}{(Profit)} \times 100$ D) $\frac{(Profit)}{(C.P)} \times 100$

Answer: D) $\frac{(Profit)}{(C.P)} \times 100$

10. What is the angle of elevation of the top of a light house of 15 m height seen at a point 15 m away from the base?

- A) 60 Degree B) 45 Degree
C) 90 Degree D) 30 Degree

Answer: B) 45 Degree

11. What is the value of $14x+3y+25x+2y$?

- A) $44xy$ B) $39x + 5y$
C) $17x + 27y$ D) $16x + 28y$

Answer: B) $39x + 5y$

12. What is the value of $a^2 + b^2$ if $a+b=9$ and $ab = 20$?

- A) (-121) B) (-41)
C) 121 D) 41

Answer: D) 41

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

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

Answer: D) $(\frac{9}{10})$

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

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

Answer: C) 25 mm

15. What is the compound interest on a principal of Rs.25000/- after 3 years at the rate of 12% per annum?

- A) Rs.10483.20 B) Rs.9720
C) Rs.10123.20 D) Rs. 9000

Answer: C) Rs.10123.20

16. What is the minimum permissible size of aluminium wire used in estimation?

- A) 1.5 sq.mm
- B) 2.5 sq.mm
- C) 5 sq.mm
- D) 3.5 sq.mm

Answer: A) 1.5 sq.mm

17. 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 94%
- D) Cu 92%

Answer: C) Cu 94%

18. What is the expanded form of S.P?

- A) Selling Price
- B) Super Price
- C) Selected Price
- D) Special Price

Answer: A) Selling Price

19. What is the ratio of shear stress to shear strain?

- A) Bulk modulus
- B) Modulus of rigidity
- C) Yield point
- D) Modulus of elasticity

Answer: B) Modulus of rigidity

20. What is the melting point of aluminium?

- A) 620 Degree C
- B) 670 Degree C
- C) 680 Degree C
- D) 660 Degree C

Answer: D) 660 Degree C

21. What effort required to lift a load of 150 kg in a wheel and axle, if the velocity ratio is 2.5 and the efficiency of the machine is 75%?

- A) 70 kg
- B) 90 kg
- C) 80 kg
- D) 100 kg

Answer: C) 80 kg

22. What is the radius of a circle whose diameter is 44 cm?

- A) 22 cm
- B) 44 cm
- C) 20 cm
- D) 23 cm

Answer: A) 22 cm

23. Which one is non-metal?

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

Answer: D) Graphite

24. What is the unit of strain?

- A) Kg/cm²
- B) Newton/metre²
- C) No unit
- D) Metre

Answer: C) No unit

25. What is the value of x, if $3(2x - 4) = -4x + 28$?

- A) 4
- B) 8
- C) 6
- D) 12

Answer: A) 4