

Duration: 180 Mins

Total Marks: 25

Q.ID: ITISKILL0459IX

1. Which is the formula for $a^m \div a^n$?

- A) $(a^m)^n$ B) a^{mn}
C) a^{m-n} D) a^{m+n}

Answer: C) a^{m-n}

2. What is the value of x, if $x(120) = 960$?

- A) 6 B) 10
C) 7 D) 8

Answer: D) 8

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

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

Answer: B) Fusibility

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

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

Answer: A) 0.30 m/sec^2

5. Which is the example for dynamically induced Emf?

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

Answer: B) Generator

6. Which insulating material is used for making switches?

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

Answer: A) Bakelite

7. What is the ratio of change in length to original length?

- A) Lateral strain B) Linear strain
C) Volumetric strain D) Poisson's ratio

Answer: B) Linear strain

8. What is the matured amount for the deposit of Rs.5000/- and the simple interest earned for Rs.500/-?

- A) Rs.6500 B) Rs.6000
C) Rs.4500 D) Rs.5500

Answer: D) Rs.5500

9. What is the diameter of the circle, if the area of the circle is 78.5 cm^2 ?

- A) 15 cm B) 5.5 cm
C) 5 cm D) 10 cm

Answer: D) 10 cm

10. What is the relative permittivity of rubber?

- A) Between 2 and 3 B) Between 8 and 10
C) Between 12 and 14 D) Between 5 and 6

Answer: A) Between 2 and 3

11. Which is example for second order lever?

- A) Bottle opener B) Common balance
C) Human forearm D) A pair of scissors

Answer: A) Bottle opener

12. What is the density of aluminium?

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

Answer: A) 2.7 g/cm^3

13. What is the weight of a rectangular block of a cast iron of $250 \text{ cm} \times 20 \text{ cm} \times 8 \text{ cm}$ (density of cast iron is 7.8 gm/cm^3)?

- A) 372 kg B) 312 kg
C) 525 kg D) 410 kg

Answer: B) 312 kg

14. How the 'Principal' is denoted in simple interest calculation?

- A) 'I' B) 'P'
C) 'R' D) 'n'

Answer: B) 'P'

15. What is the formula for $a^m \times a^n$?

- A) a^{m+n} B) a^{mn}
C) $n.a^m$ D) a^{m-n}

Answer: A) a^{m+n}

16. What is the difference between the simple and the compound interest amount at 5% per annum for 2 years on a principal of Rs.20000/-?

- A) Rs.5 B) Rs.50
C) Rs.25 D) Rs.55

Answer: B) Rs.50

17. What is the profit amount, if the i - phone cost price is Rs.50000/- and selling price is Rs.70000/-?

- A) Rs. 10000/- B) Rs. 20000/-
C) Rs. 50000/- D) Rs. 2000/-

Answer: B) Rs. 20000/-

18. What is the subtracted value of $3x - 4x^2$ from $4y^2 - 2x + 8x^2$?

- A) $2y^2 - 5x - 12x^2$ B) $2y^2 - 5x + 12x^2$
C) $2y^2 + 5x - 12x^2$ D) $(-2y^2 - 5x + 12x^2)$

Answer: B) $2y^2 - 5x + 12x^2$

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

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

Answer: A) Meter

20. What is the length of arc of a sector, whose radius is 15 cm and angle is 40 Degree?

- A) 9.75 cm B) 10.60 cm
C) 9.8 cm D) 10.4 cm

Answer: D) 10.4 cm

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

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

Answer: D) 735.5 watts

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

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

Answer: C) 20.93 cm^2

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

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

Answer: C) Ductility

24. 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

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

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

Answer: C) 746 watts