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Score: 7/25 (28.00%)

Code: 8463

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

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

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

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

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

- A) a^{m+n}
B) a^{m-n}
C) a^{mxn}
D) $(a^m \div a^n)$ (Incorrect)

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

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

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

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

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

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

7. What does EMF stands for?

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

8. Which is the example for dynamically induced Emf?

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

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

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

10. What is the relative permittivity of rubber?

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

11. 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 7.8gm/cm^3)?

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

12. Which is example for second order lever?

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

13. What is the density of aluminium?

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

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

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

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

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

16. Which insulating material is used for making switches?

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

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

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

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

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

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

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

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

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

21. 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.25
C) **Rs.50** D) Rs.55 (Incorrect)

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/sec² B) **0.30 m/sec²**
C) 0.20 m/sec² D) 0.10 m/sec² (Incorrect)

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

- A) 725.5 watts (Incorrect) B) **735.5 watts**
C) 745.5 watts D) 755.5 watts

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

- A) 726 watts B) 736 watts
C) **746 watts** D) 756 watts (Incorrect)

25. What denotes letter M in MKS system? ಮೀಟರ್
ವ್ಯವಸ್ಥೆಯಲ್ಲಿ M ಅಕ್ಷರ ಏನನ್ನು ಸೂಚಿಸುತ್ತದೆ?

- A) Mile B) **Meter**
C) Millimeter (Incorrect) D) Micron