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Score: 14/25 (56.00%)

Code: 5471

1. Which is very good conductor?

- A) **Copper (Correct)** B) Cast iron
C) Wrought iron D) Steel

2. What is the resistance?

$I = 11.5$ Amps
 $V = 380$ Volts
 $R = \underline{\hspace{2cm}}$ Ohms

- A) 13 ohms B) 23 ohms
C) **33 ohms (Correct)** D) 43 ohms

3. What is the voltage?

$R = 250$ Ohms
 $I = 0.44$ Amps
 $V = \underline{\hspace{2cm}}$ Volts

- A) 100 Volts B) 105 Volts
C) 108 Volts D) **110 Volts (Correct)**

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

- A) 94.8 ohms B) 95.8 ohms
C) **96.8 ohms (Correct)** D) 97.8 ohms

5. Which law states about electromagnetic induction?

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

6. What is the formula for induced emf?

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

7. How many hours will take for a 100 watts bulb to consume 1 kwh energy?

$W = 1$ Kwh
 $P = 100$ Watts
 $t = \underline{\hspace{2cm}}$ Hours

A) **10 hours (Correct)**

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

8. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm^3 ?

- A) 8 B) 18.5
C) 19 D) **19.5 (Correct)**

9. Which metal contains iron as a major content?

- A) Brass metal (Incorrect) B) Bronze metal
C) Zinc D) **Ferrous metal**

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

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

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

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

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

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

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

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

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

- A) 5900 m^3 (Incorrect) B) **6000 m^3**
C) 6100 m^3 D) 6200 m^3

15. What is called if a body possesses only magnitude or size alone?

- A) Speed B) Velocity
C) Vector quantity (Incorrect) D) **Scalar quantity**

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

A) Metre/second

B) Metre/second²

C) Metre/minutes

D) Metre/minutes²
(Incorrect)

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

A) 10 m

B) 20 m (Correct)

C) 30 m

D) 40 m

18. What is the formula for potential energy?

A) mgh joule (Correct)

B) mgh^2 joule

C) $\frac{1}{2} mgh$ joule

D) $\frac{2}{3} mgh$ joule

19. 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) 1962 Joules

D) 1972 Joules (Incorrect)

20. What are fundamental units?

A) Length, Mass, Volume

B) Length, Mass, Time (Correct)

C) Length, Mass, Area

D) Length, Pressure, Volume

21. Convert decimal 0.000659 to fraction?

A) (659/1000)

B) (659/10000)

C) (659/100000)

D) (659/1000000) (Correct)

22. What is the length of each part is a copper wire of 225 metre long is cut into 900 equal parts?

A) 0.23 metre

B) 0.25 metre

C) 0.28 metre

D) 0.29 metre (Incorrect)

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

A) 13

B) 23

C) 33 (Incorrect)

D) 43

24. 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) A (Correct)

B) B

C) C

D) D

25. What is the value of $\tan 45^\circ$ if $\sin 45^\circ = \frac{1}{\sqrt{2}}$? | Sin $45^\circ = \frac{1}{\sqrt{2}}$ ಆಗಿದ್ದರೆ $\tan 45^\circ$ ಮೌಲ್ಯವೆಷ್ಟು?

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

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

(C) **1**

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

A) A

B) B

C) C (Correct)

D) D