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Score: 24/25 (96.00%)

Code: 5454

1. Which machine converts mechanical energy into electrical energy?

- A) Battery
B) **Generator (Correct)**
C) Heater
D) Iron box

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

- A) 10
B) **2.4 (Correct)**
C) 5
D) 4

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

- A) **Current (Correct)**
B) Voltage
C) Resistance
D) Power

4. What is the resistance?

I = 11.5 Amps

V = 380 Volts

R = _____ Ohms

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

5. What is the voltage?

R = 250 Ohms

I = 0.44 Amps

V = _____ Volts

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

6. 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 (Incorrect)
C) **96.8 ohms**
D) 97.8 ohms

7. Which is the unit electrical power?

- A) Volts
B) Ohms
C) **Watts (Correct)**
D) Ampere

8. What is the density (ρ) in g/cm^3 of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm^3 ?

- A) 6.6 g/cm^3
B) 6.9 g/cm^3
C) 7.2 g/cm^3
D) **7.5 g/cm^3 (Correct)**

9. What is the carbon percentage in low carbon steel?

- A) 0.02% to 0.03%
B) **0.15% to 0.25% (Correct)**
C) 0.25% to 0.50%
D) 0.50% to 1.50%

10. What is the ore of aluminium?

- A) Hematite
B) Mallatite
C) **Bauxite (Correct)**
D) Lemonite

11. Which insulating material is used for making switches?

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

12. What is the cross sectional area of a circular ring of $D = 38 \text{ mm}$ and $d = 32 \text{ mm}$?

- A) 320 mm^2
B) **330 mm^2 (Correct)**
C) 340 mm^2
D) 350 mm^2

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

- A) **1766.25 liters (Correct)**
B) 1767.25 liters
C) 1768.25 liters
D) 1769.25 liters

14. What is the formula for speed?

- A) **Distance covered/Time (Correct)**
B) Change in velocity/Time
C) Distance in definite direction /Time
D) Change in momentum/Time

15. What maximum height a stone will reach if it is thrown upwards with a velocity of 20 m/sec ? ($g = 10 \text{ m/sec}^2$)

- A) 10 m
B) **20 m (Correct)**
C) 30 m
D) 40 m

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

- A) **75 kg.m/sec (Correct)**
B) 76 kg.m/sec
C) 77 kg.m/sec
D) 78 kg.m/sec

17. How much is 8% of 40 kg?

- A) 2.2 kg
C) 4.2 kg
B) 3.2 kg (Correct)
D) 5.2 kg

18. Convert 52% into fraction?

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

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

- A) 20 days
C) 24 days (Correct)
B) 22 days
D) 26 days

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

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

21. Simplify: $(17.49 \times 5.2) / (6.5)$

- A) 13.69
C) 13.89
B) 13.79
D) 13.99 (Correct)

22. What is the square root of 529?

- A) 12
B) 23 (Correct)

C) 33

D) 43

23. What is termed as the quantity of matter contained in a body? | ವಸ್ತುವಿನಲ್ಲಿ ಇರುವ ದ್ರವ್ಯದ ಪರಿಮಾಣವನ್ನು ಎಂದು ಏನು ಕರೆಯಲಾಗುತ್ತದೆ?

- A) Density | ಸಾಂದ್ರತೆ
C) Mass | ದ್ರವ್ಯರಾಶಿ (Correct)
B) Volume | ಗಾತ್ರ
D) Specific gravity | ವಿಶಿಷ್ಟ ಗುರುತ್ವ

24. What is known for the temperature at which any solid melts into liquid? | ಯಾವುದೇ ಘನ ದ್ರವಕ್ಕೆ ಕರಗುವ ತಾಪಮಾನಕ್ಕೆ ಏನು ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ?

- A) Boiling point | ಕುದಿಯುವ ಬಿಂದು
C) Latent heat of fusion | ಸುಪ್ತ ಶಾಖ
B) Melting point | ಕರಗುವ ಬಿಂದು (Correct)
D) Latent heat of vaporisation | ಆವಿಯಾಗುವಿಕೆಯ ಸುಪ್ತ ಶಾಖ

25. Which is the unit of current? | ಪ್ರವಾಹದ ಮೂಲಮಾನ ಯಾವುದು?

- A) Ampere | ಆಂಪಿಯರ್ (Correct)
C) Ohm | ಓಂ
B) Volt | ವೋಲ್ಟ್
D) Watt | ವ್ಯಾಟ್