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Question Paper

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Score: 11/30 (36.67%)

Code: 0218

1. Which machine converts mechanical energy into electrical energy?

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

2. Which is the unit of current?

- A) Ampere (Correct)**
C) Ohm
B) Volt
D) Watt

3. Which is the unit of resistance?

- A) Ampere (Incorrect)
C) Ohm
B) Volt
D) Watt

4. What is the flow of electrons in any conductor?

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

5. Which property of a substance is opposing the flow of electric current?

- A) Current
C) Resistance
B) Voltage
D) EMF (Incorrect)

6. Which is very good conductor?

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

7. Which is mineral insulator

- A) Glass
C) Mica
B) Quartz (Incorrect)
D) Porcelain

8. What is the total resistance if three resistances of 3 ohms, 9 ohms and 5 ohms are connected in series?

- A) 11 ohms
C) 17 ohms (Correct)
B) 7 ohm
D) 1/17 ohms

9. 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

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

- A) Current**
B) Voltage (Incorrect)

C) Resistance

D) Power

11. Which law states that at constant temperature the current passing through a closed circuit is directly proportional to the potential difference and inversely proportional to the resistance?

- A) Ohm's law**
C) Newton's law (Incorrect)
B) Lenz's law
D) Hooke's law

12. What is the resistance?

I = 11.5 Amps

V = 380 Volts

R = _____ Ohms

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

13. What is the current?

R = 50 Ohms

220 Volts

I = _____ Amps

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

14. What is the voltage?

R = 250 Ohms

I = 0.44 Amps

V = _____ Volts

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

15. Which statement is correct according to ohm's law?

- A) $I = 1/V$ (Incorrect)
C) $I = V/R$
B) $I = R$
D) $I = R/V$

16. What is the filament resistance if a 6 volt bulb draws a current of 0.5 Amps?

- A) 12 W**
C) 3 W
B) 10 W
D) 1.2 W (Incorrect)

17. How much watt second in 1 watt hour?

- A) 1000 watt sec (Incorrect) B) 2000 watt sec
C) 3600 watt sec D) 4000 watt sec

18. What is the power if an emf of one volt causes a current flow of 1 ampere?

- A) 1 watt B) 1 kilowatt (Incorrect)
C) 1 HP D) 1 Kilowatt hour

19. Which is equal to electric power?

- A) $R \times I^2$ watts B) $I \times R^2$ watts (Correct)
C) RI D) IRA

20. How much power does it consumes if an electric heater draws a current of 10 amps at 200 volts?

- A) 2000 watts (Correct) B) 2010 watts
C) 2020 watts D) 2030 watts

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

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

22. What is the voltage of the immersion heater?

$P = 500$ watts

$I = 2.27$ Amps

$V = \underline{\hspace{2cm}}$ Volts

- A) 200.3 volts B) 210.3 volts
C) 220.3 volts (Correct) D) 230.3 volts

23. What is the unit of intensity of magnetic field?

- A) wb/m B) m/wb
C) Hertz D) Coloumb (Incorrect)

24. Which law states about electromagnetic induction?

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

25. What is the formula for induced emf?

- A) $B \times L \times v$ volts (Incorrect) B) $B \times L \times v$ volts
C) $B \times L \times v$ volts D) $B \times L \times v$ volts

26. What does EMF stands for?

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

27. Which is the example for statically induced emf?

- A) Generator B) Motor
C) Transformer D) Refrigerator (Incorrect)

28. Which is the example for dynamically induced Emf?

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

29. Which is the unit electrical power?

- A) Volts (Incorrect) B) Ohms
C) Watts D) Ampere

30. What is the current Flow in the bulb?

$P = 550$ watts

$R = 22$ Ohms

$I = \underline{\hspace{2cm}}$ Amps

- A) 2 Amps B) 3 Amps
C) 4 Amps D) 5 Amps (Correct)