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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  
**C) Ohm (Correct)**  
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 (Correct)**  
B) Voltage  
D) EMF

6. Which is very good conductor?

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

7. Which is mineral insulator

- A) Glass  
**C) Mica (Correct)**  
B) Quartz  
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  
C) 5  
**B) 2.4 (Correct)**  
D) 4

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

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

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 (Correct)**  
C) Newton's law  
B) Lenz's law  
D) Hooke's law

12. What is the resistance?

<br>

I = 11.5 Amps

<br>

V = 380 Volts

<br>

R = \_\_\_\_\_ Ohms

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

13. What is the current?

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R = 50 Ohms

<br>

220 Volts

<br>

I = \_\_\_\_\_ Amps

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

14. What is the voltage?

<br>

R = 250 Ohms

<br>

I = 0.44 Amps

<br>

V = \_\_\_\_\_ Volts

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

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

- A)  $I = 1/V$   
**C)  $I = V/R$  (Correct)**  
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 (Correct)**  
C) 3 W  
B) 10 W  
D) 1.2 W

17. How much watt second in 1 watt hour?

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

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

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

19. Which is equal to electric power?

- A)  $R^2 I$  watts                      **B)  $I^2 R$  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                                  B) 95.8 ohms  
**C) 96.8 ohms (Correct)**                      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 (Incorrect)                      B) 210.3 volts  
**C) 220.3 volts**                                      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 formual for induced emf?

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

28. Which is the example for dynamically induced Emf?

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

29. Which is the unit electrical power?

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