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Score: 50/55 (90.91%)

Code: 1945

1. Which machine converts mechanical energy into electrical energy?

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

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 formula for induced emf?

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

14. What does EMF stand for?

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

15. Which is the example for statically induced emf?

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

16. Which is the example for dynamically induced Emf?

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

17. Which is the unit electrical power?

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

18. What is the current Flow in the bulb?

<br>

P = 550 watts

<br>  
R = 22 Ohms  
<br>  
I = \_\_\_\_Amps

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

19. What is the power required?

<br>  
I = 0.455 Amps  
<br>  
R = 484 Ohms  
<br>  
P = \_\_\_\_Watts

- A) 98.2 watts  
C) **100.2 watts (Correct)**  
B) 99.2 watts  
D) 101.2 watts

20. What is the rated power if an adjustable resistor bears the following label 1.5 k ohms/ 0.08A?

- A) 9.2 watts  
C) **9.6 watts (Correct)**  
B) 9.4 watts  
D) 9.8 watts

21. How much voltage will be required to illuminate a 40 watts fluorescent lamp draws a current of 0.10 amperes?

- A) 390 volts  
C) **400 volts (Correct)**  
B) 395 volts  
D) 405 volts

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

<br>  
W = 1 Kwh  
<br>  
P = 100 Watts  
<br>  
t = \_\_\_\_Hours

- A) **10 hours**  
C) 18 hours  
B) 12 hours  
D) 24 hours (Incorrect)

23. What is termed as the quantity of matter contained in a body?

- A) Density  
C) **Mass (Correct)**  
B) Volume  
D) Specific gravity

24. What is the force with which a body is attracted by the earth towards its centre?

- A) Mass  
C) Volume  
B) **Weight (Correct)**  
D) Density

25. What is called mass per unit volume of a substances?

- A) Mass  
C) **Density (Correct)**  
B) Weight  
D) Volume

26. What is called the ratio between the density of a substances density of water at 4 Degree Centigrade?

- A) Density  
C) Mass  
B) **Specific gravity (Correct)**  
D) Weight

27. What is the density of aluminium?

- A) **2.7 g/cm<sup>3</sup> (Correct)**  
C) 4.7 g/cm<sup>3</sup>  
B) 3.7 g/cm<sup>3</sup>  
D) 5.7 g/cm<sup>3</sup>

28. Wha is the mass if the density of a body is 7.6 g/cm<sup>3</sup> and its volume is 25 cm<sup>3</sup>?

- A) **190 grams (Correct)**  
C) 210 grams  
B) 200 grams  
D) 220 grams

29. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm<sup>3</sup>?

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

30. What is the density (r) in g/cm<sup>3</sup> of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm<sup>3</sup>?

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

31. What is the volume (V) of mercury in cm<sup>3</sup>, if mass (m) of mercury is 1 kg and density (r) is 13.6 g/cm<sup>3</sup>?

- A) **73.53 cm<sup>3</sup> (Correct)**  
C) 73.33 cm<sup>3</sup>  
B) 73.43 cm<sup>3</sup>  
D) 73.23 cm<sup>3</sup>

32. What is the mass in gram, if a force of 15 dyres acting on a mass m producing an acceleration of 2.5 cm/sec<sup>2</sup>?

- A) 9 grams  
C) 7 grams  
B) 8 grams  
D) **6 grams (Correct)**

33. What is the specific gravity of the metal, if the piece of metal weighs 150 grams in air and 125 grams in water?

- A) **6 (Correct)**  
C) 15  
B) 10  
D) 25

34. What is the volume of mercury in cm<sup>3</sup>, if the mass (m) of mercury is 136 grams (g) and density (r) of mercury is 13.6 g/cm<sup>3</sup>?

- A) 136 cm<sup>3</sup>  
C) 10.6 cm<sup>3</sup>  
B) 13.6 cm<sup>3</sup>  
D) **10.0 cm<sup>3</sup> (Correct)**

35. What is the block weighs (W) in kg, if volume (V) is 320 cm<sup>3</sup> and density 8.9 g/cm<sup>3</sup>?

- A) 2.948 kg  
C) 2.648 kg  
B) **2.848 kg (Correct)**  
D) 2.448

36. What is the specific gravity of the metal, if the weighs 6.5 kgf in air and 3.5 kgf in water?

- A) 6.166  
C) **2.166 (Correct)**  
B) 3.166  
D) 1.166

37. What is the weight force of a car has a mass of 800 kg?(Take g = 9.81m/sec)

- A) **7848 Newton (Correct)**  
C) 7847 Newton  
B) 7748 Newton  
D) 7487 Newton

38. Which one is non-metal?

- A) Mercury  
C) Brass  
B) **Graphite (Correct)**  
D) Iron

39. Which metal contains iron as a major content?

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

40. What is the name of the metal which do not contain iron?

- A) Ferrous metals  
C) Insulating metals  
B) **Non-ferrous metals**  
D) Non-Insulating metals  
(Incorrect)

41. Which one of the following properties is the mechanical properties of metal?

- A) Fusibility  
C) Corrosion  
B) **Ductility (Correct)**  
D) Structure

42. Which is brittle metal?

- A) **Cast iron (Correct)**  
C) Mild steel  
B) Steel  
D) Alloy steel

43. Which mechanical property of a metal offers resistance to elastic deformation in a cutting tool?

- A) Ductility  
C) **Hardness (Correct)**  
B) Malleability  
D) Toughness

44. Which property of material enables to formation of permanent deformation without fracture?

- A) Elasticity  
C) Ductility  
B) **Plasticity (Correct)**  
D) Brittleness

45. Which property of metal has its power of returning to its

original shape after the applied force is released?

- A) Malleability  
C) **Elasticity (Correct)**  
B) Tenacity  
D) Plasticity

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

- A) Conductivity  
C) **Fusibility (Correct)**  
B) Malleability  
D) Tenacity

47. Which alloy used in electric lamp as filament?

- A) Cobalt  
C) **Tungsten (Correct)**  
B) Vanadium  
D) Silicon

48. What metals contained in brass alloy?

- A) Copper and aluminium  
C) **Copper and zinc (Correct)**  
B) Copper and lead  
D) Copper and tin

49. Which cast iron cannot be welded?

- A) Grey cast iron  
C) Malleable cast iron  
B) **White cast iron (Correct)**  
D) Nodular cast iron

50. Which metal cannot be forged?

- A) Alloy steel  
C) Steel  
B) Mild steel  
D) **Cast iron (Correct)**

51. Which metal is widely used for making casting of machinery parts?

- A) **Grey cast iron (Correct)**  
C) Malleable cast iron  
B) White cast iron  
D) Wrought iron

52. Which furnace is used to get pig iron from iron ore?

- A) Mild steel - Rever battery  
C) **Blast furnace (Correct)**  
B) Electric furnace  
D) Cupola

53. What is the name of furnace to obtained cast iron?

- A) **Cupola (Correct)**  
C) Steel - Rever battery  
B) Mild steel - Blast furnace  
D) Alloy metal - Electric furnace

54. What is the other name of low carbon steel?

- A) Low alloy steel  
C) High speed steel  
B) High alloy steel  
D) **Mild steel (Correct)**

55. What is the carbon percentage in medium carbon steel?

- A) 0.05% to 0.15%  
C) **0.25% to 0.5% (Correct)**  
B) 0.15% to 0.25%  
D) 0.5% to 1.5%