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Score: 19/66 (28.79%)

Code: 3336

1. Which machine converts mechanical energy into electrical energy?

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

2. Which is the unit of current?

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

3. Which is the unit of resistance?

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

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

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

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

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

6. Which is very good conductor?

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

7. Which is mineral insulator

- A) Glass (Incorrect) B) Quartz
C) Mica 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 B) 7 ohm
C) 17 ohms (Correct) 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**
 C) 5 D) 4 (Incorrect)

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

- A) Current** B) Voltage

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

12. What is the resistance?

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 $I = 11.5 \text{ Amps}$

 $V = 380 \text{ Volts}$

 $R = \text{_____ Ohms}$
 A) 13 ohms B) 23 ohms (Incorrect)
C) 33 ohms D) 43 ohms

13. What is the current?

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 $R = 50 \text{ Ohms}$

 220 Volts

 $I = \text{_____ Amps}$
 A) 4.1 Amps B) 4.2 Amps (Incorrect)
 C) 4.3 Amps **D) 4.4 Amps**

14. What is the voltage?

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 $R = 250 \text{ Ohms}$

 $I = 0.44 \text{ Amps}$

 $V = \text{_____ Volts}$
 A) 100 Volts B) 105 Volts
C) 108 Volts (Incorrect) **D) 110 Volts**

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

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

17. How much watt second in 1 watt hour?

- A) 1000 watt sec
B) 2000 watt sec (Incorrect)
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 (Correct)
B) 1 kilowatt
C) 1 HP
D) 1 Kilowatt hour

19. Which is equal to electric power?

- A) $R^2 I$ watts (Incorrect)
B) $I^2 R$ watts
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
B) 2010 watts
C) 2020 watts (Incorrect)
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

$V =$ ____ Volts

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

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

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

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) $B^2 L \sin \theta$ volts (Incorrect)
B) $BL \sin \theta$ volts
C) $BLV \sin \theta$ volts
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
D) Refrigerator (Incorrect)

28. Which is the example for dynamically induced Emf?

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

29. Which is the unit electrical power?

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

30. What is the current Flow in the bulb?

$P = 550$ watts

$R = 22$ Ohms

$I =$ ____ Amps

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31. What is the power required?

$I = 0.455$ Amps

$R = 484$ Ohms

$P =$ ____ Watts

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

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

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

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

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

$W = 1$ Kwh

$P = 100$ Watts

$t =$ ____ Hours

$t =$ ____ Hours

$t =$ ____ Hours

$t =$ ____ Hours

$t =$ ____ Hours

$t =$ ____ Hours

$t =$ ____ Hours

- A) 10 hours
C) 18 hours (Incorrect)

- B) 12 hours
D) 24 hours

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

- A) Density (Incorrect)
C) Mass

- B) Volume
D) Specific gravity

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

- A) Mass (Incorrect)
C) Volume

- B) Weight
D) Density

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

- A) Mass
C) Density

- B) Weight (Incorrect)
D) Volume

38. 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

39. What is the density of aluminium?

- A) 2.7 g/cm³
C) 4.7 g/cm³

- B) 3.7 g/cm³
D) 5.7 g/cm³ (Incorrect)

40. What is the mass if the density of a body is 7.6 g/cm³ and its volume is 25 cm³?

- A) 190 grams
C) 210 grams

- B) 200 grams (Incorrect)
D) 220 grams

41. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm³?

- A) 8
C) 19 (Incorrect)

- B) 18.5
D) 19.5

42. What is the density (r) in g/cm³ of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm³?

- A) 6.6 g/cm³
C) 7.2 g/cm³ (Incorrect)

- B) 6.9 g/cm³
D) 7.5 g/cm³

43. What is the volume (V) of mercury in cm³, if mass (m) of mercury is 1 kg and density (r) is 13.6 g/cm³?

- A) 73.53 cm³
C) 73.33 cm³

- B) 73.43 cm³
D) 73.23 cm³ (Incorrect)

44. What is the mass in gram, if a force of 15 dyres acting on

a mass m producing an acceleration of 2.5 cm/sec²?

- A) 9 grams
C) 7 grams

- B) 8 grams (Incorrect)
D) 6 grams

45. 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

46. What is the volume of mercury in cm³, if the mass (m) of mercury is 136 grams (g) and density (r) of mercury is 13.6 g/cm³?

- A) 136 cm³ (Incorrect)
C) 10.6 cm³

- B) 13.6 cm³
D) 10.0 cm³

47. What is the block weighs (W) in kg, if volume (V) is 320 cm³ and density 8.9 g/cm³?

- A) 2.948 kg (Incorrect)
C) 2.648 kg

- B) 2.848 kg
D) 2.448

48. 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 (Incorrect)
C) 2.166

- B) 3.166
D) 1.166

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

- A) 7848 Newton
C) 7847 Newton

- B) 7748 Newton (Incorrect)
D) 7487 Newton

50. Which one is non-metal?

- A) Mercury
C) Brass

- B) Graphite (Correct)
D) Iron

51. Which metal contains iron as a major content?

- A) Brass metal
C) Zinc (Incorrect)

- B) Bronze metal
D) Ferrous metal

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

- A) Ferrous metals
C) Insulating metals

- B) Non-ferrous metals (Correct)
D) Non-Insulating metals

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

- A) Fusibility
C) Corrosion

- B) Ductility (Correct)
D) Structure

54. Which is brittle metal?

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

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

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

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

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

57. Which property of metal has its power of returning to its original shape after the applied force is released?

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

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

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

59. Which alloy used in electric lamp as filament?

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

60. What metals contained in brass alloy?

- A) Copper and aluminium B) Copper and lead

C) **Copper and zinc (Correct)**

D) Copper and tin

61. Which cast iron cannot be welded?

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

62. Which metal cannot be forged?

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

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

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

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

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

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

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

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

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