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Score: 32/49 (65.31%)

Code: 9412

1. Which is the unit of current?

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

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

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

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

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

4. Which is very good conductor?

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

5. Which is mineral insulator

- A) Glass B) Quartz
C) **Mica (Correct)** D) Porcelain

6. 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

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

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

8. What is the voltage?

R = 250 Ohms

I = 0.44 Amps

V = ____Volts

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

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

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

10. 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

11. 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

12. 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

13. 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** D) 97.8 ohms (Incorrect)

14. 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
C) **220.3 volts (Correct)** D) 230.3 volts

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

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

16. Which law states about electromagnetic induction?

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

17. What is the formula for induced emf?

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

18. Which is the example for statically induced emf?

- A) Generator B) Motor

C) TransformerD) Refrigerator (Incorrect)

C) 22.46

D) 23.46

19. 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

C) 9.6 wattsD) 9.8 watts (Incorrect)

20. 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

21. What is the square root of 0.017?

A) 0.001 (Incorrect)**B) 0.13**

C) 0.00001

D) 0.000001

22. What is the definition of ratio?

A) Relation of two quantities of the same kind (Correct)

B) Relation of two quantities of the different kind

C) Equality between two ratios

D) Inequality between two ratios

23. What is the ratio of 4 kg to 800 grams?

A) 05:01 (Correct)

B) 04:08

C) 08:04

D) 02:04

24. What percentage of 80 is 20?

A) 0.8

B) 0.4

C) 0.25D) 0.2 (Incorrect)

25. How much is 8% of 40 kg?

A) 2.2 kg

B) 3.2 kgC) 4.2 kg (Incorrect)

D) 5.2 kg

26. Convert 52% into fraction?

A) (9/25)

B) (11/25)

C) (13/25) (Correct)

D) (17/25)

27. Convert 0.456 decimal fraction into percentage?

A) 0.456

B) 0.0456

C) 45.6 (Correct)

D) 0.000456

28. What is the x value for $x^2 + 62 = 126$?

A) 4 (Incorrect)

B) 6

C) 8

D) 10

29. What is the square root of decimal number 550.37?

A) 21.26 (Incorrect)

B) 22.26

30. What is the length L₂, if total length (L) is 2.75 metre and L₁:L₂ = 2:3?

A) 1.1 metre

B) 1.25 metre

C) 1.65 metre (Correct)

D) 1.75 metre

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

A) 20 days

B) 22 days

C) 24 days (Correct)

D) 26 days

32. What will be the rpm of smaller gear if a 180 mm dia meshes with 60 mm dia gear and the bigger gear makes 60 rpm?

A) 120 rpm (Incorrect)

B) 140 rpm

C) 160 rpm

D) 180 rpm

33. What is the percentage of copper if the casting weight of copper 42.3 kg and tin weight 2.7 kg?

A) Cu 92%

B) Cu 94% (Correct)

C) Cu 96%

D) Cu 98%

34. A motor cycle tyre is sold for Rs 300/- what is the purchase price if 25% profit is added to it.

A) Rs 200

B) Rs 220

C) Rs 240 (Correct)

D) Rs 260

35. What is the decimal fraction of conversion of 18.5%?

A) 0.185 (Correct)

B) 0.175

C) 0.165

D) 0.195

36. What are the two classifications of system of units?

A) British and Metric (Incorrect)

B) Gravitational and non-gravitational

C) Fundamental and derived

D) Metric and International

37. What are fundamental units?

A) Length, Mass, Volume

B) Length, Mass, Time (Correct)

C) Length, Mass, Area

D) Length, Pressure, Volume

38. What denotes letter M in MKS system?

A) Mile (Incorrect)**B) Meter**

C) Millimeter

D) Micron

39. How many millimetres are there in 1 inch?

A) 2.54 mm

B) 25.4 mm (Correct)

C) 24.5 mm

D) 2.45 mm

40. What is the LCM of 12, 18, 6, 36?

- A) 12
B) 18
C) 36 (Correct)
D) 42

41. What is the HCF of 18, 42, 24?

- A) 2
B) **6 (Correct)**
C) 18
D) 24

42. What is the improper fraction for the given mixed fraction $7 \frac{3}{7}$?

- A) **(52/7)**
B) "7/52" (Incorrect)
C) "28/7"
D) "7/28"

43. Convert decimal 0.000659 to fraction?

- A) (659/1000)
B) (659/10000)
C) (659/100000)
D) (659/1000000) (Correct)

44. Simplify: $(\frac{3}{4}) + (\frac{2}{5}) - (\frac{5}{20})$

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

45. Divide $(\frac{20}{31}) / (\frac{15}{62})$

- A) $2\frac{4}{3}$
B) $2\frac{1}{3}$
C) $2\frac{3}{2}$
D) $2\frac{2}{3}$ (Correct)

46. What is the product of 0.003×0.5 ?

- A) 0.00015
B) **0.0015 (Correct)**
C) 0.015
D) 0.15

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

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

48. What is the length of each part if a copper wire of 225 metre long is cut into 900 equal parts?

- A) 0.23 metre
B) **0.25 metre (Correct)**
C) 0.28 metre
D) 0.29 metre

49. What is the square root of 529?

- A) 12
B) **23 (Correct)**
C) 33
D) 43