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Score: 45/49 (91.84%)

Code: 3813

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 (Correct)** B) Cast iron
C) Wrought iron D) Steel

5. Which is mineral insulator

- A) Glass B) Quartz (Incorrect)
C) **Mica** 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** D) 1/17 ohms (Incorrect)

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

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

8. What is the voltage?

R = 250 Ohms

I = 0.44 Amps

V = ____Volts

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

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 (Correct)** D) 97.8 ohms

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** B) m/wb (Incorrect)
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) $B \times L^2 \times \sin \theta$ volts B) $BL \sin \theta$ volts
C) **$BLV \sin \theta$ (Correct)** D) $B \times L^2 \times V \sin \theta$ volts

18. Which is the example for statically induced emf?

- A) Generator B) Motor

C) Transformer (Correct) D) Refrigerator

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 watts (Correct) D) 9.8 watts

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 **B) 0.13 (Correct)**
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) 0.25 (Correct) D) 0.2

25. How much is 8% of 40 kg?

- A) 2.2 kg **B) 3.2 kg (Correct)**
C) 4.2 kg 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 B) 6
C) 8 (Correct) D) 10

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

- A) 21.26 B) 22.26

C) 22.46 **D) 23.46 (Correct)**

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 B) 140 rpm
C) 160 rpm **D) 180 rpm (Correct)**

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 B) Gravitational and non-gravitational
C) Fundamental and derived (Correct) 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 **B) Meter (Correct)**
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) $\frac{52}{7}$ (Correct)**
B) $\frac{7}{52}$
C) $\frac{28}{7}$
D) $\frac{7}{28}$

43. Convert decimal 0.000659 to fraction?

- A) $\frac{659}{1000}$ (Incorrect)
B) $\frac{659}{10000}$
C) $\frac{659}{100000}$
D) $\frac{659}{1000000}$ (Correct)

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

- A) $\frac{3}{10}$
B) **$\frac{9}{10}$ (Correct)**
C) $\frac{12}{10}$
D) $\frac{13}{10}$

45. Divide $\frac{20}{31} \div \frac{15}{62}$

- 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: $\frac{17.49 \times 5.2}{6.5}$

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

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