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Score: 31/49 (63.27%)

Code: 5051

1. Which is the unit of resistance?

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

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

2. Which is very good conductor?

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

9. 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

3. Which is mineral insulator

- A) Glass (Incorrect)
B) Quartz
C) Mica
D) Porcelain

10. 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

4. 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 (Incorrect)
C) 17 ohms
D) 1/17 ohms

11. 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

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

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

12. 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 (Incorrect)
C) 2020 watts
D) 2030 watts

6. 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)

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

7. What is the resistance?

$I = 11.5$ Amps
 $V = 380$ Volts
 $R = \underline{\hspace{2cm}}$ Ohms

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

14. What is the voltage of the immersion heater?

$P = 500$ watts
 $I = 2.27$ Amps
 $V = \underline{\hspace{2cm}}$ Volts

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

8. What is the current?

$R = 50$ Ohms
 $V = 220$ Volts
 $I = \underline{\hspace{2cm}}$ Amps

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. Which is the example for dynamically induced Emf?

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

18. Which is the unit electrical power?

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

19. 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

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

$W = 1 \text{ Kwh}$
 $P = 100 \text{ Watts}$
 $t = \text{___} \text{Hours}$

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

21. What is the square root of 0.017?

- A) 0.001
C) 0.00001
B) **0.13**
D) 0.000001 (Incorrect)

22. What is the definition of ratio?

- A) **Relation of two quantities of the same kind**
C) Equality between two ratios
B) Relation of two quantities of the different kind (Incorrect)
D) Inequality between two ratios

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

- A) **05:01 (Correct)**
C) 08:04
B) 04:08
D) 02:04

24. What percentage of 80 is 20?

- A) 0.8
C) **0.25**
B) 0.4
D) 0.2 (Incorrect)

25. How much is 8% of 40 kg?

- A) 2.2 kg
C) 4.2 kg
B) **3.2 kg (Correct)**
D) 5.2 kg

26. Convert 52% into fraction?

- A) (9/25) (Incorrect)
C) **(13/25)**
B) (11/25)
D) (17/25)

27. Convert 0.456 decimal fraction into percentage?

- A) 0.456
C) **45.6**
B) 0.0456
D) 0.000456 (Incorrect)

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

- A) 4
C) **8 (Correct)**
B) 6
D) 10

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

- A) 21.26
C) 22.46
B) 22.26
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
C) **1.65 metre (Correct)**
B) 1.25 metre
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
C) **24 days (Correct)**
B) 22 days
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
C) 160 rpm
B) 140 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%
C) Cu 96%
B) **Cu 94% (Correct)**
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
C) **Rs 240**
B) Rs 220 (Incorrect)
D) Rs 260

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

- A) **0.185 (Correct)**
C) 0.165
B) 0.175
D) 0.195

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

- A) British and Metric
C) **Fundamental and derived**
B) Gravitational and non-gravitational
D) Metric and International (Incorrect)

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

C) 24.5 mm (Incorrect)

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

C) 18 (Incorrect)

D) 24

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

A) $\frac{52}{7}$

B) $\frac{7}{52}$

C) $\frac{28}{7}$

D) $\frac{7}{28}$ (Incorrect)

43. Convert decimal 0.000659 to fraction?

A) $\frac{659}{1000}$

B) $\frac{659}{10000}$

C) $\frac{659}{100000}$ (Incorrect)

D) $\frac{659}{1000000}$

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

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

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