

Duration: 60 Mins

Total Marks: 49

Q.ID: ITISKILL29330R

1. What is the total resistance if three resistances of 3 ohms, 9 ohms and 5 ohms are connected in series?

- A) 17 ohms
B) 1/17 ohms
C) 7 ohm
D) 11 ohms

Answer: A) 17 ohms

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

- A) Cu 94%
B) Cu 92%
C) Cu 98%
D) Cu 96%

Answer: A) Cu 94%

3. What is the resistance of an electric iron if the rating of electric iron is 220 V and 500 watts?

- A) 95.8 ohms
B) 97.8 ohms
C) 96.8 ohms
D) 94.8 ohms

Answer: C) 96.8 ohms

4. Convert decimal 0.000659 to fraction?

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

Answer: D) (659/1000000)

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

- A) 1.75 metre
B) 1.25 metre
C) 1.1 metre
D) 1.65 metre

Answer: D) 1.65 metre

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

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

Answer: D) wb/m

7. How much is 8% of 40 kg?

- A) 4.2 kg
B) 3.2 kg
C) 2.2 kg
D) 5.2 kg

Answer: B) 3.2 kg

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

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

Answer: D) Current

9. What denotes letter M in MKS system?

- A) Meter
B) Mile
C) Millimeter
D) Micron

Answer: A) Meter

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

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

Answer: D) 05:01

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

- A) 23.46
B) 22.46
C) 21.26
D) 22.26

Answer: A) 23.46

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

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

Answer: C) Resistance

13. Convert 52% into fraction?

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

Answer: A) (13/25)

14. Which is very good conductor?

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

Answer: C) Copper

15. What is the voltage? $R = 250 \text{ Ohms}$ $I = 0.44 \text{ Amps}$ $V = \text{___Volts}$

- A) 110 Volts
B) 100 Volts
C) 108 Volts
D) 105 Volts

Answer: A) 110 Volts

16. Which is the unit of current?

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

Answer: B) Ampere

17. 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
- C) 230.3 volts
- D) 220.3 volts

Answer: D) 220.3 volts

18. How much watt second in 1 watt hour?

- A) 4000 watt sec
- B) 2000 watt sec
- C) 1000 watt sec
- D) 3600 watt sec

Answer: D) 3600 watt sec

19. What is the square root of 529?

- A) 43
- B) 12
- C) 23
- D) 33

Answer: C) 23

20. What is the filament resistance if a 6 volt bulb draws a current of 0.5 Amps?

- A) 12 W
- B) 3 W
- C) 1.2 W
- D) 10 W

Answer: A) 12 W

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

- A) 22 days
- B) 24 days
- C) 26 days
- D) 20 days

Answer: B) 24 days

22. What is the square root of 0.017?

- A) 0.000001
- B) 0.13
- C) 0.001
- D) 0.00001

Answer: B) 0.13

23. What is the definition of ratio?

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

Answer: A) Relation of two quantities of the same kind

24. What is the formula for induced emf?

- A) $B \times 2 \times V \sin \theta$ volts
- B) $B \times 2 \times L \sin \theta$ volts
- C) $BLV \sin \theta$ volts
- D) $BL \sin \theta$ volts

Answer: C) $BLV \sin \theta$ volts

25. 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) 0.29 metre
- C) 0.28 metre
- D) 0.25 metre

Answer: D) 0.25 metre

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

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

Answer: C) 400 volts

27. How much power does it consume if an electric heater draws a current of 10 amps at 200 volts?

- A) 2020 watts
- B) 2010 watts
- C) 2000 watts
- D) 2030 watts

Answer: C) 2000 watts

28. 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) 160 rpm
- B) 180 rpm
- C) 120 rpm
- D) 140 rpm

Answer: B) 180 rpm

29. Divide $(20/31)/(15/62)$

- A) $2(4/3)$
- B) $2(3/2)$
- C) $2(1/3)$
- D) $2(2/3)$

Answer: D) $2(2/3)$

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

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

Answer: B) 36

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

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

Answer: B) Current

32. What is the product of 0.003×0.5 ?

- A) 0.00015
- B) 0.15
- C) 0.0015
- D) 0.015

Answer: C) 0.0015

33. Which law states about electromagnetic induction?

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

Answer: B) Faraday's law

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

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

Answer: A) Fundamental and derived

35. How many millimetres are there in 1 inch?

A) 2.54 mm

B) 24.5 mm

C) 2.45 mm

D) 25.4 mm

Answer: D) 25.4 mm

36. What are fundamental units?

A) Length, Pressure, Volume B) Length, Mass, Volume

C) Length, Mass, Time D) Length, Mass, Area

Answer: C) Length, Mass, Time

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

A) 0.175

B) 0.165

C) 0.195

D) 0.185

Answer: D) 0.185

38. What percentage of 80 is 20?

A) 0.25

B) 0.2

C) 0.8

D) 0.4

Answer: A) 0.25

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

A) $(\frac{3}{10})$

B) $(\frac{9}{10})$

C) $(\frac{12}{10})$

D) $(\frac{13}{10})$

Answer: B) $(\frac{9}{10})$

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

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

B) " $\frac{7}{28}$ "

C) " $\frac{7}{52}$ "

D) " $\frac{28}{7}$ "

Answer: A) $(\frac{52}{7})$

41. Which is mineral insulator

A) Mica

B) Porcelain

C) Quartz

D) Glass

Answer: A) Mica

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

A) Rs 240

B) Rs 260

C) Rs 200

D) Rs 220

Answer: A) Rs 240

43. Simplify: $(\frac{17.49 \times 5.2}{6.5})$

A) 13.79

B) 13.99

C) 13.89

D) 13.69

Answer: B) 13.99

44. Convert 0.456 decimal fraction into percentage?

A) 45.6

B) 0.000456

C) 0.456

D) 0.0456

Answer: A) 45.6

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

A) 6

B) 10

C) 4

D) 8

Answer: D) 8

46. Which is the example for statically induced emf?

A) Motor

B) Transformer

C) Generator

D) Refrigerator

Answer: B) Transformer

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

A) 2

B) 24

C) 18

D) 6

Answer: D) 6

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

A) $I = R/V$

B) $I = V/R$

C) $I = 1/V$

D) $I = R$

Answer: B) $I = V/R$

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

A) 9.8 watts

B) 9.2 watts

C) 9.6 watts

D) 9.4 watts

Answer: C) 9.6 watts