

Duration: 60 Mins

Total Marks: 61

Q.ID: ITISKILL5510CZ

1. What is the current Flow in the bulb? $P = 550$ watts
 $R = 22$ Ohms $I =$ ____Amps

- A) 2 Amps B) 4 Amps
C) 3 Amps D) 5 Amps

Answer: D) 5 Amps

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

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

Answer: A) 1.65 metre

3. Which is the example for dynamically induced Emf?

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

Answer: A) Generator

4. Which law states about electromagnetic induction?

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

Answer: B) Faraday's law

5. 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

6. What is the definition of ratio?

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

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

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

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

Answer: A) 2000 watts

8. What is the power required? $I = 0.455$ Amps $R = 484$ Ohms $P =$ ____Watts

- A) 99.2 watts B) 98.2 watts

- C) 100.2 watts D) 101.2 watts

Answer: C) 100.2 watts

9. Simplify: $(3/4) + (2/5) - (5/20)$

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

Answer: B) $(9/10)$

10. Which is equal to electric power?

- A) IR B) RI
C) I^2R watts D) R^2I watts

Answer: C) I^2R watts

11. What is the power if an emf of one volt causes a current flow of 1ampere?

- A) 1 watt B) 1 Kilowatt hour
C) 1 HP D) 1 kilowatt

Answer: A) 1 watt

12. How many millimetres are there in 1 inch?

- A) 24.5 mm B) 2.54 mm
C) 25.4 mm D) 2.45 mm

Answer: C) 25.4 mm

13. What is the resistance? $I = 11.5$ Amps $V = 380$ Volts $R =$ ____Ohms

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

Answer: B) 33 ohms

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

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

Answer: A) Current

15. What denotes letter M in MKS system?

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

Answer: D) Meter

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

- A) $(52/7)$ B) $"28/7"$

C) "7/52"

D) "7/28"

Answer: A) (52/7)

17. How much watt second in 1 watt hour?

A) 4000 watt sec

B) 3600 watt sec

C) 1000 watt sec

D) 2000 watt sec

Answer: B) 3600 watt sec

18. How much is 8% of 40 kg?

A) 4.2 kg

B) 3.2 kg

C) 5.2 kg

D) 2.2 kg

Answer: B) 3.2 kg

19. What are fundamental units?

A) Length, Mass, Volume

B) Length, Pressure, Volume

C) Length, Mass, Area

D) Length, Mass, Time

Answer: D) Length, Mass, Time

20. What percentage of 80 is 20?

A) 0.4

B) 0.25

C) 0.8

D) 0.2

Answer: B) 0.25

21. 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) 94.8 ohms

C) 97.8 ohms

D) 96.8 ohms

Answer: D) 96.8 ohms

22. 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 98%

C) Cu 96%

D) Cu 92%

Answer: A) Cu 94%

23. Which is the unit of resistance?

A) Volt

B) Ohm

C) Ampere

D) Watt

Answer: B) Ohm

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

A) 42

B) 12

C) 36

D) 18

Answer: C) 36

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

A) Metric and International

B) British and Metric

C) Gravitational and non-gravitational

D) Fundamental and derived

Answer: D) Fundamental and derived

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

A) wb/m

B) Coloumb

C) m/wb

D) Hertz

Answer: A) wb/m

27. How many hours will take for a 100 watts bulb to consume 1 kwh energy?
 $W = 1 \text{ Kwh}$
 $P = 100 \text{ Watts}$
 $t = \text{_____Hours}$

A) 18 hours

B) 12 hours

C) 24 hours

D) 10 hours

Answer: D) 10 hours

28. Convert 0.456 decimal fraction into percentage?

A) 0.0456

B) 0.456

C) 45.6

D) 0.000456

Answer: C) 45.6

29. What does EMF stands for?

A) Electronic Magnetic Force

B) Electro Magnetic Force

C) Electromated Force

D) Electro Motive Force

Answer: D) Electro Motive Force

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

A) 17 ohms

B) 7 ohm

C) 1/17 ohms

D) 11 ohms

Answer: A) 17 ohms

31. Which machine converts mechanical energy into electrical energy?

A) Battery

B) Iron box

C) Generator

D) Heater

Answer: C) Generator

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) 9.8 watts

C) 9.6 watts

D) 9.4 watts

Answer: C) 9.6 watts

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

A) 0.28 metre

B) 0.23 metre

C) 0.29 metre

D) 0.25 metre

Answer: D) 0.25 metre

34. What is the product of 0.003 x 0.5?

A) 0.15

B) 0.0015

C) 0.015

D) 0.00015

Answer: B) 0.0015

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

- A) 2
B) 18
C) 24
D) 6

Answer: D) 6

36. What is the square root of 0.017?

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

Answer: B) 0.13

37. Divide (20/31)/(15/62)

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

Answer: A) $2\frac{2}{3}$

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

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

Answer: C) 05:01

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

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

Answer: C) Current

40. What is the total resistance if two resistances of 4 ohms and 6 ohms are connected in parallel?

- A) 2.4
B) 5
C) 4
D) 10

Answer: A) 2.4

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

- A) 0.175
B) 0.185
C) 0.165
D) 0.195

Answer: B) 0.185

42. Convert 52% into fraction?

- A) $\frac{13}{25}$
B) $\frac{11}{25}$
C) $\frac{9}{25}$
D) $\frac{17}{25}$

Answer: A) $\frac{13}{25}$

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

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

Answer: C) 110 Volts

44. What is the voltage of the immersion heater? $P = 500 \text{ watts}$ $I = 2.27 \text{ Amps}$ $V = \text{____Volts}$

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

Answer: C) 220.3 volts

45. What is the formula for induced emf?

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

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

46. What is the square root of 529?

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

Answer: B) 23

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

- A) 10
B) 6
C) 8
D) 4

Answer: C) 8

48. Which is the unit electrical power?

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

Answer: B) Watts

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

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

Answer: B) 24 days

50. 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) 140 rpm
B) 180 rpm
C) 160 rpm
D) 120 rpm

Answer: B) 180 rpm

51. Which is very good conductor?

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

Answer: B) Copper

52. 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 200
C) Rs 260
D) Rs 220

Answer: A) Rs 240

53. Which is the unit of current?

- A) Watt
C) Ampere

- B) Ohm
D) Volt

Answer: C) Ampere

54. Convert decimal 0.000659 to fraction?

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

Answer: A) (659/1000000)

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

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

Answer: B) Resistance

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

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

Answer: C) 13.99

57. 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) Lenz's law B) Ohm's law

- C) Newton's law D) Hooke's law

Answer: B) Ohm's law

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

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

Answer: A) 12 W

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

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

Answer: A) $I = V/R$

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

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

Answer: B) 23.46

61. What is the current? $R = 50 \text{ Ohms}$ 220 Volts
 $I = \text{_____Amps}$

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

Answer: B) 4.4 Amps