

May 2026

Iti

Question Paper

Duration: 60 Mins

Total Marks: 61

ID: ITISKILL5510CZ

Student Name: _____	Roll No: _____
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1. What is the square root of 529?

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

- | | |
|---------|--------|
| A) 0.8 | B) 0.2 |
| C) 0.25 | D) 0.4 |

2. What denotes letter M in MKS system?

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

3. What does EMF stands for?

- | | |
|-------------------------|------------------------------|
| A) Electromated Force | B) Electro Magnetic Force |
| C) Electro Motive Force | D) Electronic Magnetic Force |

4. 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) 9.4 watts | D) 9.6 watts |

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

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

6. 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% |

7. Which is the unit of resistance?

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

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

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

9. Which law states about electromagnetic induction?

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

10. What percentage of 80 is 20?

11. What is the voltage of the immersion heater? $P = 500$ watts $I = 2.27$ Amps $V =$ ____Volts

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

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

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

13. Convert 0.456 decimal fraction into percentage?

- | | |
|-----------|-------------|
| A) 0.0456 | B) 0.000456 |
| C) 0.456 | D) 45.6 |

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

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

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

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

16. Which is very good conductor?

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

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

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

18. What is the voltage? $R = 250$ Ohms $I = 0.44$ Amps $V =$ ____Volts

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

19. What is the definition of ratio?

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

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

- | | |
|---------------|---------------|
| A) 0.23 metre | B) 0.25 metre |
| C) 0.29 metre | D) 0.28 metre |

21. Convert decimal 0.000659 to fraction?

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

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

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

23. How much watt second in 1 watt hour?

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

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

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

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

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

26. Which machine converts mechanical energy into electrical energy?

- | | |
|-------------|--------------|
| A) Iron box | B) Heater |
| C) Battery | D) Generator |

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

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

28. Which is the unit electrical power?

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

29. 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) 120 rpm

D) 160 rpm

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

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

31. What is the product of 0.003×0.5 ?

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

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

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

33. Which is equal to electric power?

- | | |
|-------------------------|-------------------------|
| A) $R \times I^2$ watts | B) $I \times R$ |
| C) $R I$ | D) $I^2 \times R$ watts |

34. 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) Hooke's law |
| C) Newton's law | D) Lenz's law |

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

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

36. What is the power required? $I = 0.455 \text{ Amps}$ $R = 484 \text{ Ohms}$ $P = \text{_____Watts}$

- | | |
|----------------|----------------|
| A) 99.2 watts | B) 100.2 watts |
| C) 101.2 watts | D) 98.2 watts |

37. What is the formula for induced emf?

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

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

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

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

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

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

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

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

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

42. What is the current Flow in the bulb? $P = 550$ watts
 $R = 22$ Ohms $I = \underline{\hspace{1cm}}$ Amps

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

43. 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

44. What are fundamental units?

- A) Length, Mass, Time
- B) Length, Mass, Area
- C) Length, Mass, Volume
- D) Length, Pressure, Volume

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

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

46. Which is the example for dynamically induced Emf?

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

47. What is the square root of 0.017?

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

48. 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) 26 days
- D) 24 days

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

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

50. 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 220

D) Rs 260

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

- A) $\frac{7}{52}$
- B) $\frac{52}{7}$
- C) $\frac{28}{7}$
- D) $\frac{7}{28}$

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

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

53. Which is the unit of current?

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

54. How many hours will take for a 100 watts bulb to consume 1 kwh energy? $W = 1$ Kwh $P = 100$ Watts $t = \underline{\hspace{1cm}}$ Hours

- A) 12 hours
- B) 24 hours
- C) 18 hours
- D) 10 hours

55. How many millimetres are there in 1 inch?

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

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

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

57. Convert 52% into fraction?

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

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

- A) $\frac{1}{17}$ ohms
- B) 7 ohm
- C) 11 ohms
- D) 17 ohms

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

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

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

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

61. How much is 8% of 40 kg?

- A) 4.2 kg
- B) 2.2 kg

C) 3.2 kg

D) 5.2 kg