

ITI Quiz - 08-Apr-2026

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Q. ID: ITISKILL6026SA

April 2026

Sri Mahalingeswara ITI

Question Paper

Duration: 30 Mins

Total Marks: 79

ID: ITISKILL6026SA

Student Name: _____ Roll No: _____

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

- A) 9.2 watts
- B) 9.6 watts
- C) 9.8 watts
- D) 9.4 watts

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

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

3. Which property of a metal enables it by which it can be drawn out into wires under tension without rupture?

- A) Brittleness
- B) Hardness
- C) Malleability
- D) Ductility

4. Which is brittle metal?

- A) Steel
- B) Cast iron
- C) Mild steel
- D) Alloy steel

5. Which alloy steel is using for making precious instrument?

- A) Manganese steel
- B) Vanadium
- C) Silicon steel
- D) Invar steel

6. Which is mineral insulator

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

7. What is the other name of low carbon steel?

- A) Low alloy steel
- B) High alloy steel
- C) High speed steel
- D) Mild steel

8. Which insulating material is used for making switches?

- A) Ebonite
- B) PVC
- C) Porcelain
- D) Bakelite

9. Convert 52% into fraction?

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

10. What is the total resistance if three resistances of 3 ohms,

9 ohms and 5 ohms are connected in series?

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

11. 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) 97.8 ohms
- C) 95.8 ohms
- D) 96.8 ohms

12. 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
- D) 1.75 metre

13. What is the carbon percentage in low carbon steel?

- A) 0.02% to 0.03%
- B) 0.15% to 0.25%
- C) 0.50% to 1.50%
- D) 0.25% to 0.50%

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

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

15. Which mechanical property of a metal offers resistance to elastic deformation in a cutting tool?

- A) Toughness
- B) Hardness
- C) Ductility
- D) Malleability

16. Which law states about electromagnetic induction?

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

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

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

18. What is the ore of aluminium?

- A) Bauxite
- B) Lemonite
- C) Hematite
- D) Mallatite

19. 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) Hooke's law | B) Newton's law |
| C) Lenz's law | D) Ohm's law |

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

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

21. Which metal contains iron as a major content?

- | | |
|-----------------|------------------|
| A) Zinc | B) Brass metal |
| C) Bronze metal | D) Ferrous metal |

22. Which one of the following properties is the mechanical properties of metal?

- | | |
|---------------|--------------|
| A) Fusibility | B) Structure |
| C) Corrosion | D) Ductility |

23. Which metal is widely used for making casting of machinery parts?

- | | |
|------------------------|--------------------|
| A) Malleable cast iron | B) Wrought iron |
| C) Grey cast iron | D) White cast iron |

24. Which metal cannot be forged?

- | | |
|---------------|----------------|
| A) Steel | B) Alloy steel |
| C) Mild steel | D) Cast iron |

25. What is the carbon percentage in high carbon steel?

- | | |
|-------------------|-------------------|
| A) 0.50% to 1.50% | B) 0.25% to 0.50% |
| C) 0.15% to 0.25% | D) 0.02% to 0.03% |

26. Which among the following is an insulator?

- | | |
|-----------|--------------|
| A) Mica | B) Copper |
| C) Silver | D) Aluminium |

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

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

28. Which is very good conductor?

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

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

- | | |
|-----------|-----------|
| A) Cu 96% | B) Cu 92% |
|-----------|-----------|

- | | |
|-----------|-----------|
| C) Cu 94% | D) Cu 98% |
|-----------|-----------|

30. Which cast iron cannot be welded?

- | | |
|--------------------|------------------------|
| A) Grey cast iron | B) Malleable cast iron |
| C) White cast iron | D) Nodular cast iron |

31. Which is the unit of current?

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

32. What is the formula for induced emf?

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

33. What is the name of the property of an insulation that should break down or puncture on application of high voltage?

- | | |
|------------------------|-------------------------|
| A) Mechanical strength | B) Di-electric strength |
| C) Non absorption | D) Specific resistance |

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

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

35. How much watt second in 1 watt hour?

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

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

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

37. Which one is non-metal?

- | | |
|-------------|------------|
| A) Iron | B) Brass |
| C) Graphite | D) Mercury |

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

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

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

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

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

Watts
 t = ____Hours

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

41. What is the name of furnace to obtained cast iron?

- A) Cupola
- B) Alloy metal - Electric furnace
- C) Steel - Rever battery
- D) Mild steel - Blast furnace

42. What percentage of 80 is 20?

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

43. What is the square root of 0.017?

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

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

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

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

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

46. 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
- C) 2030 watts
- D) 2020 watts

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

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

48. Which is the example for dynamically induced Emf?

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

49. Which machine converts mechanical energy into electrical energy?

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

50. Which is the unit of resistance?

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

51. What is the current?
 R = 50 Ohms
 220 Volts
 I = ____Amps

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

52. 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 260
- C) Rs 240
- D) Rs 220

53. Which alloy used in electric lamp as filament?

- A) Vanadium
- B) Silicon
- C) Cobalt
- D) Tungsten

54. Which is equal to electric power?

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

55. What is the definition of ratio?

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

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

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

57. What is the name of the metal which do not contain iron?

- A) Non-ferrous metals
- B) Insulating metals
- C) Non-Insulating metals
- D) Ferrous metals

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

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

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

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

60. Which is the example for statically induced emf?

- A) Motor
- B) Transformer
- C) Generator
- D) Refrigerator

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

- A) 5
- B) 2.4

C) 4

D) 10

62. Which is the unit electrical power?

A) Watts

B) Volts

C) Ampere

D) Ohms

63. What metals contained in brass alloy?

A) Copper and lead

B) Copper and aluminium

C) Copper and zinc

D) Copper and tin

64. Which property of material enables to formation of permanent deformation without fracture?

A) Ductility

B) Brittleness

C) Plasticity

D) Elasticity

65. Which alloy steel is used to make permanent magnets?

A) Silicon steel

B) Cobalt steel

C) Manganese steel

D) Vanadium steel

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

A) 2 Amps

B) 4 Amps

C) 5 Amps

D) 3 Amps

67. How much is 8% of 40 kg?

A) 5.2 kg

B) 2.2 kg

C) 3.2 kg

D) 4.2 kg

68. What does EMF stands for?

A) Electro Motive Force

B) Electromated Force

C) Electronic Magnetic Force

D) Electro Magnetic Force

69. Which steel is used for making files and cold chisel?

A) Low carbon steel

B) Stainless steel

C) High carbon steel

D) Midium carbon steel

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

A) 05:01

B) 08:04

C) 04:08

D) 02:04

71. Convert 0.456 decimal fraction into percentage?

A) 0.456

B) 0.000456

C) 45.6

D) 0.0456

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

A) 405 volts

B) 400 volts

C) 390 volts

D) 395 volts

73. Which insulator is used in over head lines?

A) Porcelain

B) Mica

C) Rubber

D) P.V.C

74. 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) 160 rpm

C) 180 rpm

D) 140 rpm

75. Which rubber is used as insulator for power cables and control wires?

A) Butyl

B) Hypalone

C) Nitrite butadiene

D) Silicon

76. What is the carbon percentage in medium carbon steel?

A) 0.5% to 1.5%

B) 0.05% to 0.15%

C) 0.25% to 0.5%

D) 0.15% to 0.25%

77. Which property of metal has its power of returning to its original shape after the applied force is released?

A) Elasticity

B) Plasticity

C) Malleability

D) Tenacity

78. Which property of a metal possessed by it melts when heat is applied?

A) Fusibility

B) Malleability

C) Conductivity

D) Tenacity

79. Which furnace is used to get pig iron from iron ore?

A) Cupola

B) Electric furnace

C) Mild steel - Rever battery

D) Blast furnace