

ITI Quiz - 08-Apr-2026

03:05 PM

Q. ID: ITISKILL6026SA

April 2026

Sri Mahalingeswara ITI

Answer Key

Duration: 30 Mins

Total Marks: 79

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

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

Answer: D) Current

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

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

Answer: D) 110 Volts

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

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

Answer: B) Resistance

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

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

Answer: C) Di-electric strength

5. 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

Answer: C) Rs 240

6. Which is the unit electrical power?

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

Answer: D) Watts

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

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

Answer: B) Grey cast iron

8. Convert 0.456 decimal fraction into percentage?

- A) 45.6
- B) 0.0456

C) 0.000456

D) 0.456

Answer: A) 45.6

9. Which metal contains iron as a major content?

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

Answer: C) Ferrous metal

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

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

Answer: B) Cobalt steel

11. Which law states about electromagnetic induction?

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

Answer: D) Faraday's law

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

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

Answer: D) Cupola

13. Which alloy used in electric lamp as filament?

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

Answer: C) Tungsten

14. 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

15. How much is 8% of 40 kg?

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

Answer: A) 3.2 kg

16. Which is the example for dynamicallly induced Emf?

- A) Motor bike
- B) Motor

C) Car D) Generator

Answer: D) Generator

17. What does EMF stands for?

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

Answer: A) Electro Motive Force

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

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

Answer: D) Ductility

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

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

Answer: C) 8

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

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

Answer: D) Mild steel

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

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

Answer: D) 5 Amps

22. Which insulator is used in over head lines?

A) Mica B) P.V.C
C) Porcelain D) Rubber

Answer: C) Porcelain

23. Which is the unit of current?

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

Answer: B) Ampere

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

A) Plasticity B) Tenacity
C) Malleability D) Elasticity

Answer: D) Elasticity

25. Which is very good conductor?

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

Answer: D) Copper

26. Which metal cannot be forged?

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

Answer: B) Cast iron

27. What is the square root of 0.017?

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

Answer: D) 0.13

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

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

Answer: C) 1.65 metre

29. Which is mineral insulator

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

Answer: B) Mica

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

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

Answer: D) 2.4

31. 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) 11 ohms D) 1/17 ohms

Answer: A) 17 ohms

32. Which is the example for statically induced emf?

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

Answer: B) Transformer

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

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

Answer: B) Non-ferrous metals

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

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

Answer: B) 23.46

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

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

Answer: A) 100.2 watts

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

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

Answer: B) Ductility

37. 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) Hooke's law D) Newton's law

Answer: A) Ohm's law

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

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

Answer: C) Hardness

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

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

Answer: C) 2000 watts

40. How much watt second in 1 watt hour?

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

Answer: B) 3600 watt sec

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. Which cast iron cannot be welded?

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

Answer: B) White cast iron

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

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

Answer: D) 9.6 watts

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

- A) 0.5% to 1.5% B) 0.25% to 0.5%
C) 0.15% to 0.25% D) 0.05% to 0.15%

Answer: B) 0.25% to 0.5%

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

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

Answer: A) Blast furnace

46. What is the ore of aluminium?

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

Answer: B) Bauxite

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

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

Answer: A) 1 watt

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

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

Answer: A) 400 volts

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

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

Answer: C) 12 W

50. Convert 52% into fraction?

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

Answer: D) (13/25)

51. Which machine converts mechanical energy into electrical energy?

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

Answer: B) Generator

52. What is the current?
 R = 50 Ohms
 220 Volts

 I = ____Amps

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

Answer: A) 4.4 Amps

53. What is the formual for induced emf?

- A) BL sinq volts B) BLV sinq volts
C) $B ² > V$ sinq volts D) $B ² > L$ sinq volts

Answer: B) BLV sinq volts

54. Which insulating material is used for making switches?

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

Answer: C) Bakelite

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

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

Answer: A) Current

56. 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) 10 hours B) 12 hours
C) 24 hours D) 18 hours

Answer: A) 10 hours

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

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

Answer: B) 0.15% to 0.25%

58. Which is equal to electric power?

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

Answer: D) $I ² > R$ watts

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

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

Answer: A) 220.3 volts

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

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

Answer: A) Invar steel

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

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

Answer: C) 24 days

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

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

Answer: D) 0.50% to 1.50%

63. Which is the unit of resistance?

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

Answer: D) Ohm

64. Which is brittle metal?

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

Answer: B) Cast iron

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

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

Answer: A) wb/m

66. 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) 95.8 ohms
C) 96.8 ohms D) 94.8 ohms

Answer: C) 96.8 ohms

67. What percentage of 80 is 20?

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

Answer: C) 0.25

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

- A) Malleability B) Conductivity
C) Tenacity D) Fusibility

Answer: D) Fusibility

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

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

Answer: C) 05:01

70. Which one is non-metal?

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

Answer: B) Graphite

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

- A) Silicon B) Butyl

C) Nitrite butadiene

D) Hypalone

Answer: A) Silicon

72. What metals contained in brass alloy?

A) Copper and tin

B) Copper and lead

C) Copper and zinc

D) Copper and aluminium

Answer: C) Copper and zinc

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

A) Midium carbon steel

B) Stainless steel

C) High carbon steel

D) Low carbon steel

Answer: C) High carbon steel

74. What is the resistance? $I = 11.5$ Amps $V = 380$ Volts $R = \underline{\hspace{2cm}}$ Ohms

A) 23 ohms

B) 43 ohms

C) 33 ohms

D) 13 ohms

Answer: C) 33 ohms

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

A) Ductility

B) Plasticity

C) Brittleness

D) Elasticity

Answer: B) Plasticity

76. What is the definition of ratio?

A) Equality between two ratios

B) Relation of two quantities of the same kind

C) Relation of two quantities of the different kind

D) Inequality between two ratios

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

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

A) $I = R/V$

B) $I = 1/V$

C) $I = V/R$

D) $I = R$

Answer: C) $I = V/R$

78. 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 96%

C) Cu 92%

D) Cu 98%

Answer: A) Cu 94%

79. Which among the following is an insulator?

A) Aluminium

B) Mica

C) Silver

D) Copper

Answer: B) Mica