

ITI Quiz - 02-Mar-2026 02:11 PM

Q. ID: ITISKILL6983HL

Calculation for MRAC and FITTER

March 2026

Trinity iti Udupi

Question Paper

Student: Pavan

Score: 38/49 (77.55%)

Code: 4761

1. Which machine converts mechanical energy into electrical energy?

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

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

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

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

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

4. Which is very good conductor?

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

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

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

6. 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 (Correct)
C) Newton's law
B) Lenz's law
D) Hooke's law

7. What is the resistance?

$I = 11.5$ Amps
 $V = 380$ Volts
 $R = \underline{\hspace{2cm}}$ Ohms

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

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

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

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

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

10. How much watt second in 1 watt hour?

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

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

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

12. Which is equal to electric power?

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

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

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

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

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

15. Which law states about electromagnetic induction?

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

16. What does EMF stands for?

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

17. Which is the example for statically induced emf?

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

18. Which is the example for dynamically induced Emf?

- A) Motor
C) Car
- B) Generator**
D) Motor bike (Incorrect)

19. Which is the unit electrical power?

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

20. What is the current Flow in the bulb?

P = 550 watts

R = 22 Ohms

I = _____Amps

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

21. What is the square root of 0.017?

- A) 0.001
C) 0.00001
- B) 0.13 (Correct)**
D) 0.000001

22. What is the definition of ratio?

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

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

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

24. What percentage of 80 is 20?

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

25. How much is 8% of 40 kg?

- A) 2.2 kg
C) 4.2 kg
- B) 3.2 kg (Correct)**
D) 5.2 kg

26. Convert 52% into fraction?

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

27. Convert 0.456 decimal fraction into percentage?

- A) 0.456
C) 45.6 (Correct)
- B) 0.0456
D) 0.000456

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

- A) 4
B) 6

- C) 8 (Correct)**
D) 10

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

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

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

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

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

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

32. 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
C) 160 rpm
- B) 140 rpm (Incorrect)
D) 180 rpm

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

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

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

- A) Rs 200
C) Rs 240 (Correct)
- B) Rs 220
D) Rs 260

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

- A) 0.185 (Correct)**
C) 0.165
- B) 0.175
D) 0.195

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

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

37. What are fundamental units?

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

38. What denotes letter M in MKS system?

- A) Mile
C) Millimeter (Incorrect)
- B) Meter**
D) Micron

39. How many millimetres are there in 1 inch?

- A) 2.54 mm
C) 24.5 mm (Incorrect)
B) **25.4 mm**
D) 2.45 mm

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

- A) 12
C) **36 (Correct)**
B) 18
D) 42

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

- A) 2
C) 18
B) **6 (Correct)**
D) 24

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

- A) **(52/7) (Correct)**
C) "28/7"
B) "7/52"
D) "7/28"

43. Convert decimal 0.000659 to fraction?

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

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

- A) (3/10)
B) **(9/10) (Correct)**

C) (12/10)

D) (13/10)

45. Divide $(\frac{20}{31}) / (\frac{15}{62})$

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

46. What is the product of 0.003×0.5 ?

- A) 0.00015
C) 0.015
B) **0.0015 (Correct)**
D) 0.15

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

- A) 13.69
C) 13.89
B) 13.79
D) **13.99 (Correct)**

48. 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
C) 0.28 metre
B) **0.25 metre (Correct)**
D) 0.29 metre

49. What is the square root of 529?

- A) 12 (Incorrect)
C) 33
B) **23**
D) 43