

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

Q. ID: ITISKILL6983HL

Calculation for MRAC and FITTER

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Trinity iti Udupi

Question Paper

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Score: 43/49 (87.76%)

Code: 6523

1. Which machine converts mechanical energy into electrical energy?

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

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

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

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

- A) Current  
B) Voltage  
C) **Resistance (Correct)**  
D) EMF

4. Which is very good conductor?

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

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

- A) **Current (Correct)**  
B) Voltage  
C) Resistance  
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)**  
B) Lenz's law  
C) Newton's law  
D) Hooke's law

7. What is the resistance?

$I = 11.5 \text{ Amps}$   
 $V = 380 \text{ Volts}$   
 $R = \text{_____ Ohms}$

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

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

- A)  $I = 1/V$   
B)  $I = R$   
C)  **$I = V/R$  (Correct)**  
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)**  
B) 10 W  
C) 3 W  
D) 1.2 W

10. How much watt second in 1 watt hour?

- A) 1000 watt sec  
B) 2000 watt sec  
C) **3600 watt sec (Correct)**  
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)**  
B) 1 kilowatt  
C) 1 HP  
D) 1 Kilowatt hour

12. Which is equal to electric power?

- A)  $R <sup>2</sup> I$  watts  
B)  **$I <sup>2</sup> R$  watts (Correct)**  
C)  $RI$   
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  
B) 95.8 ohms  
C) **96.8 ohms (Correct)**  
D) 97.8 ohms

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

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

15. Which law states about electromagnetic induction?

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

16. What does EMF stands for?

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

17. Which is the example for statically induced emf?

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

18. Which is the example for dynamically induced Emf?

|                                                                                                                              |                                  |                                                     |                             |
|------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------|-----------------------------|
| A) Motor                                                                                                                     | <b>B) Generator (Correct)</b>    | <b>C) 8</b>                                         | D) 10                       |
| C) Car                                                                                                                       | D) Motor bike                    |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>19.</b> Which is the unit electrical power?                                                                               |                                  |                                                     |                             |
| A) Volts                                                                                                                     | B) Ohms                          | A) 21.26                                            | <u>B) 22.26 (Incorrect)</u> |
| <b>C) Watts (Correct)</b>                                                                                                    | D) Ampere                        | C) 22.46                                            | <b>D) 23.46</b>             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>20.</b> What is the current Flow in the bulb?                                                                             |                                  |                                                     |                             |
| <br>                                                                                                                         |                                  |                                                     |                             |
| P = 550 watts                                                                                                                |                                  |                                                     |                             |
| <br>                                                                                                                         |                                  |                                                     |                             |
| R = 22 Ohms                                                                                                                  |                                  |                                                     |                             |
| <br>                                                                                                                         |                                  |                                                     |                             |
| I = ____Amps                                                                                                                 |                                  |                                                     |                             |
| A) 2 Amps                                                                                                                    | B) 3 Amps                        | A) 1.1 metre                                        | B) 1.25 metre               |
| C) 4 Amps                                                                                                                    | <b>D) 5 Amps (Correct)</b>       | <b>C) 1.65 metre (Correct)</b>                      | D) 1.75 metre               |
|                                                                                                                              |                                  |                                                     |                             |
| <b>21.</b> What is the square root of 0.017?                                                                                 |                                  |                                                     |                             |
| A) 0.001                                                                                                                     | <b>B) 0.13 (Correct)</b>         |                                                     |                             |
| C) 0.00001                                                                                                                   | D) 0.000001                      |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>22.</b> What is the definition of ratio?                                                                                  |                                  |                                                     |                             |
| <b>A) Relation of two quantities of the same kind (Correct)</b>                                                              |                                  | B) Relation of two quantities of the different kind |                             |
| C) Equality between two ratios                                                                                               | D) Inequality between two ratios |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>23.</b> What is the ratio of 4 kg to 800 grams?                                                                           |                                  |                                                     |                             |
| <b>A) 05:01 (Correct)</b>                                                                                                    | B) 04:08                         |                                                     |                             |
| C) 08:04                                                                                                                     | D) 02:04                         |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>24.</b> What percentage of 80 is 20?                                                                                      |                                  |                                                     |                             |
| A) 0.8                                                                                                                       | B) 0.4                           |                                                     |                             |
| <b>C) 0.25 (Correct)</b>                                                                                                     | D) 0.2                           |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>25.</b> How much is 8% of 40 kg?                                                                                          |                                  |                                                     |                             |
| A) 2.2 kg                                                                                                                    | <b>B) 3.2 kg (Correct)</b>       |                                                     |                             |
| C) 4.2 kg                                                                                                                    | D) 5.2 kg                        |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>26.</b> Convert 52% into fraction?                                                                                        |                                  |                                                     |                             |
| A) (9/25)                                                                                                                    | B) (11/25)                       |                                                     |                             |
| <b>C) (13/25) (Correct)</b>                                                                                                  | D) (17/25)                       |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>27.</b> Convert 0.456 decimal fraction into percentage?                                                                   |                                  |                                                     |                             |
| A) 0.456                                                                                                                     | B) 0.0456                        |                                                     |                             |
| <b>C) 45.6 (Correct)</b>                                                                                                     | D) 0.000456                      |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>28.</b> What is the x value for $x^{>2}</sup> + 62 = 126$ ?                                                               |                                  |                                                     |                             |
| A) 4                                                                                                                         | B) 6 (Incorrect)                 |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>29.</b> What is the square root of decimal number 550.37?                                                                 |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>30.</b> What is the length L2, if total length (L) is 2.75 metre and L1:L2 = 2:3?                                         |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>31.</b> How many days a mechanic takes to assemble 64 machines if he assembles 8 machines in 3 days?                      |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>32.</b> 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? |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>33.</b> What is the percentage of copper if the casting weight of copper 42.3 kg and tin weight 2.7 kg?                   |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>34.</b> A motor cycle tyre is sold for Rs 300/- what is the purchase price if 25% profit is added to it.                  |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>35.</b> What is the decimal fraction of conversion of 18.5%?                                                              |                                  |                                                     |                             |
| <b>A) 0.185 (Correct)</b>                                                                                                    |                                  | B) 0.175                                            |                             |
| C) 0.165                                                                                                                     |                                  | D) 0.195                                            |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>36.</b> What are the two classifications of system of units?                                                              |                                  |                                                     |                             |
| A) British and Metric                                                                                                        |                                  | B) Gravitational and non-gravitational              |                             |
| <b>C) Fundamental and derived (Correct)</b>                                                                                  |                                  | D) Metric and International                         |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>37.</b> What are fundamental units?                                                                                       |                                  |                                                     |                             |
| A) Length, Mass, Volume                                                                                                      |                                  | <b>B) Length, Mass, Time (Correct)</b>              |                             |
| C) Length, Mass, Area                                                                                                        |                                  | D) Length, Pressure, Volume                         |                             |
|                                                                                                                              |                                  |                                                     |                             |
| <b>38.</b> What denotes letter M in MKS system?                                                                              |                                  |                                                     |                             |
| A) Mile                                                                                                                      |                                  | <b>B) Meter (Correct)</b>                           |                             |
| C) Millimeter                                                                                                                |                                  | D) Micron                                           |                             |

39. How many millimetres are there in 1 inch?

- A) 2.54 mm  
C) 24.5 mm  
B) **25.4 mm (Correct)**  
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  $0.003 \times 0.5$ ?

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