

Electrical Engineering Quiz 001 (Mixed)

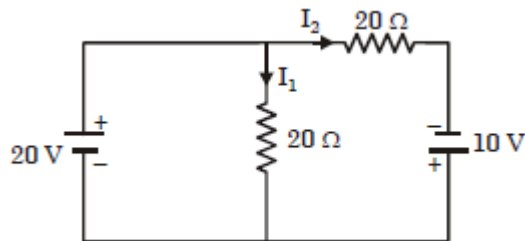
Quiz Instructions

- Before attempting, carefully read the question text.
- Then choose the correct answer.
- Click on "**Submit**" to confirm your answer.
- Use the **Question List** in the upper left corner to jump to a certain question.

1. The resistivity of a conductor depends upon.....

- A) pressure
- B) temperature
- C) degree of illumination
- D) shape of cross-section

2. Determine the value of current (in A) through both the resistors of the given circuit.



- A) -2, -1.5
- B) 2, 1.5
- C) -2, 1.5
- D) 2, -1.5

3. The S.I unit of electrical energy is.....

- A) Watt
- B) Volts
- C) Ampere
- D) Joule

4. Determine the energy (in J) stored by a 0.4 H inductance, if the current flowing through it is 2 A.

- A) 1.6
- B) 0.8
- C) 0.4
- D) 1.4

5. What will be the voltage (in V) across a 8 H inductor, when the rate of change of current in the inductor is 0.5 A/sec.

- A) 2
- B) 6
- C) 4
- D) 8

6. Which one of the following statement is TRUE?

- A) The equivalent resistance in series combination is larger than the largest resistance in the combination.
- B) The equivalent resistance in series combination is smaller than the largest resistance in the combination.
- C) The equivalent resistance in series combination is equal to the smallest resistance in the combination.
- D) The equivalent resistance in series combination is equal to the largest resistance in the combination.

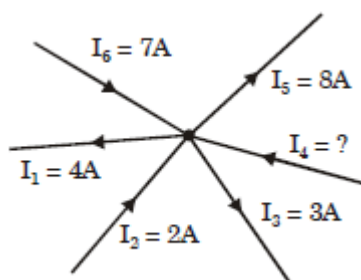
7. Determine the voltage (in V) of a battery connected to a parallel plate capacitor (filled with air) when the area of the plate is 10 square centimeters, the separation between the plates is 5 mm and the charged stored on the plates is 20 pC.

- A) 12.3
- B) 10.3
- C) 11.3
- D) 14.3

8. The relative permeability of diamagnetic materials is ____.

- A) Greater than 1
- B) Greater than 10
- C) Less than 1
- D) Greater than 100

9. What is the value of current I_4 (in A) for the given junction?



- A) 4
- B) -4

- C) 6
- D) -6

10. What will the equivalent capacitance (in mF) of three capacitors connected in a series having capacitance of 0.04 mF, 0.08 mF and 0.02 respectively?

- A) 0.026
- B) 0.032
- C) 0.065
- D) 0.011

Answer Keys

Question	Answer
1	B
2	B
3	D
4	B
5	C

Question	Answer
6	A
7	C
8	C
9	C
10	D