

1. What does Lenz's law state about the induced electromotive force (emf) in a coil?

- A) It generates a current that supports the change in magnetic flux
- B) It generates a current that opposes the change in magnetic flux
- C) It has no effect on the magnetic flux
- D) It only applies to direct current systems

2. What happens to the induced current when the magnetic flux through a coil increases?

- A) The induced current creates a magnetic field supporting the increase
- B) The induced current creates a magnetic field opposing the increase
- C) The induced current stops flowing
- D) The induced current flows in the same direction as the external field

3. How do you determine the direction of the induced current in a coil?

- A) By using the left hand rule
- B) By applying Lenz's Law and the right hand rule
- C) By measuring the voltage across the coil
- D) By observing the physical movement of the coil

4. What does a 'dot' (•) symbol represent in the context of magnetic fields?

- A) Magnetic field going into the page
- B) Magnetic field coming out of the page
- C) Magnetic field pointing to the left
- D) Magnetic field pointing to the right

5. In the example of a coil moving into a region with a magnetic field pointing out of the page, what direction does the induced current flow?

- A) Counterclockwise
- B) Clockwise
- C) No current flows
- D) Induced current flows in both directions