Class 12 Physics Chapter 6 Electromagnetic Induction MCQs

1. Which of the following factors is the induced charge in an electromagnetic induction independent of?

(a) Time
(b) Resistance of the coil
(c) Change of flux
(d) None of the above

2. Which of the following states that whenever there is a change in the magnetic field linked with electric circuits, an emf is induced?

(a) Lenz's Law
(b) Ohm's Law
(c) Faraday's Law of Electromagnetic Induction
(d) None of the above

3. Which of the following gives the polarity of the induced emf?

(a) Biot-Savart law
(b) Lenz's law
(c) Ampere's circuital law
(d) Fleming's right-hand rule

4. Electrical Inertia is the measure of

(a) Self Inductance
(b) Mutual Inductance
(c) Impedance
(d) None of the above

5. Which of the following laws is the consequence of the law of conservation of energy?

(a) Lenz's law
(b) Ohm's Law
(c) Archimedes Law
(d) All of the above

6. Which of the following apparatuses construction uses electromagnetic induction?

(a) Voltmeter
(b) Galvanometer

(c) Generator
(d) Electric Motor

7. Which of the following factors is the self-inductance associated with a coil is independent of?

(a) induced voltage
(b) current
(c) time
(d) coil resistance

8. Which of the following rules is used to identify the direction of the current induced in a wire moving in a magnetic field?

(a) Ampere's rule
(b) Fleming's Left-Hand Rule
(c) Fleming's Right-Hand Rule
(d) None of the above

9. Which of the following statements is true?

(a) A metal plate can be heated by passing either a direct current or an alternating current through the plate.
(b) A metal plate can be heated by placing it in a time-invariant magnetic field
(c) A metal plate can be heated by placing it in a time-variant magnetic field
(d) Both (a) and (c)

10. The induced emf is equal to the coefficient of self-inductance is equal to unity when the rate of change of current is unity.

(a) True
(b) False

********** Answer Key **********

1 - (a)	2 - (c)	3 - (b)	4 - (a)	5 - (a)
6 - (c)	7 - (d)	8 - (b)	9 - (d)	10 - (a)