

ECAT Physics Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	When there is no relative motion between the magnet and coil, the galvanometer indicates:	<p>A. No current in circuit B. An increasing current C. A decreasing current D. Either B or C</p>
2	The current produced by moving a loop of a wire across a magnetic field is called:	<p>A. Direct current B. Magnetic current C. Alternating current D. Induced current E. None of these</p>
3	A device which converts Electrical energy into mechanical energy is called as	<p>A. Transformer B. Generator C. Motor D. All of these</p>
4	The induced emf in a coil is proportional to:	<p>A. Magnetic flux through a coil B. Rate of change of magnetic flux through the coil C. Area of the coil D. Product of magnetic flux and area of the coil</p>
5	The magnitude of induced emf depends upon the:	<p>A. Rate of decrease of magnetic field B. Rate of change of magnetic field C. Rate of increase of magnetic flux D. Constancy of magnetic field E. None of these</p>
6	The SI unit of magnetic induction is	<p>A. Weber B. Weber/meter C. Henry D. Tesla</p>
7	The current produced by moving a loop of wire across a magnetic field is called:	<p>A. Direct current B. Magnetic current C. Alternating current D. Induced current E. None of these</p>
8	An emf is set up in a conductor when it	<p>A. Is kept in a magnetic field B. Is kept in an electric field C. Moves across a magnetic field D. Both A and B E. None of these</p>
9	An induced current can be produced by:	<p>A. Constant magnetic field B. >Changing magnetic field C. >Varying magnetic field D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-</p>

		<p>serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Constant electric field</p> <p>E. None of these</p>
10	A coil of constant area is placed in a constant magnetic field. An include current is produced in the coil when:	<p>A. The coil is destroyed</p> <p>B. The coil is Rotated</p> <p>C. The coil is neither destroyed nor rotated</p> <p>D. Both (A) and (B)</p> <p>E. None of these</p>
11	The induced current in the loop can be Increased by	<p>A. Using a stronger magnetic field</p> <p>B. Moving the loop faster</p> <p>C. Replacing the loop by a coil of many turns</p> <p>D. All above</p> <p>E. Both A and B</p>
12	The ratio of average e.m.f in the coil tot he time rate of change of current in the same coil is called	<p>A. Mutual induction</p> <p>B. Mutual inductance</p> <p>C. Capacitance</p> <p>D. Self inductance</p>
13	In a coil current change from 2 to 4 A in .05 s. If the average induced emf is 8V then coefficient of self-inductance is:	<p>A. 0.2 henry</p> <p>B. 0.1 henry</p> <p>C. 0.8 henry</p> <p>D. 0.04 henry</p>
14	In magnet-coil experiment, emf can be produced by:	<p>A. Keeping the coil stationary and moving the magnet</p> <p>B. Keeping the magnet stationary and moving the coil</p> <p>C. Relative motion of the loop and magnet</p> <p>D. Any one of above</p> <p>E. All above</p>
15	Referring to above figure, a changing current in coil P can be produced:	<p>A. At the instant the switch is closed</p> <p>B. At the instant the switch is opened</p> <p>C. With the help of rheostat</p> <p>D. All of these</p> <p>E. None of these</p>
16	In magnet-coil experiment, emf can be produced by	<p>A. Keeping the coil stationary and moving the magnet</p> <p>B. Keeping the magnet stationary and moving</p> <p>C. Relative motion of the loop and magnet</p> <p>D. Any one of above</p> <p>E. All above</p>
17	When the conductor moved across a magnetic field:	<p>A. Emf induced is similar to that of a battery</p> <p>B. Emf induced gives rise to induced current</p> <p>C. An emf induced across its ends</p> <p>D. All are correct</p>

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E. None of these
<o:p></o:p></p>

18 An induced current can be produced by

- A. Constant magnetic field
- B. Changing magnetic field**
- C. Varying electric field
- D. Constant electric field
- E. None of these

19 When a conductor is moved across a magnetic field:

- A. Emf induced is similar to that of a battery
- B. Emf induced gives rise to induced current
- C. An emf is induced across its ends
- D. All are correct**
- E. None of these

20 The magnitude of induced emf depends upon the:

- A. Rate of decrease of magnetic field
- B. Rate of change of magnetic field**
- C. Rate of increase of magnetic flux
- D. Constancy of magnetic field
- E. None of these