

ECAT Physics Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	A coil of constant area is placed in a constant magnetic field. An induced current is produced in the coil when	A. The coil is distorted B. The coil is rotated C. The coil is neither distorted nor rotated D. Both A and B E. None of these
2	Referring to above figure, current in the coil P grows from zero to its maximum value:	A. At the instant the switch is closed B. At the instant the switch is opened C. When switch is kept open D. All of above E. Neither of above
3	The induced current in a conductor depends upon:	A. Resistance of the loop B. Speed with which the conductor moves C. Any of these D. Both A and B E. None of these
4	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Both A and C B. Induced emf C. Both A and B D. Motion emf E. Electrostatic emf
5	Motional emf is called motional:	A. Electromagnetic force and is measured in newtons B. Electromotive force and is measured in volt C. Electromotive force and is measured in newtons D. Electromagnetic force and is measured in volts E. None of these
6	The law of electromagnetic induction is related to:	A. Coulomb B. Ampere C. Faraday D. Lenz E. None of these
7	When there is no relative motion between the magnet and coil, the galvanometer indicates:	A. No current in circuit B. An increasing current C. A decreasing current D. Either B or C
8	Micheal Faraday and joseph Henry belong respectively to:	A. USA and England B. England and France C. England and USA D. USA and France E. None of these
9	An induced current can be produced by:	A. Constant magnetic field B. Changing magnetic field C. Varying magnetic field D. Constant electric field E. None of these
10	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
11	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Motion emf B. Electrostatic emf C. Induced emf D. Both A and B E. Both A and C
12	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law

13	The induced current in a conductor depends upon:	<ul style="list-style-type: none"> A. Resistance of the loop B. Speed with which the conductor moves C. Any of these D. Both (A) and (B) E. None of these
14	The induced current in the loop can be increased by:	<ul style="list-style-type: none"> A. Using a strong magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All of above E. None of these
15	Transformer is used to	<ul style="list-style-type: none"> A. Increase alternating current B. Increase d.c voltage C. Increase & Decrease emf D. All answers are right
16	The magnitude of induced emf depends upon the	<ul style="list-style-type: none"> 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
17	The ratio of average e.m.f in the coil to the time rate of change of current in the same coil is called	<ul style="list-style-type: none"> A. Mutual induction B. Mutual inductance C. Capacitance D. Self inductance
18	An emf is set up in a conductor when it	<ul style="list-style-type: none"> 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
19	The motional e.m.f depends upon the	<ul style="list-style-type: none"> A. Length of a conductor B. Strength of a magnet C. Speed of the conductor D. All of the above
20	Instead of moving the coil towards a magnet, the magnet is moved towards the coil with the same speed. The galvanometer shows current	<ul style="list-style-type: none"> A. Of same magnitude in the same direction B. Of different magnitude in the same direction C. Of same magnitude but in opposite direction D. Of different magnitude in the opposite direction E. None of these