

## ECAT Pre General Science Physics Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	The induced current in the loop can be increased by:	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
2	An emf is set up in a conductor when it:	A. is kept in a magnetic field B. is kept in a electric field C. Move across a magnetic field D. Both (A) and (B) E. None of these
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	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
5	Which of the following is most suitable as the core of transformer	A. Soft iron B. Alinco C. Steel D. None of these
6	Lens's law deals with the	A. Magnitude of induced current B. Magnitude of induced e.m.f C. Direction of induced e.m.f D. Direction of induced current
7	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
8	An emf is set up in a conductor when it:	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
9	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
10	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law
11	The device in which induced emf is statically induced emf is:	A. Transformer B. AC generator C. Alternator D. Dynamo
12	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:	A. 0.2 henry B. 0.1 henry C. 0.8 henry D. 0.04 henry
13	The induced emf in a coil is proportional to:	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

14	The work is stored in the inductor as	<p>A. Electric potential energy  B. Elastic potential energy  C. Magnetic energy  D. Absolute potential energy</p>
15	The product of induced current and the resistance of the wire through which the current is passing is called:	<p>A. Electromagnetic induction  B. induced emf  C. Induced current  D. Self induced  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  B. Keeping the magnet stationary and moving  C. Relative motion of the loop and magnet  D. Any one of above  E. All above</p>
17	Faraday's law of electromagnetic induction has been used in the construction of:	<p>A. Galvanometer  B. Voltmeter  C. Electric motor  D. Electric generator  E. Commutator</p>
18	A square loop of wire is moving through a uniform magnetic field. The normal to the loop is oriented parallel to the magnetic field. The emf induced in the loop is:	<p>A. Zero  B. Of smaller magnitude  C. Of larger magnitude  D. Sometimes B, sometimes C  E. Neither of these</p>
19	When the conductor moved across a magnetic field:	<p>A. Emf induced is similar to that of a battery  B. Emf induced gives rise to induced current  C. An emf induced across its ends  D. All are correct  E. None of these</p>
20	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>