

Physics ECAT Pre Engineering Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	The product of induced current and the resistance of the wire through which the current is passing is called:	A. Electromagnetic induction B. induced emf C. Induced current D. Self induced E. None of these
2	Faraday's law of electromagnetic induction has been used in the construction of:	A. Galvanometer B. Voltmeter C. Electric motor D. Electric generator E. Commutator
3	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:	A. Zero B. Of smaller magnitude C. Of larger magnitude D. Sometimes B, sometimes C E. Neither of these
4	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
5	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
6	Referring to above figure, current in coil P falls from its maximum value to zero	A. At the instant the switch is closed B. At the instant the switch is opened C. When switch is kept open D. When switch is kept closed E. None of these
7	A device which converts Electrical energy into mechanical energy is called as	A. Transformer B. Generator C. Motor D. All of these
8	The direction of induced current is always so as to oppose the cause which produces it. This is	A. Lenz's law B. Ampere's law C. Faraday's law D. Coulomb's law E. None of these
9	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
10	For inducing emf in a coil the basic requirement is that:	A. Flux should link the coil B. Change in flux should link the coil C. Coil should form a closed loop D. Both B and C are true
11	The SI unit of magnetic induction is	A. Weber B. Weber/meter C. Henry D. Tesla
12	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
13	The induced current in the loop can be increased by:	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All above E. Both (A) and (B)

14	The current produced by moving a loop of wire across a magnetic field is called:	<ul style="list-style-type: none"> A. Direct current B. Magnetic current C. Alternating current D. Induced current E. None of these
15	When a conductor is moved across a magnetic field:	<ul style="list-style-type: none"> 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
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	Referring to above figure, a changing current in coil P can be produced:	<ul style="list-style-type: none"> A. At the instant the switch is closed B. At the instant the switch is opened C. With the help of rheostat D. All of these E. None of these
18	Back emf is produced due to	<ul style="list-style-type: none"> A. Self induction B. Mutual induction C. A.C D. Lenz's law
19	In magnet-coil experiment, emf can be produced by	<ul style="list-style-type: none"> 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
20	The rate change of area expressed is expressed in:	<ul style="list-style-type: none"> A. None of these B. ms^{-1} C. m^2/s^2 D. ms^{-2} E. m^2/s^{-1}