

ECAT Pre General Science Physics Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law
2	The motional e.m.f depends upon the	A. Length of a conductor B. Strength of a magnet C. Speed of the conductor D. All of the above
3	Split rings act as	A. Vibrator B. Resistor C. Motor D. Commutator
4	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
5	The work is stored in the inductor as	A. Electric potential energy B. Elastic potential energy C. Magnetic energy D. Absolute potential energy
6	A.C. can be measure with the help of	A. Nuclear effect B. Magnetic effect C. Chemical effect D. Heating effect
7	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
8	What is the coefficient of mutual inductance, when the magnetic flux changes by $2 \times 10^{-2} \text{ Wb}$, and change in current is 0.01 A?	A. 2 H B. 3 H C. $1/2$ H D. Zero
9	When the conductor 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 induced across its ends D. All are correct E. None of these

10	An induced current can be produced by:	<p>A. Constant magnetic field</p> <p>B. Changing magnetic field</p> <p>C. Varying magnetic feild</p> <p>D. Constant electric field</p> <p>E. None of these</p>
11	An induced current can be produced by:	<p>A. Constant magnetic field</p> <p>B. Changing magnetic field</p> <p>C. Varying magnetic field</p> <p>D. Constant electric field</p> <p>E. None of these</p>
12	The magnitude of induced emf depends upon the	<p>A. Rate of decrease of magnetic field</p> <p>B. Rate of change of magnetic field</p> <p>C. Rate of increase of magnetic flux</p> <p>D. Constancy of magnetic field</p> <p>E. None of these</p>
13	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	<p>A. Both A and C</p> <p>B. Induced emf</p> <p>C. Both A and B</p> <p>D. Motion emf</p> <p>E. Electrostatic emf</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, current in coil P falls from its maximum value to zero:	<p>A. At the instant the switch is closed</p> <p>B. At the instant the switch is opened</p> <p>C. When switch is kept open</p> <p>D. When switch is kept closed</p> <p>E. None of these</p>
16	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>
17	An induced current can be produced by:	<p>A. Constant magnetic field</p> <p>B. Changing magnetic field</p> <p>C. Varying magnetic field</p>

17	An induced current can be produced by	C. Varying electric field D. Constant electric field E. None of these
18	When there is no relative motion between the magnet and coil, the galvanometer indicated	A. No current in the circuit B. An increasing current C. A decreasing current D. A constant current E. Either B or C
19	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
20	Eddy current is produced when:	A. A metal is kept in varying magnetic field B. A metal is kept in steady magnetic field C. A circular coil is placed in a steady magnetic field D. A current is passed through a circular coil