ECAT Pre General Science Physics Chapter 15 Electromagnetic Induction Online Test

Sr	Questions	Answers Choice
1	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
2	Faraday's law of electromagnetic induction has been used in the construction of:	A. Galvanometer B. Voltmeter C. Electric motor D. Electric genrator E. Commutator
3	The law of electromagnetic induction is related to:	A. Coulomb B. Ampere C. Faraday D. Lenz E. None of these
4	The rate change of area expressed is expressed in:	A. None of these B. ms⁻¹ C. m²s⁻² D. ms⁻² E. m²s⁻¹
5	Plan of a coil makes an angle of 20° with the lines of magnetic field. The angle between B and vector area of plane of coil is:	A. Also 20° <o:p></o:p> B. 70° <o:p></o:p> C. 90° <o:p></o:p> D. 180° <o:p></o:p> E. None of these
6	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
7	A metal road of length 1m is moving at a speed of 1 ms^{-1}In a direction making angle of 30° with 0.5 Y magnetic field. The emf produced in the rod is:	A. 0.25 N B. 0.25 V C. 2.5 V

		D. 2.5 N E. 25 V
8	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
9	When the conductor moved across a magnetic field:	A. Emf induced is similar to that of a battery <o:p></o:p> B. Emf induced gives rise to induced current <o:p></o:p> C. An emf induced across its ends <o:p></o:p> D. All are correct <o:p></o:p> E. None of these <o:p></o:p>
10	A coil of constant area is placed in a constant magnetic field. An include current is produced in the coil when:	A. The coil is destroyed B. The coil is Rotated C. The coil is neither destroyed nor rotated D. Both (A) and (B) E. None of these
11	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
12	In magnet-coil experiment, emf can be produced by:	A. Keeping the coil stationary and moving the magnet B. Keeping the magnet stationary and moving the coil C. Relative motion of the loop and magnet D. Any one of above E. All above
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 induced current is 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
15	The phenomenon of generation of induced emf is called	A. Electrostatic induction B. Magnetic induction C. Electromagnetic induction D. Electric induction

		E. Both (A) and (D)
16	An induced current can be produced by:	A. Constant magnetic field B. Changing magnetic field C. Varying magnetic feild D. Constant electric field E. None of these
17	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
18	The current produced by moving a loop of a wire across a magnetic field is called:	A. Direct current B. Magnetic current C. Alternating current D. Induced current E. None of these
19	When a conductoris moved across a magnetic field:	A. Emf induced its 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	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Induced emf B. Both A and B C. Both A and C D. Motion emf E. Electrostatic emf
21	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Motion emf B. Both A and B C. Both A and C D. Electrostatic emf E. Induced emf
22	When a conductor is moved across a magnetic field, the redistribution of charge sets up:	A. Magnetic field B. Electrostatic field C. Electromagnetic field D. All of these E. None of these
23	When a conductor moved with its length parallel to the lines of magnetic fled:	A. An emf is induced across its ends B. Emf induced is similar to that of a battery C. Emf passes through the conductor D. Both A and B E. None of these
24	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
25	The unit of induced emf is:	A. Volt B. Nm/As C. Joule coul⁻¹ D. Both A and C E. All of these
26	Referring to above figure, a changing current in coil P can be produced:	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
27	Referring to above figure, due to change in current in the coil P, the change in magnetic flux:	A. Is associated with coil P B. Is associated with coil S C. Causes an induced current is coil S D. All of these E. None of these
28	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
29	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

30	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