ECAT Pre General Science Physics Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
2	A metal road of length 1m is moving at a speed of 1 ms^{-1}In a direction making angle of 30^{o} 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
3	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
4	Self inducede e.m.f. is also called	A. Motional e.m.f. B. Thermistor C. Electrostatic induction D. Back e.m.f
5	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
6	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
7	An induced current can be produced by	A. Constant magnetic field B. Changing magnetic field C. Varying electric field D. Constant electric field E. None of these
8	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law
9	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
10	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
11	A.C. can be measure with the help of	A. Nuclear effect B. Magnetic effect C. Chemical effect D. Heating effect
12	Lenz's law is the consequence of	A. Mass B. Energy conservation C. Momentum conservation D. Charge
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	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
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 B
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	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
18	The ratio of average e.m.f in the coil tot he time rate of change of current in the same coil is called	A. Mutual induction B. Mutual inductance C. Capacitance D. Self inductance
19	The change of magnetic flux through a circuit will produce	A. Magnetic Field B. Electric Field C. emf D. a.c
20	The unit of induced emf is:	A. Volt B. Nm/As C. Joule coul⁻¹ D. Both A and C E. All of these