Physics ECAT Pre Engineering Chapter 15 Electromagnetic Induction

Sr	Questions	Answers Choice
1	Lenz's law is the consequence of	A. Mass B. Energy conservation C. Momentum conservation D. Charge
2	Which of the following is most suitable as the core of transformer	A. Soft iron B. Alinco C. Steel D. None of these
3	The change of magnetic flux through a circuit will produce	A. Magnetic Field B. Electric Field C. emf D. a.c
4	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
5	What is the coefficient of mutual inductance, when the magnetic flux changes by 2×10^{-2}Wb, and change in current is 0.01 A?	A. 2 H B. 3 H C. 1/2 H D. Zero
6	The work is stored in the inductor as	A. Electric potential energy B. Elastic potential energy C. Magnetic energy D. Absolute potential energy
7	Michael 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	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
9	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
10	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
11	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
12	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
13	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

14	Instead of moving the coil towards a magnet, the magnet is moved towards the coil with the same speed. The galvanometer shows current:	A. Of same magnitude in the same direction B. Of different magnitude in the same direction C. Of same magnitude but in opposite direction D. Of different magnitude in the opposite direction E. None of these
15	Self inducede e.m.f. is also called	A. Motional e.m.f. B. Thermistor C. Electrostatic induction D. Back e.m.f
16	A.C. can be measure with the help of	A. Nuclear effect B. Magnetic effect C. Chemical effect D. Heating effect
17	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
18	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
19	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
20	For inducting 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