

Physics ICS Part 2 Chapter 15 Online MCQ's Test

Sr	Questions	Answers Choice
1	Energy density in an inductor is.	A. Directly proportional to magnetic field B. Directly proportional to square of magnetic field C. Inversely proportional to magnetic field D. Inversely proportional to square of magnetic field
2	Lenz's law deals with	A. Magnitude of emf B. Direction emf C. Direction of induced current D. Resistance
3	The Lenz's law fulfils.	A. Law of conservation of energy B. Law of conservation of charge C. Law of conservation of momentum D. Kirchhoff's law
4	Lenz's law is a consequence of the law of conservation of	A. Charge B. Momentum C. Energy D. Angular momentum
5	EMF is induced due to change in	A. Charge B. Current C. Magnetic flux D. Electric field
6	When a coil is moved in a uniform magnetic field, an induced emf is produced due of change in	A. Flux density B. Electric flux C. Magnetic flux D. Magnetic field strength
7	The negative sign with induced emf in Faraday's law is in accordance with	A. Lenz's law B. Amperes law C. Boyle's law D. Gauss law
8	The motional emf depends upon the	A. Length of conductor B. Speed of conductor C. Strength of magnet D. All of these
9	A metal rod of 1 m is moving at a speed of 1 ms ⁻¹ in a direction making an angle 30° with 0.5 T magnetic field . The emf produced is.	A. 0.25 N B. 2.5 N C. 0.25 V D. 2.5 V
10	The rod of unit length is moving at 30° through a magnetic field of 1 T. If the velocity of rod is 1 m/s, then induced emf in the rod will be given by	A. 1 V B. 0.25 V C. 0.5 V D. 0.6 V
11	The motional emf is give by	A. qvB B. IBL C. eBL D. vBL
12	The motional emf developed in a conduction depends upon.	A. Length B. Orientation C. Magnetic field D. All of the above
13	When a conductor moves across a magnetic field an emf is set up this emf is called.	A. Variable emf B. Constant emf C. Back emf D. Induced emf
14	Electromagnetic induction obeys law of conservation	A. Charge B. Energy C. Momentum D. Mass

15	If we make magnetic field stronger the value of induced current is.	A. Decreased B. Increased C. Vanishes D. Remain constant
16	Eddy current is produced when:	A. A metal is light 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
17	Step up transfer has a transformation ratio of 3:2. What is the voltage in secondary , If voltage in primary is 30 V?	A. 45 V B. 15 V C. 90 V D. 300 V