

## MDCAT Physics Chapter 9 Electromagnetic Induction Online Test

Sr	Questions	Answers Choice
1	Frequency of A.C. used in Pakistan is:	A. 100 CPs B. 60 CPs C. 50 CPs D. 120 CPs
2	Lenz law is in accordance with the law of conservation of:	A. Momentum B. Angular momentum C. Charge D. Energy
3	Such a value A.C current which produces the same heating effect as is produced by the D.C of equal magnitude is called:	A. r.m.s current B. Peak current C. Effective current D. None of the above
4	In general, in an ac circuit:	A. The average value of current is zero B. The average value of the square of the current is zero C. The average power dissipation is zero D. The phase difference between voltage and current is zero
5	During each cycle, alternating voltage reaches a peak value:	A. One time B. Two time C. Four-time D. A number of times depending on the frequency
6	The average value of A.C. current and voltage over a complete cycle is:	A. Maximum     B. Zero     C. Neither zero nor maximum     D. None of the above
7	When the power output in watts equals one half the power input, the efficiency of the transformer becomes:	A. 100% B. 200% C. 50% D. Zero
8	When a transformer is used to stepping up A.C voltage from 100 V to 200 V is connected across 50V D.C mains, then:	A. Output voltage is 100 V B. Output voltage is 250 V C. No voltage is developed across the secondary D. None of these
9	The induction e.m.f primarily produced at the cost of:	A. Internal energy B. Chemical energy C. Electrical energy D. Mechanical energy
10	The loss of power in transformer occurs due to:	A. The shape of coils B. Size of coils C. Magnetic hysteresis and Eddy current D. None of these
11	Transformer obeys the law of conservation of:	A. Flux B. Momentum C. Power D. emf
12	Transformer works on the principle of:	A. Self-induction B. Mutual induction C. Back emf D. None of the above
13	If the magnetic flux linked with a coil varies at the rate of 1wb/min, the induced emf is:	A. 1V B. 1/60V C. 60V D. None of these
14	The SI unit of induced emf is:	A. Vs/ A B. Tesla C. Henry

		D. Volt
15	Lenz's law deals with the:	<ul><li>A. Magnetic field of emf</li><li>B. Direction of emf</li><li>C. Both of the magnitude and direction of emf</li><li>D. Direction of induced current</li></ul>
16	The motional of emf depends upon the:	<ul><li>A. Length of conductor</li><li>B. Strength of magnetic field</li><li>C. Speed of conductor</li><li>D. All the above</li></ul>
17	The magnitude of emf of a conductor of length L and velocity V is equal to:	A. VB/ L B. VL/ B C. VBL D. qVBL
18	The induced current can be increased by:	<ul> <li>A. Increasing the number of turns of coil</li> <li>B. By moving the coil faster through the field</li> <li>C. By increasing the strength</li> <li>D. All of the above</li> </ul>
19	Identify the phenomenon by which an induced emf could be generated:	<ul> <li>A. By moving a conductor across a magnetic field</li> <li>B. By rotating a coil faster through the field</li> <li>C. By increasing the strength</li> <li>D. All the above</li> </ul>