

## Physics FSC Part 2 Chapter 15 Online MCQ's Test

Sr	Questions	Answers Choice
1	Lenz's law presented in	A. 1834 B. 1934 C. 1826 D. 1836
2	The motional emf depends upon the	A. Length of conductor B. Speed of conductor C. Strength of magnet D. All of these
3	The Lenz's law is also statement of:	A. Law of conservation of mass B. Law of conservation of charge C. Law of conservation of energy D. Law of conservation of momentum
4	Self induction does not depend on	A. Number of turns of the coil B. Area of cross section of the core C. Nature of material of the core D. Current through inductor
5	The only difference between the construction of D.C and A.C is.	A. Carbon burshes B. Coil C. Commutator D. Magnetic field
6	Step up transformer is used.	A. Step up D.C. voltage B. Step up A.C. voltage C. Step up both A.C and D.C. D. Step up A.C. current
7	The mutual inductance of the coils depends upon.	A. Stiffness of the coils B. Density of coils C. Material of coils D. Geometry of the coils
8	The induced emf in a coil is proportional to:	A. Magnetic flux through the coil B. Rate of change of Magnetic flux through the coil C. Area of the coil D. Product of magnetic flux flux and area of the coil
9	In A.C. inductor behaves as	A. Capacitor B. Resistor C. Commutator D. Transistor
10	The movement of conductor in magnetic field produces electrical current was discovered in:	A. 1931 B. 1731 C. 1842 D. 1831
11	Lenz's law deals with	A. Magnitude of emf B. Direction emf C. Direction of induced current D. Resistance
12	A step up transformer is used 120 V line to provide 240 V. If primary coil has 100 turns the number of turns is secondary is.	A. 50 B. 100 C. 150 D. 200
13	$B^2/2\mu$ is the expression of.	A. Lenz's law B. Magnetic energy C. Magnetic energy density D. Back emf
14	If force in the direction of velocity of conductor, then induced current is directed,	A. Anti clockwise B. Clock wise C. At equilibrium D. None of above
15	The current induced can be increased by:	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop bay coi of many

turns

D. All of above

16 The induction can be increased by winding the wire around a core made of.

- A. Copper
- B. Silicon
- C. Iron
- D. Aluminum

17 The SI unit of Mutual inductance is:

- A.  $V A^{-1} S^{-1}$
- B.  $V A S^{-1}$
- C.  $V S A^{-1}$
- D.  $A S V^{-1}$

18 Energy stored in inductor is.

- A.  $\frac{1}{2} L I^2$
- B.  $\frac{1}{2} L I$
- C.  $\frac{1}{2} L^2 I$
- D.  $\frac{1}{2} L^2 I^2$

19 Energy density of an inductor is:

- A.  $U_M = \frac{1}{2} \mu B^2$
- B.  $U_M = 2 \mu B$
- C.  $U_M = \frac{1}{2} B^2 / \mu$
- D.  $U_M = 2 B^2 / \mu$

20 If magnetic field is doubled then magnetic energy density becomes.

- A. Four times
- B. Two times
- C. Three times
- D. Six times