

Physics FSC Part 2 Chapter 15 Online MCQ's Test

Sr	Questions	Answers Choice
1	Energy density of an inductor is:	A. $UM=1/2\mu₀/B²$ B. $Um = 2\mu₀/B$ C. $UM = 1/2B²/\mu₀$ D. $Um = 2B²/\mu₀$
2	When the back emf is zero, its draws.	A. Zero current B. Minimum current C. Maximum current D. Steady current
3	The motional emf is give by	A. qvB B. IBL C. eBL D. vBL
4	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
5	The movement of conductor in magnetic field produces electrical current was discovered in:	A. 1931 B. 1731 C. 1842 D. 1831
6	For step down transformer	A. $N_s > N_p$ B. $N_p > N_s$ C. $N_s = N_p$ D. $N_s > > N_p$
7	A 50 mH coil carries a current of 2.0 a , then energy stored in tis magnetic field is.	A. 0.1 J B. 10 J C. 100 J D. 1000 J
8	The Si unit of Mutual inductance is:	A. $VA^{-1}S^{1}$ B. VAS^{-1} C. VSA^{-1} D. ASV^{-1}
9	Lenz's law is a consequence of the law of conservation of	A. Charge B. Momentum C. Energy D. Angular momentum
10	The induction can be increased by winding the wire around a core made of.	A. Copper B. Silicon C. Iron D. Aluminum
11	A current generator device converts:	A. Mechanical energy into chemical energy B. Chemical energy into electrical energy C. Mechanical energy into electrical energy D. Both b and c
12	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 circualr coil
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	In a coil current change from 2 to 4 A in .05 s . If the average induced emf is 8 V then coefficient of self-inductance is:	A. 0.2 henry B. 0.1 henry C. 0.8 henry D. 0.04 henry
15	In case of inductor , energy is stored in the	A. Electric field B. Magnetic field C. Potential field D. Gravitational field
16	SI unit of henry which is.	A. VSA-1 B. VS-1 A C. VS-1A-1 D. VSA
17	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
18	The direction of induced current is always so as to oppose the change which causes the current is:	A. Faraday's law B. Lenz's law C. Ohm's law D. Kirchhoff's 1st rule
19	Eddy current is one cause energy loss in	A. A.C. generator B. Transformer C. D.C. motor D. D.C. generator
20	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