

Physics FSC Part 2 Chapter 15 Online MCQ's Test

Sr	Questions	Answers Choice
1	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
2	If the coil is wound on iron core, the flux through it.	A. Decreases B. Becomes zero C. Increases D. Remains constant
3	the core of transformer is laminated so reduce.	A. Magnetic loss B. Hysteresis loss C. Eddy current loss D. Electric loss
4	In A.C. generator , when plane of coil is perpendicular to magnetic field, then output of generator is.	A. NwAB B. 2pi f C. Maximum D. Zero
5	Commutator was invented in	A. 1834 B. 1820 C. 1840 D. 1835
6	If 10 A current passes through 100 mH inductor, then energy stored is.	A. 100 J B. 5 J C. 20 J D. Zero
7	Mutual induction has a practical role in the performance of the.	A. Radio choke B. Transformers C. A.C. Generator D. D.C. Generator
8	Energy density of an inductor is:	A. $UM = \frac{1}{2} \mu B^2$ B. $Um = 2\mu B$ C. $UM = \frac{1}{2} B^2 / \mu$ D. $Um = 2B^2 / \mu$
9	The jerks in D.C. motor are created by the use of.	A. Armature B. Commutators C. Split rings D. Source of emf
10	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
11	Self inductance of a long solenoid is given by	D. None of the above
12	The working principle of transformer is.	A. Self induction B. Faraday's law C. Mutual induction D. Electromagnetic induction
13	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
14	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
		A. Directly proportional to magnetic field

15	Energy density in an inductor is.	field B. Directly proportional to square of magnetic field C. Inversely proportional to magnetic field D. Inversely proportional to square of magnetic field
16	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
17	With the speed of motor, magnitude of back emf	A. Remain same B. Increase C. Decrease D. First increases then decreases
18	Commentator was invented by	A. Henry B. Ousted C. Maxwell D. William sturgeon
19	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
20	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