

Physics FSC Part 2 Chapter 15 Online MCQ's Test

Sr	Questions	Answers Choice
1	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
2	If speed of rotation of a generator is doubled the output voltage will be.	A. Remain same B. Double C. Four time D. One half
3	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
4	Mutual induction has a practical role in the performance of the.	A. Radio choke B. Transformers C. A.C. Generator D. D.C. Generator
5	Energy density of an inductor is:	A. $UM=1/2\mu₀/B²$ B. $Um = 2\mu₀/B$ C. $UM = 1/2B²/\mu₀$ D. $Um = 2B²/\mu₀$
6	One henry is equal to	A. 1 ohm x 1 sec B. 1 ohm x 1 hertz C. 1 ohm x 1 metre D. All of above
7	Electromagnetic induction obeys law of conservation	A. Charge B. Energy C. Momentum D. Mass
8	Question Image	A. Lenz's law B. Faraday's law C. Ampere's law D. None of these
9	If 10 A current passes through 100 mH inductor, then energy stored is.	A. 100 J B. 5 J C. 20 J D. Zero
10	If the north pole of a magnet moves away from a metallic ring	A. Clockwise B. Anticlockwise C. First clockwise and then anticlockwise D. None of above
11	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
12	A real transformer does not change.	A. Voltage level B. Current level C. Power level D. Frequency
13	Lenz's law deals with	A. Magnitude of emf B. Direction emf C. Direction of induced current D. Resistance
14	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

15	Commutator was invented by:	A. William bills B. William Gates C. William tells D. William Sturgeon
16	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
17	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
18	The motional emf depends upon the	A. Length of conductor B. Speed of conductor C. Strength of magnet D. All of these
19	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
20	The negative sign with induced emf in Faraday's law is in accordance with	A. Lenz's law B. Ampere's law C. Boyle's law D. Gauss law