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

| Sr | Questions | Answers Choice |
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| 1 | The application of mutual induction is a. | A. D.C. motor<br>B. Radio<br>C. Television<br>D. Transformer |
| 2 | split rings are used in | A. A.C. generator<br>B. A.C. motor<br>C. Transformer<br>D. D.C. motor |
| 3 | Which of the following quantities remain constant in step up transformer? | A. Current<br>B. Voltage<br>C. Power<br>D. Heat |
| 4 | When motor is just started, back emf is almost. | A. Maximum<br>B. Zero<br>C. Minimum<br>D. Infinite |
| 5 | DC generator by william Sturgeon in: | A. 1894<br>B. 1961<br>C. 1834<br>D. 1961 |
| 6 | Induced emf in A.C. generator can be increased by | A. Decreasing area of coil<br>B. Decreasing magnetic field<br>C. Increasing area of coil<br>D. Slowing down speed of coil |
| 7 | Energy stored in an inductor is: | A. 1/2L<sup>2</sup>I<br>B. 1/2L<sup>2</sup>/I<br>C. <sub>1/2LI</sub><sup>2</sup><br>D. 1/2LI |
| 8 | B2/2p is the expression of. | A. Lenz's law<br>B. Magnetic energy<br>C. Magnetic energy density<br>D. Back emf |
| 9 | The device in the circuit that consume electrical energy are known as. | A. Dissipaters<br>B. Generator<br>C. Load<br>D. Motors |
| 10 | A metal rod of 1 m is moving at a speed of 1 ms-1 in a direction making an angle 30 $^{o}$ with 0.5 T magnetic field . The emf produced is. | A. 0.25 N<br>B. 2.5 N<br>C. 0.25 V<br>D. 2.5 V |
| 11 | Question Image | |
| 12 | Which of the following converts electrical energy into mechanical energy. | A. Transformer<br>B. A.C. generator<br>C. D.C. generator<br>D. D.C. motor |
| 13 | The self induction emf is some times called. | A. Motional emf<br>B. Constant emf<br>C. Back emf<br>D. Variable emf |
| 14 | The illustration of the phenomenon of mutual induction is in the device of | A. Transformer<br>B. Inductor<br>C. A.C. Generator<br>D. Ammeter |
| 15 | By winding the coil around a less magnetic core, self induction. | A. Will increase<br>B. Will decrease<br>C. Remain same<br>D. First increase then decrease |
| 16 | The Lenz's law is also statement of: | A. Law of conservation of mass<br>B. Law of conservation of charge<br>C. Law of conservation of energy |

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| | | D. Law of conservation of momentum |
| 17 | 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<br>B. 100<br>C. 150<br>D. 200 |
| 18 | EMF is induced due to change in | A. Charge<br>B. Current<br>C. Magnetic flux<br>D. Electric field |
| 19 | The movement of conductor in magnetic field produces electrical current was discovered in: | A. 1931<br>B. 1731<br>C. 1842<br>D. 1831 |
| 20 | If D.C. input for step up transformer, the output is | A. Zero<br>B. High<br>C. Low<br>D. May be high or low |