

## Physics Fsc Part 1 Chapter 10 Online Test

| Sr | Questions  | Answers Choice  |
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| 1  | The e.m.f. produced in the conductor when it moves across a magnetic field is called.  | A. Self emf<br>B. Motional emf<br>C. Mutual emf<br>D. Induced emf   |
| 2  | What is the value of the current in a wire of 10 cm long of the right angle to a uniform magnetic field of 0.5 T when the force acting on the wire is 5 N? | A. 1 A<br>B. 100 A<br>C. 10 A<br>D. 1000 A  |
| 3  | Lenz's law deals with the.   | A. Magnitude of induced current<br>B. Magnitude of induced emf<br>C. Direction of induced emf<br>D. Direction of induced current  |
| 4  | The value of the induced emf is directly proportional to the rate of change of.  | A. Magnetic flux<br>B. Electric flux<br>C. Force<br>D. Work   |
| 5  | A moving charged particle is surrounded by   | A. Electric field only<br>B. Magnetic field only<br>C. Both electric and magnetic field<br>D. No field                            |
| 6  | Electrons while moving perpendicularly through a uniform magnetic field are.   | A. Deflected towards north pole<br>B. Deflected towards south pole<br>C. Deflected along circular path<br>D. Not deflected at all |
| 7  | The SI Unit of magnetic flux is.   | A. Weber<br>B. N m <sup>-1</sup><br>C. N m A <sup>-1</sup><br>D. Both a and c   |
| 8  | The direction of line of magnetic force can be found by  | A. Right hand rule<br>B. Left hand rule<br>C. Hund's rule<br>D. Left and right hand rules   |
| 9  | Total number of magnetic lines of force passing normally through unit area is called.  | A. Flux density<br>B. Magnetism<br>C. Flux<br>D. Magnetic flux  |
| 10 | The unit of flux density is.   | A. N A <sup>-1</sup> m <sup>-1</sup><br>B. N A <sup>-1</sup> m <sup>-1</sup><br>C. N m A <sup>-2</sup><br>D. N m A                |
| 11 | Two free parallel straight wires carrying current in the same direction  | A. Attract each other<br>B. Repel each other<br>C. Do not affect each other<br>D. Get rotated                                     |
| 12 | The SI unit of magnetic induction or flux density is.  | A. Tesla<br>B. Gauss<br>C. Ampere<br>D. Weber   |
| 13 | The unit N A <sup>-1</sup> m <sup>-1</sup> is called   | A. Weber<br>B. Tesla<br>C. Coulomb<br>D. None of these  |
| 14 | If a current is passing through a wire, the magnetic lines of force are.   | A. Concentric circles<br>B. Parallel to the wire<br>C. Perpendicular to the wire<br>D. None of these                              |

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|    |  | D. <p>Inclined to the wire</p>  |
| 15 | Two free parallel straight wires carrying currents in the opposite direction   | <p>A. <p>Do not affect each other</p></p> <p>B. <p>Repel each other</p></p> <p>C. <p>Attract each other</p></p> <p>D. <p>Get rotated</p></p>  |
| 16 | The radius of curvature of the path of a charged particle in a uniform magnetic field is directly proportional to            | <p>A. <p>The particle's charge</p></p> <p>B. <p>The particle's momentum</p></p> <p>C. <p>The particle's energy</p></p> <p>D. <p>The flux density of the field</p></p>                       |
| 17 | The direction of induced current is always so as to oppose the change. Which causes the current, This is the statement of.   | <p>A. <p>Lenz's law</p></p> <p>B. <p>Faraday's law</p></p> <p>C. <p>Gauss's law</p></p> <p>D. <p>Joule's law</p></p>  |
| 18 | Lenz's law is consistent with  | <p>A. <p>Law of conservation of energy</p></p> <p>B. <p>Law of conservation of charge</p></p> <p>C. <p>Law of conservation of momentum</p></p> <p>D. <p>Law of conservation of mass</p></p> |
| 19 | A changing magnetic field produces   | <p>A. <p>Electric current</p></p> <p>B. <p>Changing electric field</p></p> <p>C. <p>Magnetic field</p></p> <p>D. <p>Conservative field</p></p>  |
| 20 | A 0.50 T field over an area of 2 m <sup>2</sup> which lies at an angle of 60 degree to the field, then the magnetic flux is. | <p>A. <p>0.50 weber</p></p> <p>B. <p>0.866 weber</p></p> <p>C. <p>0.75 weber</p></p> <p>D. <p>4 weber</p></p>   |