

Physics ICS Part 1 Chapter 10 Online Test

Sr	Questions	Answers Choice
1	The SI unit of magnetic induction or flux density is.	A. <p>Tesla</p> B. <p>Gauss</p> C. <p>Ampere</p> D. <p>Weber</p>
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. <p>1 A</p> B. <p>100 A</p> C. <p>10 A</p> D. <p>1000 A</p>
3	If a current is passing through a wire, the magnetic lines of force are.	A. <p>Concentric circles</p> B. <p>Parallel to the wire</p> C. <p>Perpendicular to the wire</p> D. <p>Inclined to the wire</p>
4	The value of the induced emf is directly proportional to the rate of change of.	A. <p>Magnetic flux</p> B. <p>Electric flux</p> C. <p>Force</p> D. <p>Work</p>
5	The radius of curvature of the path of a charged particle in a uniform magnetic field is directly proportional to	A. <p>The particle's charge</p> B. <p>The particle's momentum</p> C. <p>The particle's energy</p> D. <p>The flux density of the field</p>
6	Two free parallel straight wires carrying current in the same direction	A. <p>Attract each other</p> B. <p>Repel each other</p> C. <p>Do not affect each other</p> D. <p>Get rotated</p>
7	Total number of magnetic lines of force passing normally through unit area is called.	A. <p>Flux density</p> B. <p>Magnetism</p> C. <p>Flux</p> D. <p>Magnetic flux</p>
8	Magnetic field is detected by	A. <p>Ammeter</p> B. <p>Galvanometer</p> C. <p>Magnetic compass</p> D. <p>Avometer</p>
9	One of the following quantities that is not affected by the magnetic field is	A. <p>Moving charge</p> B. <p>Change in magnetic flux</p> C. <p>Current flowing in conductor</p> D. <p>Stationary charge</p>
10	The number of magnetic lines of force passing through any surface is known as.	A. <p>Magnetism</p> B. <p>Electric flux</p> C. <p>Magnetic flux</p> D. <p>Flux density</p>
11	The direction of induced current is always so as to oppose the change. Which causes the current, This is the statement of.	A. <p>Lenz's law</p> B. <p>Faraday's law</p> C. <p>Gauss's law</p> D. <p>Joule's law</p>
12	A magnetic compass will be deflected if it is kept near a	A. <p>Charge of motion</p> B. <p>Charge at rest</p> C. <p>Both a and b</p> D. <p>None</p>
13	When a charged particle is projected perpendicular to uniform magnetic field, its trajectory is.	A. <p>A circle</p> B. <p>Ellipse</p> C. <p>A helix</p> D. <p>Straight line</p>
14	Lenz's law is consistent with	A. <p>Law of conservation of energy</p> B. <p>Law of conservation of charge</p> C. <p>Law of conservation of</p>

		<p>momentum</p> <p>D. Law of conservation of mass</p>
15	Two free parallel straight wires carrying currents in the opposite direction	<p>A. Do not affect each other</p> <p>B. Repel each other</p> <p>C. Attract each other</p> <p>D. Get rotated</p>
16	The e.m.f. produced in the conductor when it moves across a magnetic field is called.	<p>A. Self emf</p> <p>B. Motional emf</p> <p>C. Mutual emf</p> <p>D. Induced emf</p>
17	The current produced when the conductor moves across a magnetic field is called	<p>A. Electric potential</p> <p>B. Electrostatic induction</p> <p>C. Electromagnetic induction</p> <p>D. Electric polarization</p>
18	A current is flowing towards north along a power line. The direction of the magnetic field over the wire is directed towards.	<p>A. East</p> <p>B. South</p> <p>C. West</p> <p>D. North</p>
19	A 0.50 T field over an area of 2 m ² which lies at an angle of 60 degrees to the field, then the magnetic flux is.	<p>A. 0.50 weber</p> <p>B. 0.866 weber</p> <p>C. 0.75 weber</p> <p>D. 4 weber</p>
20	The fact that emf produced by motion of a coil across a magnetic field was discovered by	<p>A. Michael Faraday</p> <p>B. Henry</p> <p>C. Oersted</p> <p>D. Both a and b</p>