

ECAT Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	The SI unit of magnetic induction is tesla which is equal to	<p>A. Newton/ampere-meter or N/A-m</p> <p>B. Newton/ampere²-meter or N/A²-m</p> <p>C. Newton/ampere²-meter² or N/A²-m²</p> <p>D. Newton/ampere²-meter² or N/A²-m²</p>
2	When the charged particle is projected at right angles to the field, then experienced by it will be:	<p>A. Maximum</p> <p>B. Zero</p> <p>C. qvB</p> <p>D. Both (A) and (B)</p> <p>E. Both (A) and (C)</p>
3	Method "lamp and scale arrangement" used to measure the	<p>A. angle of deflection</p> <p>B. restoring torque</p> <p>C. magnetic field strength</p> <p>D. current</p>
4	The unit of magnetic flux is	<p>A. Weber-m²</p> <p>B. Weber-m³</p> <p>C. Henry</p> <p>D. Weber</p>
5	Avo-meter is used of measure the	<p>A. current, voltage</p> <p>B. voltage, resistance</p> <p>C. resistance, current</p> <p>D. current, voltage and resistance</p>
6	At a given instant, a photon moves in +x direction in a region where there magnetic field in -z direction. The magnetic force on the proton will be the:	<p>A. -y direction</p> <p>B. +y direction</p> <p>C. +z direction</p> <p>D. -z direction</p> <p>E. None of these</p>
7	Fluorescent screen is a screen where visible spot	<p>A. vanishes</p> <p>B. is made</p> <p>C. becomes small and large</p> <p>D. none of these</p>
8	The force exerted on a conductor of length L, carrying current I when placed in a magnetic field B is given by	<p>A. $F = IB/L$</p> <p>B. $F = L \times B/I$</p> <p>C. $F = IL \times B$</p> <p>D. $F = IL \cdot B$</p>
9	The field around a moving charge is called	<p>A. magnetic field</p> <p>B. conservative field</p> <p>C. non-conservative field</p> <p>D. none of these</p>
10	Tesla is the unit of	<p>A. Magnetic induction or flux density</p> <p>B. Magnetic flux</p> <p>C. Self inductance</p> <p>D. None of these</p>
11	The total number of lines of magnetic induction passing through a surface perpendicular to the magnetic field is called	<p>A. magnetic flux</p> <p>B. magnetic flux density</p> <p>C. magnetic induction</p> <p>D. magnetic field intensity</p>
12	The strength of magnetic field around the current conductor is	<p>A. Smaller near the conductor</p> <p>B. Greater near the conductor</p> <p>C. Greater at the large distance from the conductor</p> <p>D. Constant near and away from the conductor</p>
13	Galvanometer is a device used for the detection of	<p>A. voltage</p> <p>B. current</p> <p>C. temperature</p> <p>D. pressure</p>
14	CRO deflects the beam of	<p>A. proton</p> <p>B. α-particle</p>

		<p>C. electron</p> <p>D. neutron</p>
15	Charge to mass ratio (e/m) of an electron is given by the relation	<p>A. $e/m = 2V/Br^2$</p> <p>B. $e/m = 2V/B^2r$</p> <p>C. $e/m = 2V/B^2r^2$</p> <p>D. $e/m = V/2B^2r^2$</p>
16	In a moving coil galvanometer, the deflecting couple depends upon	<p>A. area of the coil</p> <p>B. number of turns of coil</p> <p>C. value of magnetic field</p> <p>D. all of the above</p>
17	NmA^{-1} is commonly called:	<p>A. Weber</p> <p>B. Ampere</p> <p>C. Gauss</p> <p>D. Coulomb</p> <p>E. None of these</p>
18	the current is pass through the straight wire. The magnetic field established around it has its lines of force:	<p>A. Circular and endless</p> <p>B. Oval in shape</p> <p>C. Straight</p> <p>D. Parabolic</p> <p>E. All are true</p>
19	Total number of turns on 0.15 m length solenoid is 300. the value of n is:	<p>A. Greater than 300</p> <p>B. Smaller than 300</p> <p>C. Equal to 300</p> <p>D. Any of (A) or (B)</p> <p>E. Any of (A) or(C)</p>
20	If the value of galvanometer constant $k = C/BA n$ is made small, the galvanometer can be made	<p>A. Sensitive</p> <p>B. Accurate</p> <p>C. Stable</p> <p>D. None of these</p>