

ECAT Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	The working of galvanometer depends upon torque exerted on a current carrying coil in	<p>A. magnetic field B. electric field C. gravitational field D. nuclear field</p>
2	Amperean path is a:	<p>A. Closed path B. Rectangular path C. Circular path D. Any of above E. Broken path</p>
3	The magnetic field in the middle of a solenoid due to current is	<p>A. weak B. strong and uniform C. none-uniform D. zero</p>
4	The CRO is used for displaying the waveform of a given	<p>A. current B. voltage C. both of them D. none of them</p>
5	Charge to mass ratio (e/m) of an electron is given by the relation	<p>A. $e/m = 2V/Br^2$ B. $e/m = 2V/B^2r$ C. $e/m = 2V/B^2r^2$ D. $e/m = V/2B^2r^2$</p>
6	If the number of turns of a solenoid (carrying a steady current I) is doubled without changing the length of a solenoid, then magnetic field:	<p>A. Becomes Half B. Becomes double C. Is not affected D. Becomes one fourth E. None of these</p>
7	if the field is directed along the normal to the area, then flux is:	<p>A. Maximum B. Equal to zero C. Equal to BA D. Minimum E. None of these</p>

8	The force experienced by an electron projected in a magnetic field B with a velocity V is given by	A. $F = e(V \times B)$ B. $F = -e(V \times B)$ C. $F = e(B \times V)$ D. Both a and c
9	Magnetic lines of force:	A. <p>Cannot intersect at all</p> B. Intersect at infinity C. Intersect within magnet D. Intersect at Neutral Point E. None of these
10	The SI unit of magnetic flux is	A. Nm^2 B. Nm^{-1} C. NAm^{-1} D. Nm^2/A
11	A current carrying conductor is placed at right angle to the magnetic field. The magnetic force experienced by the conductor is	A. minimum B. maximum C. zero D. none of these
12	A long wire wound tightly on a cylindrical core is called:	A. Potentiometer B. Solenoid C. Toroid D. Wheat and stone bridge E. None of these
13	In order to make a voltmeter, high resistance is connected with galvanometer, in	A. perpendicular B. may be paralalled or pendicular C. series D. none of these
14	In the formula $B = \mu n I$, the symbol n denotes:	A. Total number of turns of solenoid B. Number of turns per unit length C. Number of turns per unit volume D. Numbers of turns per unit area E. Number of moles
15	If current through conductor is 1 A and length of conductor is 1m placed at right angle to the magnetic field, then the strength of magnetic field is	A. $F = B^2$ B. $F = 0$ C. $F = B$ D. $F = B/2$
16	Electron gun consist of	A. three anodes B. heating cathode C. three anodes D. three anodes , heating cathode, grid

17	A charged particle moving at right angle to the magnetic field will experience	A. minimum force B. maximum force C. zero D. moderate force
18	When a suitable small resistance is put in parallel with the galvanometer coil, it is converted into	A. Voltmeter B. Avometer C. Ammeter D. None of these
19	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	A. $1\text{T} = 10^4\text{G}$ B. $1\text{T} = 10^5\text{G}$ C. $1\text{T} = 10^3\text{G}$ D. $1\text{T} = 10^4\text{G}$
20	A resistance used in voltmeter is called	A. shunt resistance B. high resistance C. low resistance D. zero resistance