ECAT Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	The force experienced by charged particle is maximum, if it moves	A. parallel to magnetic field B. perpendicular to magnetic field C. opposite to the magnetic field D. none of these
2	A full-scale deflection is obtained in a galvanometer with a current of few	A. ampere B. volts C. milliampere D. ohm
3	The SI unit of magnetic induction is	A. Gauses B. Tesla C. Weber D. Weber²
4	The force experienced by an electron projected in a magnetic field B with a velocity V is given by	A. F=e(V x B) B. F= -e(V x B) C. F= e(B x V) D. Both a and c
5	A field is uniform and much stronger:	A. Inside a long solenoid<o:p></o:p> B. Outside a long solenoid<o:p></o:p> C. At the end of a long solenoid<o:p></o:p> D. At the central point of long solenoid<o:p></o:p> E. None of these<o:p></o:p>
6	'K' is the proportionality constant of force experienced by conductor. What is the value of 'K' in SI units?	A. 0 B. 1 C. 0.5 D. -1
7	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque
8	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:	A. -y direction B. +y direction C. +z direction D. -z direction E. None of these
9	A shunt resistance parallel to the galvanometer is used to convert it into	A. avometer B. millimeter C. voltmeter D. none of these
10	The force acting as one meter length of the conductor placed at right angle to the magnetic field, when one A current is passing through it, defines the	A. magnetic flux B. magnetic induction C. magnetic field D. self inductance
11	The sources of magnetic field are	A. isolated magnetic poles B. charges at rest C. charges in motion

		C. charges in motion D. none of these
12	Magnetic lines of force:	A. Cannot intersect at all<o:p></o:p> B. Intersect at infinity<o:p></o:p> C. Intersect within magnet<o:p></o:p> D. Intersect at Neutral Point<o:p></o:p> E. None of these
13	Amperean path is a:	A. Closed path<o:p></o:p> B. Rectangular path<o:p></o:p> C. Circular path<o:p></o:p> D. Any of above<o:p></o:p> E. Broken path<o:p></o:p>
14	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:	A. Becomes Half B. Becomes double C. Is not affected D. Becomes one fourth E. None of these
15	NmA^{-1} is commonly called:	A. Weber B. Apmere C. Guass D. Coulomb E. None of these
16	A relationship between Gauses of magnetic induction and Tesla(T) is given by	A. G 10⁻³T B. G = 10⁻²T C. G = 10⁻⁴T D. G = 10⁻¹T
17	Magnetic flux passing through the an element of are A placed perpendicular to a uniform magnetic field Bis:	A. Maximum B. Minimum C. Zero D. Very small E. None of these
18	If the value of galvanometer constant k = C/BAN is made small, the galvanometer can be made	A. Sensitive B. Accurate C. Stable D. None of these
19	41 The force experience, when proton projected in a magnetic field with velocity 'v' is	A. +e(v x B) B. -C(V x B) C. +e²(v x B) D. -e(v²x B)
20	The unit of flux density is also given by	A. Weber/m²or Wb . m⁻² B. Weber/mor Wb . m C. Weber/mor Wb . m⁻¹

C. Weber/m^{-1} Wb . m⁻¹
D. Weber or Wb