Physics ECAT Pre Engineering Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	Which is modified form of galvanometer	A. potentiometer B. battery C. voltmeter D. slide wire bridge
2	magnetic field is a:	A. Vector quantity<o:p></o:p> B. Scalar quantity<o:p></o:p> C. Scalar as well as scalar quantity<o:p></o:p> D. Any of (A) or (B)<o:p></o:p> E. Neither (A) nor (B)
3	When an electron enters in a magnetic field right angle to its motion, the magnitude of its velocity will be	A. changed B. zero C. unchanged D. none of these
4	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)
5	For measuring large currents, an ordinary galvanometer cannot be used without proper, then both relates with each other as	A. modification B. voltage C. current D. resistance
6	A beam of electrons is provided by an	A. electron gun B. Suppray C. Injection D. None of these
7	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
8	It is customary represent a current flowing towards the reader by a symbol	A. (x) B. (+) C. (.) D. (-) E. (÷) <o:p></o:p>
		A. Newton/ampere-meter or N/A-m B. Newton/ampere²-meter or N/A²-m

9	The SI unit of magnetic induction is tesla which is equal to	C. Newton/ampere²-meter² or N/A²-m² D. Newton/ampere²-meter²or N/A²-m²
10	The CRO is used for displaying the waveform of a given	A. current B. voltage C. both of them D. none of them
11	When the waveform of one voltage is increasing and that of second is decreasing and vice versa, then phase difference between these voltage is	A. 90° B. 75° C. 0° D. 180°
12	Which one of the following relations is correct?	A. 1 Wb-m²= Nm⁻¹A⁻¹ B. 1 tesla = 104 gausses C. 1 Wb-m²= 1 tesla D. All of the above
13	Method "lamp and scale arrangement" used to measure the	A. angle of deflection B. restoring torque C. magnetic field strength D. current
14	Weber is a unit of	A. magnetic flux B. magnetic filed intensity C. magnetic induction D. magnetic flux density
15	Hold the solenoid in the right hand with fingers curling in the direction of current. The direction of the field will be given by:	A. Thumb<o:p></o:p> B. Curled fingers<o:p></o:p> C. Middle finger<o:p></o:p> D. Arm of right hand<o:p></o:p> E. None of these<o:p></o:p>
16	When some compass needles are placed on a card board along a circle with the center at the wire, they will	A. Point the direction of N-S<o:p></o:p> B. Set themselves tangential to the circle<o:p></o:p> C. Point in

		the direction of E-W<o:p></o:p> D. None of these<o:p></o:p> E. Point in direction of S-E
17	A resistance used in voltmeter is called	A. shunt resistance B. high resistance C. low resistance D. zero resistance
18	In the formula $B = \mu_0 nI$, the symbol n denotes:	A. Total number of turns of solenoid<o:p></o:p> B. Number of turns per unit length<o:p></o:p> C. Number of turns per unit volume<o:p></o:p> D. Numbers of turns per unit area<o:p></o:p> E. Number of moles<o:p></o:p>
19	The magnetic field inside a solenoid can be increased by:	A. Increasing n B. Decreasing I C. Increasing I D. By using iron core within solenoid E. All correct except (B)
20	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>