Physics ECAT Pre Engineering Chapter 14 Electromagnetism Online Test

Sr	Questions	Answers Choice
1	When the charged particle is projected at right angles to the field, then experienced by it will be:	A. Maximum B. Zero C. qvB D. Both (A) and (B) E. Both (A) and (C)
2	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
3	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
4	Magnetic flux passing through a element whose vector area makes an angle0^o with lines of magnetic force is:	A. BACosΘ <o:p></o:p> B. Zero C. BA D. BA sin<span style="font-size:12.0pt;line-height:107%; font-family:"Times New Roman","serif";mso-fareast-font-family:Calibri; mso-fareast-theme-font:minor-latin;mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Θ E. None of these
5	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
6	NmA^{-1} is commonly called:	A. Weber B. Apmere C. Guass D. Coulomb E. None of these
7	Strength of magnetic field is measured in SI units, in:	A. N B. N/Am C. Am/N D. Nm/A E. None of these
8	The permeability of free space is measured in:	A. Wb/Am B. Wb A/m C. Am/Wb D. m/Web A E. None of these
9	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
10	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)
11	Total number of turns on 0.15 m length solenoid is 300. the value of n is:	A. Greater than 300 B. Smaller than 300 C. Equal to 300 D. Any of (A) or (B) E. Any of (A) or(C)
12	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>
13	In the formula B= $\mu_s$nl, 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>
14	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>
15	A solenoid is a coil of wire which is:	A. Short, loosely wound, cylindrical<o:p></o:p> B. Long, tightly wound, spherical<o:p></o:p> C. Long, loosely wound, cylindrical<o:p></o:p> D. Long, tightly wound, cylindrical<o:p></o:p> E. None of these<o:p></o:p>