

## Physics ECAT Pre Engineering Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	It is customary represent a current flowing towards the reader by a symbol	<p>A. (x)      B. (+)      C. (.)      D. (-)      E. (&lt;span style="font-family: &amp;quot;Times New Roman&amp;quot;, serif; font-size: 12pt; text-align: justify;"&gt;&gt;+&lt;/span&gt;&lt;p class="MsoNormal" style="text-align:justify"&gt;&lt;span style="font-size:12.0pt; line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif&amp;quot;"&gt;&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p>
2	A resistance used in galvanometer to make it voltmeter is called	<p>A. shunt resistance      B. high resistance      C. zero resistance      D. none of these</p>
3	The working of all DC electric meters (galvanometers, ammeters and voltmeters) depends upon	<p>A. Heating effect of current      B. Chemical effect of current      C. Magnetic effect of current      D. Electromagnetic effect of current</p>
4	Which is modified form of galvanometer	<p>A. potentiometer      B. battery      C. voltmeter      D. slide wire bridge</p>
5	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	<p>A. <math>IT = 10^{-4}</math> G      B. <math>IT = 10^5</math> G      C. <math>IT = 10^3</math> G      D. <math>IT = 10^4</math> G</p>
6	The SI unit of magnetic flux is	<p>A. <math>NmA^{-2}</math>      B. <math>NmA^{-1}</math>      C. <math>NAm^{-1}</math>      D. <math>Nm^{-2}A^{-1}</math></p>
7	The strength of magnetic field around the current conductor is	<p>A. Smaller near the conductor      B. Greater near the conductor      C. Greater at the large distance from the conductor      D. Constant near and away from the conductor</p>
8	When an electron enters in a magnetic field right angle to its motion, the magnitude of its velocity will be	<p>A. changed      B. zero      C. unchanged      D. none of these</p>
9	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>
10	The current sensitivity of the galvanometer is	<p>A. C/BAN      B. BAN/C      C. CAN/B      D. CBN/A</p>
11	Charge to mass ratio ( $e/m$ ) of an electron is given by the relation	<p>A. <math>e/m = 2V/Br^2</math>      B. <math>e/m = 2V/Br^2</math>      C. <math>e/m = 2V/B^2r^2</math>      D. <math>e/m = V/2Br^2</math></p>
12	Strength of magnetic field is measured in SI units, in:	<p>A. N      B. N/Am      C. Am/N      D. Nm/A      E. None of these</p>
		<p>A. small resistance in series with</p>

13	For the conversion of galvanometer into voltmeter, we connect a	galvanometer B. small resistance in parallel with galvanometer C. high resistance in parallel with galvanometer <b>D. high resistance series with galvanometer</b>
14	The SI unit of flux density is.	A. Tesla B. Weber C. Gaun D. Weber/meter
15	Galvanometer is a device used for the detection of	A. voltage <b>B. current</b> C. temperature D. pressure
16	The force acting on a charge moving in a magnetic field	A. is perpendicular to the both magnetic field and direction of motion B. is proportional to the magnetic of charges C. vanishes when the motion is directly opposite to the direction of field <b>D. all of the above</b>
17	The direction of lines of force depends upon the direction of	A. voltage <b>B. current</b> C. charges D. none of these
18	The force experienced by charged particle is maximum, if it moves	A. parallel to magnetic field <b>B. perpendicular to magnetic field</b> C. opposite to the magnetic field D. none of these
19	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. <p class="MsoNormal" style="text-align:justify"><span style="font-size: 12pt; line-height: 107%; font-family: "Times New Roman"; serif;">Thumb<b><o:p></o:p></b></span></p> B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:"Times New Roman";&quot;serif&quot;">Curled fingers<o:p></o:p></span></p> C. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:"Times New Roman";&quot;serif&quot;">Middle finger<o:p></o:p></span></p> D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:"Times New Roman";&quot;serif&quot;">Arm of right hand<o:p></o:p></span></p> E. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:"Times New Roman";&quot;serif&quot;">None of these<o:p></o:p></span></p>
20	When a suitable small resistance is put in parallel with the galvanometer coil, it is converted into	A. Voltmeter B. Avometer <b>C. Ammeter</b> D. None of these