ECAT Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	Most practical application of electricity involve	A. Charges at the rest<o:p></o:p> B. Charges in the motion<o:p></o:p> C. Electrons at rest<o:p></o:p> D. Atoms in motion<o:p></o:p> E. Molecules in motion<o:p></o:p>
2	If the ends of a wire are connected to a battery an electric field E will be set up at:	A. The ends of the wire only<o:p></o:p> B. Mid points of the wire only<o:p></o:p> C. Every point within the wire<o:p></o:p> D. At nodes only<o:p></o:p> E. Both (B) and (D) <o:p></o:p>
3	When a constant potential difference is applied across the conductor, the drift velocity of electrons:	A. Increases<o:p></o:p> B. Decreases<o:p></o:p> C. Remains the constant<o:p></o:p> D. Either of these<o:p></o:p> E. None of these<o:p>

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4	Thermistors are prepared under	A. High pressure and low temperature B. High pressure and high temperature C. Low pressure and low temperature D. Low pressure and high temprature E. None of these
5	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
6	Aluminum is a:	A. Good insulator<o:p></o:p> B. Bad conductor<o:p></o:p> C. Both (A) and (B)<o:p></o:p> D. Excellent conductor<o:p></o:p> E. Semiconductor<o:p></o:p>
7	Tick the correct statement:	A. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Both the potential and potential difference is scalars<o:p></o:p> B. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Potential is a scalar but potential difference is a vector<o:p></o:p> C. Both are vectors <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast"><o:p></o:p> D. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Potential is vector but potential difference is scalar<o:p></o:p> E. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">None of these<o:p></o:p>
8	An important part of inkjet printer is:	A. <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">Toner B. Drum<o:p></o:p> C. Deflection plates<o:p></o:p> D. Heated roles<o:p></o:p> E. <span style="font-size:12.0pt;line-height:107%;font-family: "Times

		New Roman","serif"">None of these<o:p></o:p>
9	The number of field lines passing through unit area held perpendicular to the field lines represent:	A. Flux in that region<o:p></o:p> B. Intensity of the field<o:p></o:p> C. Charge<o:p></o:p> D. Area of the region<o:p></o:p> E. None of these<o:p></o:p>
10	The current of 1 ampere is passing through a conductor. The charge passing through it in half a minute is:	A. One coulomb<o:p></o:p> B. 0.5 coulomb<o:p></o:p> C. 30 coulomb<o:p></o:p> D. 2 coulombs<o:p></o:p> E. None of these<o:p></o:p>
11	As the current flows through the wire	A. It generates heat in the wire B. It produces sound in the wire C. Resistance of the wire decrease D. Voltage across the ends is the increase E. None of these
12	The rate at which the free electrons pass through any section of a metallic wire from right to left is:	A. Greater than the speed at which they pass from left to right<o:p></o:p> B. Less than the speed at which they pass from left to right<o:p></o:p> C. The same speed at which they pass from left to right<o:p></o:p> D. Any of above<o:p></o:p> E. None of them<o:p></o:p>
		A. Cross product of two vector

13	Electric flux is:	B. Dot product of two vectors<o:p></o:p> C. A vector quantity<o:p></o:p> D. A scalar quantity<o:p></o:p> E. Both (B) and (D)<o:p></o:p>
14	The earth’s potential and potential at infinity are taken:	A. Equal<o:p></o:p> B. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Zero<o:p></o:p> C. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">First is greater than the second<o:p></o:p> D. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Second is greater than the first<o:p></o:p> E. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Both (A) and (B)<o:p></o:p>
15	Another mean of electric potential energy per unit charge is given by:	A. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Electric intensity<o:p></o:p> B. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Potential gradient<o:p></o:p> C. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Electric Flux<o:p></o:p> D. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Potential difference<o:p></o:p> E. <span style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">None of these<o:p></o:p>
16	The effects of bends in a wire on its electrical resistance are:	A. Zero<o:p></o:p> B. Much larger<o:p></o:p> C. <span style="font-size:12.0pt; line-height:107%;font-family:"Times New

		Roman","serif"">Larger<o:p></o:p> D. Smaller<o:p></o:p> E. None of these<o:p></o:p>
17	An inkjet printer uses in its operation:	A. Neutrons only<o:p></o:p> B. Mesons only<o:p></o:p> C. Positrons and photons<o:p></o:p> D. An electric charge<o:p></o:p> E. None of these<o:p></o:p>
18	Xerography means:	A. Dry writing<o:p></o:p> B. Wet writing <o:p></o:p> C. Poor writing<o:p></o:p> D. Excellent writing<o:p></o:p> E. Both (A) and (B)<o:p></o:p>
19	When two spherical conducting balls at different potentials are joined by a metallic wire, after some time:	A. Both the conductors are at the same potential<o:p></o:p> B. Potential difference across the conductors remain constant<o:p></o:p> C. Potential difference across the conductors becomes zero<o:p></o:p> D. Both (A) and (B)<o:p></o:p> E. Both (A) and (C)<o:p></o:p>
		A. Decreasing from zero to maximum<o:p></o:p> B.

20	When two spherical conducting balls at different potentials are joined by metallic wire, the current starts:	D. Increasing from zero to maximum<o:p></o:p> C. Decreasing from maximum to zero<o:p></o:p> D. Increasing from maximum to zero<o:p></o:p> E. Both (A) and (D) <o:p></o:p>