ECAT Pre General Science Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	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></o:p>
2	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>
3	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. Larger<o:p></o:p> D. Smaller<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>
4	The quantity having the same unit as that of emf is:	A. Force B. Energy C. Potential D. Current E. Charge
5	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
6	Gaussian surface is always:	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">Rectangular<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">Spherical<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">Cylindrical<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">Box shape<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">Any of these<o:p></o:p>
7	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>
8	Flux through a closed surface of any shape and flux through the surface of a sphere drawn around a charge are:	A. Different<o:p></o:p> B. Same<o:p></o:p> C. Such that it is greater in the first case<o:p></o:p> D. Such that it is greater in the second case<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>

9	Electrolysis is the study of conduction of electricity through:	A. Solids B. Liquids C. Gases D. Plasma
10	An eV is unit of:	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">Potential<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">Energy<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">Work<o:p></o:p> D. Power E. Both (B) and(C)<o:p></o:p>
11	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>
12	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>
13	Which instrument is expensive and difficult to use?	A. Voltmeter B. Potentiometer C. CRO D. Both A and C E. Both A and B
		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">Contain some magnitude of electric field<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">Is full of electric field lines<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">Is field-free region<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">Either (A) or (B)<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>
14	The interior of a hollow charged metal sphere is a region which:	
15	While finding the electric intensity at a point between two oppositely charged parallel plates, the Gaussian surface is taken in the form of a hollow:	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">Circle<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">Rectangle<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">Sphere<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">Box<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">Cylinder<o:p></o:p>
16	In order to have a constant current through wire, the potential difference across its end should:	A. Be zero<o:p></o:p> B. Be maintained constant<o:p></o:p> C. Goes on increasing<o:p></o:p> D. Go on decreasing<o:p></o:p> E. Both (A) and (B)<o:p></o:p>
		A. Equal B. <span style="font-family: "Times New Roman", serif; font-size:

17	The value of relative permittivity of different dielectrics are:	16px;">Different C. Greater than one D. Smaller than one E. Both (B) and (C)<o:p></o:p>
18	The conventional current is the name given to current due to flow of	A. Positrons B. Positive charges C. Negative charges D. Both A and C E. None of these
19	Electric flux is:	A. Cross product of two vector <o:p></o:p> 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>
20	The current that flows through the coil of a motor causes:	A. Its shaft to revolve<o:p></o:p> B. Its brushes to rotate<o:p></o:p> C. Motor to move<o:p></o:p> D. Its shafts to rotate<o:p></o:p> E. None of these<o:p></o:p>