Physics ECAT Pre Engineering Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	The example/s of non-electrical energy to electrical is/are:	A. Chemical energy<o:p></o:p> B. Mechanical energy<o:p></o:p> C. Heat energy<o:p></o:p> D. Both (A) and (B)<o:p></o:p> E. All of these<o:p></o:p>
2	The inkjet printer ejects a thin stream of:	A. Water<o:p></o:p> B. Oil<o:p></o:p> C. Ink<o:p></o:p> D. Any of above<o:p></o:p> E. None of these<o:p></o:p>
3	The value of relative permittivity of different dielectrics are:	A. Equal B. Different C. Greater than one D. Smaller than one E. Both (B) and (C)<o:p></o:p>
4	When a constant potential difference is applied across the conductor, the drift	A. Increases<o:p></o:p> B. Decreases<o:p></o:p> C. <span style="font-size: 12pt; line-height: 107%; font-

	velocity of electrons:	family: "Times New Roman", serif;">Remains the constant<o:p></o:p> D. Either of these<o:p></o:p> E. None of these<o:p> </o:p>
5	The charge carriers in an electrolyte are	A. Positive ions B. Negative ions C. Either A or B D. Both A and B E. Neither A nor B
6	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>
7	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>
		A. <span style="font-size: 12pt; line-height: 107%; font-family: "Times New Roman", serif;">Decreases<o:p></o:p> B. Increases<o:p> </o:p> C. <span style="font-size:12.0pt; line-height:107%;font-

8	When resistance of a current carrying wire increases due to rise in temperature, the drift velocity of electrons:	family:"Times New Roman","serif"">Remains the constant<o:p></o:p> D. Either of these<o:p></o:p> E. None of these<o:p></o:p>
9	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>
10	The flux through a closed surface depends upon:	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">Shape of geometry of the closed surface<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">Charge enclosed<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">Nature of the medium<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">Both (A) and (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">Both (B) and (C) <o:p></o:p>
		A. Toner cartridge<o:p></o:p> B. Deflection plates <span style="font-size:12.0pt;line-height:107%;font-family:

11	An important part of photocopier is:	style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif""><o:p></o:p> C. Charging electrode<o:p></o:p> D. Print head<o:p></o:p> E. None of these<o:p></o:p>
12	In gases, the charge carries are:	A. Electrons<o:p></o:p> B. Positive ions<o:p></o:p> C. Negative ions<o:p></o:p> D. Both (A) and (C)<o:p></o:p> E. Both (A) and (B)<o:p></o:p>
13	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
14	Two dissimilar metals joined at their ends kept at constant temperature constitute:	A. Cell<o:p></o:p> B. Voltmeter<o:p></o:p> C. Thermocouple<o:p></o:p> D. Potentiometer<o:p></o:p> E. None of these
15	In a metal, the valence electrons are:	A. Attach to individual atoms<o:p></o:p> B. Not attached to individual atoms<o:p></o:p> C. Free to move within the metal<o:p></o:p> D. Both (A) and (C)<o:p></o:p> E.

		Both (B) and (C)<o:p></o:p>
16	Most practical applications of electricity involve	A. Charges at rest B. Charges in motion C. Electrons at rest D. Atoms in motion E. Molecules in motion
17	Heating effect of current utilized in:	A. Electric motor<o:p></o:p> B. Electric toaster<o:p></o:p> C. Electroplating<o:p></o:p> D. Electric kettle<o:p></o:p> E. Both (B) and (D)<o:p></o:p>
18	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>
19	Selenium is:	A. An insulator<o:p></o:p> B. A conductor<o:p></o:p> C. Insulator in the dark and becomes conductor when exposed to light<o:p></o:p> D. Conductor in the dark only<o:p></o:p> E. None of these<o:p></o:p>
20	Kirchhoff's first rule is also called:	A. Loop rule B. Thumb rule C. Point rule D. Right hand rule E. None of these