ECAT Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
2	Field lines are closer to each other in the region where the field is:	A. Stronger<o:p></o:p> B. Weaker<o:p></o:p> C. Much weaker<o:p></o:p> D. Absent<o:p></o:p> E. None of these<o:p></o:p>
3	The obvious effect/s of current is/are:	A. Heating effect<o:p></o:p> B. Magnetic effect<o:p></o:p> C. Chemical effect<o:p></o:p> D. Both (C) and (B)<o:p></o:p> E. All of these
4	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. <span style="font-size:12.0pt; line-height:107%;font-

		family:"Times New Roman","serif"">None of these<o:p></o:p>
5	An example of photoconductor is:	A. Boron<o:p></o:p> B. Carbon<o:p></o:p> C. Iron<o:p></o:p> D. Aluminum<o:p></o:p> E. Selenium<o:p></o:p>
6	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>
7	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>
8	The charge carries in the electrolyte are:	A. Positive ions<o:p></o:p> B. Negative ions<o:p></o:p> C. Either (A) or (B)

		<o:p></o:p> D. Both (A) and (B) <o:p></o:p> E. Neither (A) nor (B) <o:p></o:p>
9	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>
10	A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s	A. One coulomb B. 0.5 coulomb C. 30 coulombs D. 2 coulombs E. None of these
11	The value of relative permittivity of different dielectrics are:	A. <span style="font-family: "Times New Roman", serif; font-size: 16px;">Equal B. <span style="font-family: "Times New Roman", serif; font-size: 16px;">Different C. <span style="font-family: "Times New Roman", serif; font-size: 16px;">Greater than one D. <span style="font-family: "Times New Roman", serif; font-size: 16px;">Smaller than one E. <span style="font- size:12.0pt;line-height:107%;font-family:"Times New Roman","serif"">Both (B) and (C)<o:p></o:p>
12	In case of two identical charges placed certain distance apart, the electric field lines are:	A. <span style="font- size:12.0pt;line-height:107%;font-family: "Times New Roman","serif"">Straight lines<o:p></o:p> B. <span style="font- size:12.0pt;line-height:107%;font-family: "Times New Roman","serif"">Sine curves<o:p></o:p> C. <span style="font- size:12.0pt;line-height:107%;font-family: "Times New Roman","serif"">Curved<o:p> </o:p> D. <span style="font- size:12.0pt;line-height:107%;font-family: "Times New Roman","serif"">Both (A) and (B)<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>
		A. Its resistance is very high<o:p></o:p> B.

13	An electric field is generated along the wire when:	B. A constant potential is maintained across the wire<o:p></o:p> C. Net current through the wire is zero<o:p></o:p> D. A constant potential difference is maintained across the wire<o:p></o:p> E. Either (A) or (D)<o:p></o:p>
14	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
15	The positive charge moving in one direction is equivalent in all external affects to a:	A. Negative charge is moving in the same direction<o:p></o:p> B. Positive charge is moving in the opposite direction<o:p></o:p> C. Negative charge moving in the opposite direction<o:p></o:p> D. Positive charges moving in the same direction<o:p></o:p> E. None of these<o:p></o:p>
16	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>
		A. Are in random motion and their speed depends upon temperature<o:p></o:p> B. Move in particular direction<o:p></o:p> C. <span style="font-size:12.0pt; line-height:107%;font-

17	The free electrons in metals:	Move with speed of light<o:p></o:p> D. Move such that their speed does not depend on their temperature<o:p></o:p> E. None of these<o:p></o:p>
18	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>
19	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>
20	Certain charge +q is placed at the center of a sphere. At each of the sphere,The directions of electric intensity and vector area are:	A. Same<o:p></o:p> B. Different<o:p></o:p> C. Opposite to each other<o:p></o:p> D. At 60º with each other<o:p></o:p> E. Both (B) and (C)<o:p></o:p>