# ECAT Physics Chapter 13 Current Electricity

| Sr | Questions | Answers Choice |
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| 1 | The conventional current is the name given to current due to flow of | A. Positrons<br>B. Positive charges<br>C. Negative charges<br>D. Both A and C<br>E. None of these |
| 2 | When two spherical conducting balls at different potentials are joined by metallic wire, the current starts: | A. Decreasing from zero to maximum<o:p></o:p> <br>B. Increasing from zero to maximum<o:p></o:p> <br>C. Decreasing from maximum to zero<o:p></o:p> <br>D. Increasing from maximum to zero<o:p></o:p> <br>E. Both (A) and (D) <o:p></o:p> |
| 3 | Aluminum is a: | A. Good insulator<o:p></o:p> <br>B. Bad conductor<o:p></o:p> <br>C. Both (A) and (B)<o:p></o:p> <br>D. Excellent conductor<o:p></o:p> <br>E. Semiconductor<o:p></o:p> |
| 4 | The passage of current is accompanied by a magnetic field in the surrounding space: | A. Always accompanied<o:p></o:p> <br>B. Sometimes accompanied<o:p></o:p> <br>C. <br>Never accompanied<o:p></o:p> <br>D. Any of above <span style="font-size:12.0pt; |

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| | | line-height:107%;font-family:"Times New Roman","serif""><o:p></o:p> <br>E. None of these<o:p></o:p> |
| 5 | As the current flows through the wire | A. It generates heat in the wire<br>B. It produces sound in the wire<br>C. Resistance of the wire decrease<br>D. Voltage across the ends is the increase<br>E. None of these |
| 6 | A field free region is found: | 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">Near the outer surface of a hollow charged metal sphere<o:p></o:p> <br>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">In the interior of solid metal uncharged sphere<o:p></o:p> <br>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">In the interior of solid metal charged sphere<o:p></o:p> <br>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> <br>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 (C)<o:p></o:p> |
| 7 | Kirchhoff's first rule is also called: | A. Loop rule<br>B. Thumb rule<br>C. Point rule<br>D. Right hand rule<br>E. None of these |
| 8 | In case of two identical charges placed certain distance apart, the electric field lines are: | A. Straight lines<o:p></o:p> <br>B. Sine curves<o:p></o:p> <br>C. Curved<o:p></o:p> <br>D. Both (A) and (B)<o:p></o:p> <br>E. None of these<o:p></o:p> |
| 9 | 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> <br>B. Different<o:p></o:p> <br>C. Opposite to each other<o:p></o:p> <br>D. At 60º with each other<o:p></o:p> |

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| | | E. Both (B) and (C)<o:p></o:p> |
| 10 | Most practical applications of electricity involve | A. Charges at rest<br>B. Charges in motion<br>C. Electrons at rest<br>D. Atoms in motion<br>E. Molecules in motion |
| 11 | The current that flows through the coil of a motor causes | A. Its shaft to revolve<br>B. Its brushes to rotate<br>C. Motor to move<br>D. Its shaft to rotate<br>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> <br>B. Less than the speed at which they pass from left to right<o:p></o:p> <br>C. The same speed at which they pass from left to right<o:p></o:p> <br>D. Any of above<o:p></o:p> <br>E. None of them<o:p></o:p> |
| 13 | Most practical application of electricity involve | A. Charges at the rest<o:p></o:p> <br>B. Charges in the motion<o:p></o:p> <br>C. Electrons at rest<o:p></o:p> <br>D. Atoms in motion<o:p></o:p> <br>E. Molecules in motion<o:p></o:p> |
| 14 | A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s | A. One coulomb<br>B. 0.5 coulomb<br>C. 30 coulombs<br>D. 2 coulombs<br>E. None of these |
| 15 | In a metal, the valence electrons are: | A. Attach to individual atoms<o:p></o:p> <br>B. Not attached to individual atoms<o:p></o:p> <br>C. <span style="font-size:12.0pt; line-height:107%;font-family:"Times New |

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| | | family:"Times New Roman","serif"">Free to move within the metal<o:p></o:p> <br>D. Both (A) and (C)<o:p></o:p> <br>E. Both (B) and (C)<o:p></o:p> |
| 16 | The charge carries in the electrolyte are: | A. Positive ions<o:p></o:p> <br>B. Negative ions<o:p></o:p> <br>C. Either (A) or (B)<o:p></o:p> <br>D. Both (A) and (B)<o:p></o:p> <br>E. Neither (A) nor (B)<o:p></o:p> |
| 17 | Electrolysis is the study of conduction of electricity through: | A. Solids<br>B. Liquids<br>C. Gases<br>D. Plasma |
| 18 | An inkjet printer uses in its operation: | A. Neutrons only<o:p></o:p> <br>B. Mesons only<o:p></o:p> <br>C. Positrons and photons<o:p></o:p> <br>D. An electric charge<o:p></o:p> <br>E. None of these<o:p></o:p> |
| 19 | 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> <br>B. Intensity of the field<o:p></o:p> <br>C. Charge<o:p></o:p> <br>D. Area of the region<o:p></o:p> <br>E. None of these<o:p></o:p> |
| | | A. Cross product of two vector <span style="font-size:12.0pt;line-height:107%;font-family: |

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| 20 | Electric flux is: | style="font-size:12.0pt;line-height:107%;font-family: "Times New Roman","serif""><o:p></o:p> <br>B. Dot product of two vectors<o:p></o:p> <br>C. A vector quantity<o:p></o:p> <br>D. A scalar quantity<o:p></o:p> <br>E. Both (B) and (D)<o:p></o:p> |