

ECAT Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	When two spherical conducting balls at different potentials are joined by a metallic wire, after some time:	<p>A. Both the conductors are at the same potential</p> <p>B. Potential difference across the conductors remain constant</p> <p>C. Potential difference across the conductors becomes zero</p> <p>D. Both (A) and (B)</p> <p>E. Both (A) and (C)</p>
2	The surface density of charge is defined as:	<p>A. Charge per volume</p> <p>B. Mass per volume</p> <p>C. Charge per area</p> <p>D. Mass per area</p> <p>E. Both (B) and (C)</p>
3	Magnetic effect of current is used:	<p>A. In electric motor</p> <p>B. To detect current</p> <p>C. To measure current</p> <p>D. All of these</p>

4 The passage of current is accompanied by a magnetic field in the surrounding space:

family: " Times New Roman", serif; >All of these</p>
E. <p class="MsoNormal" style="text-align:justify">None of these</p>

A. <p class="MsoNormal" style="text-align:justify">Always accompanied</p>
B. <p class="MsoNormal" style="text-align:justify">Sometimes accompanied</p>
C. <p class="MsoNormal" style="text-align:justify">Never accompanied</p>
D. Any of above<p class="MsoNormal" style="text-align:justify"></p>
E. <p class="MsoNormal" style="text-align:justify">None of these</p>

5 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. <p class="MsoNormal">Circle</p>
B. <p class="MsoNormal">Rectangle</p>
C. <p class="MsoNormal">Sphere</p>
D. <p class="MsoNormal">Box</p>
E. <p class="MsoNormal">Cylinder</p>

6 The passage of current is accompanied by a magnetic field in the surrounding space:

A. <p class="MsoNormal" style="text-align:justify">Always accompanied</p>
B. <p class="MsoNormal" style="text-align:justify">Sometimes accompanied</p>
C. <p class="MsoNormal" style="text-align:justify">Never accompanied</p>
D. Any of above<p class="MsoNormal" style="text-align:justify"></p>
E. <p class="MsoNormal" style="text-align:justify"></p>

		Roman", "serif",">None of these<o:p></o:p></p>
7	An inkjet printer uses in its operation:	<p>A. <p class="MsoNormal">Neutrons only<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Mesons only<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Positrons and photons<o:p></o:p></p></p> <p>D. <p class="MsoNormal">An electric charge<o:p></o:p></p></p> <p>E. <p class="MsoNormal">None of these<o:p></o:p></p></p>
8	Electric flux is:	<p>A. Cross product of two vector<p class="MsoNormal"><o:p></o:p></p></p> <p>B. <p class="MsoNormal">Dot product of two vectors<o:p></o:p></p></p> <p>C. <p class="MsoNormal">A vector quantity<o:p></o:p></p></p> <p>D. <p class="MsoNormal">A scalar quantity<o:p></o:p></p></p> <p>E. <p class="MsoNormal">Both (B) and (D)<o:p></o:p></p></p>
9	Most practical applications of electricity involve	<p>A. Charges at rest</p> <p>B. Charges in motion</p> <p>C. Electrons at rest</p> <p>D. Atoms in motion</p> <p>E. Molecules in motion</p>
10	When two spherical conducting balls at different potentials are joined by metallic wire, the current starts:	<p>A. <p class="MsoNormal" style="text-align: justify">Decreasing from zero to maximum<o:p></o:p></p></p> <p>B. <p class="MsoNormal" style="text-align: justify">Increasing from zero to maximum<o:p></o:p></p></p> <p>C. <p class="MsoNormal" style="text-align: justify">Decreasing from maximum to zero<o:p></o:p></p></p> <p>D. <p class="MsoNormal" style="text-align: justify">Increasing from maximum to zero<o:p></o:p></p></p> <p>E. Both (A) and (D)<p class="MsoNormal" style="text-align: justify"><o:p></o:p></p></p>
		<p>A. <p class="MsoNormal">Contain some magnitude of electric field<o:p></o:p></p></p> <p>B. <p class="MsoNormal"><span style="font-</p>

11	The interior of a hollow charged metal sphere is a region which:	<p>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</p> <p>C. Is field-free region</p> <p>D. Either (A) or (B)</p> <p>E. None of these</p></p> </p></p></p>
12	Most practical application of electricity involve	<p>A. Charges at the rest</p> <p>B. Charges in the motion</p> <p>C. Electrons at rest</p> <p>D. Atoms in motion</p> <p>E. Molecules in motion</p></p> </p></p></p></p>
13	A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s	<p>A. One coulomb B. 0.5 coulomb C. 30 coulombs D. 2 coulombs E. None of these</p>
14	In case of metallic conductors, the charge carriers are	<p>A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B</p>
15	Flux through a closed surface of any shape and flux through the surface of a sphere drawn around a charge are:	<p>A. Different</p> <p>B. Same</p> <p>C. Such that it is greater in the first case</p> <p>D. Such that it is greater in the second case</p> <p>E. None of these</p></p> </p></p></p></p>
		<p>A. Electrons</p></p>

16	In gases, the charge carries are:	<p>B. Positive ions</p> <p>C. Negative ions</p> <p>D. Both (A) and (C)</p> <p>E. Both (A) and (B)</p>
17	The strength of magnetic field at certain points around a wire depends upon:	<p>A. Value of current passing</p> <p>B. Distance from the current element</p> <p>C. Color of the material</p> <p>D. Both (A) and (B)</p> <p>E. Both (B) and (C)</p>
18	The positive charge moving in one direction is equivalent in all external affects to a:	<p>A. Negative charge is moving in the same direction</p> <p>B. Positive charge is moving in the opposite direction</p> <p>C. Negative charge moving in the opposite direction</p> <p>D. Positive charges moving in the same direction</p> <p>E. None of these</p>
19	Aluminum is a:	<p>A. Good insulator</p> <p>B. Bad conductor</p> <p>C. Both (A) and (B)</p> <p>D. Both (A) and (B)</p>

new Roman", "serif" >Excellent
conductor<o:p></o:p></p>

E. <p class="MsoNormal">Semiconductor<o:p></o:p></p>

20

A thermistor is a resistor which is:

- A. Light Sensitive
- B. Heat Sensitive
- C. Sound Sensitive
- D. All of these
- E. None of these