

ECAT Pre General Science Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	In case of metallic conductors, the charge carriers are	<p>A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B</p>
2	The conventional current is the name given to current due to flow of:	<p>A. Positrons</p> <p>B. Positive charges</p> <p>C. Negative charges</p> <p>D. Both (A) and (C)</p> <p>E. None of these</p>
3	Kirchhoff's first rule is also called:	<p>A. Loop rule B. Thumb rule C. Point rule D. Right hand rule E. None of these</p>
4	The number of field lines passing through unit area held perpendicular to the field lines represent:	<p>A. Flux in that region</p> <p>B. Intensity of the field</p> <p>C. Charge</p> <p>D. Area of the region</p> <p>E. None of these</p>
5	The effects of bends in a wire on its electrical resistance are:	<p>A. Zero</p> <p>B. Much larger</p> <p>C. Larger</p>

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

7 An example of photoconductor is:

A. <p class="MsoNormal">Boron<o:p></o:p></p>
B. <p class="MsoNormal">Carbon<o:p></o:p></p>
C. <p class="MsoNormal">Iron<o:p></o:p></p>
D. <p class="MsoNormal">Aluminum<o:p></o:p></p>
E. <p class="MsoNormal">Selenium<o:p></o:p></p>

8 Gaussian surface is always:

A. <p class="MsoNormal">Rectangular<o:p></o:p></p>
B. <p class="MsoNormal">Spherical<o:p></o:p></p>
C. <p class="MsoNormal">Cylindrical<o:p></o:p></p>
D. <p class="MsoNormal">None of these<o:p></o:p></p>

		<p>&quot;Times New Roman&quot;;&quot;serif&quot;;mso-fareast-font-family:&quot;Times New Roman&quot;;mso-fareast-theme-font: minor-fareast">Box shape<o:p></o:p></p></p> <p>E. <p class="MsoNormal">Any of these<o:p></o:p></p></p>
9	The best conductor is:	<p>A. Silver</p> <p>B. Copper</p> <p>C. Aluminium</p> <p>D. Both B and C</p> <p>E. None of them</p>
10	In case of metallic conductors, the charge carriers are:	<p>A. <p class="MsoNormal" style="text-align:justify">Protons<o:p></o:p></p></p> <p>B. <p class="MsoNormal" style="text-align:justify">Electrons<o:p></o:p></p></p> <p>C. <p class="MsoNormal" style="text-align:justify">Antiprotons<o:p></o:p></p></p> <p>D. <p class="MsoNormal" style="text-align:justify">Positrons<o:p></o:p></p></p> <p>E. <p class="MsoNormal" style="text-align:justify">Both (A) and (B)<o:p></o:p></p></p>
11	The third band of the colour code:	<p>A. Gives the number of zeroes</p> <p>B. Is decimal multiplier</p> <p>C. Gives the resistance tolerance</p> <p>D. Gives the third digit</p> <p>E. Both (A) and (B)</p>
12	A thermistor is a resistor which is:	<p>A. Light Sensitive</p> <p>B. Heat Sensitive</p> <p>C. Sound Sensitive</p> <p>D. All of these</p> <p>E. None of these</p>
13	The flux through a closed surface depends upon:	<p>A. <p class="MsoNormal">Shape of geometry of the closed surface<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Charge enclosed<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Nature of the medium<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Both (A) and (B)<o:p></o:p></p></p> <p>E. <p class="MsoNormal"></p>

14	The emf is measured in:	A. Newton B. Volt C. J/C D. Both A and B E. Both B and C
15	SI unit of current describes the flow of charge at the rate of	A. One ampere per second B. One coulomb per second C. One electron per second D. 6.25×10^{18} electrons per second E. Both B and D
16	Xerography means:	A. <p class="MsoNormal">Dry writing</o:p></p> B. Wet writing<p class="MsoNormal"><o:p></o:p></p> C. <p class="MsoNormal">Poor writing</o:p></p> D. <p class="MsoNormal">Excellent writing</o:p></p> E. <p class="MsoNormal">Both (A) and (B)</o:p></p>
17	The current that flows through the coil of a motor causes:	A. <p class="MsoNormal" style="text-align:justify">Its shaft to revolve</o:p></p> B. <p class="MsoNormal" style="text-align:justify">Its brushes to rotate</o:p></p> C. <p class="MsoNormal" style="text-align:justify">Motor to move</o:p></p> D. <p class="MsoNormal" style="text-align:justify">Its shafts to rotate<o:p></o:p></p> E. <p class="MsoNormal" style="text-align:justify">None of these</o:p></p>
18	As the current flow through the wire:	A. <p class="MsoNormal" style="text-align:justify">It generates heat in the wire<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify">It produces sound in the wire</o:p></p> C. <p class="MsoNormal" style="text-align:justify">Resistance of the wire decreases</o:p></p> D. <p class="MsoNormal" style="text-align:justify">Voltage across the ends is increased</o:p></p>

19

Flux through a closed surface of any shape and flux through the surface of a sphere drawn around a charge are:

- A. Different
- B. Same
- C. Such that it is greater in the first case
- D. Such that it is greater in the second case
- E. None of these

20

The strength of magnetic field at certain points around a wire depends upon:

- A. Value of current passing
- B. Distance from the current element
- C. Color of the material
- D. Both (A) and (B)
- E. Both (B) and (C)