

Physics ECAT Pre Engineering Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	Another mean of electric potential energy per unit charge is given by:	<p>A. Electric intensity</p> <p>B. Potential gradient</p> <p>C. Electric Flux</p> <p>D. Potential difference</p> <p>E. None of these</p>
2	An important part of inkjet printer is:	<p>A. Toner</p> <p>B. Drum</p> <p>C. Deflection plates</p> <p>D. Heated roles</p> <p>E. None of these</p>
3	Aluminum is a:	<p>A. Good insulator</p> <p>B. Bad conductor</p> <p>C. Both (A) and (B)</p> <p>D. Excellent conductor</p> <p>E. Semiconductor</p>

4	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>
5	The rate at which the free electrons pass through any section of a metallic wire from right to left is:	<p>A. Greater than the speed at which they pass from left to right</p> <p>B. Less than the speed at which they pass from left to right</p> <p>C. The same speed at which they pass from left to right</p> <p>D. Any of above</p> <p>E. None of them</p>
6	The current that flows through the coil of a motor causes:	<p>A. Its shaft to revolve</p> <p>B. Its brushes to rotate</p> <p>C. Motor to move</p> <p>D. Its shafts to rotate</p> <p>E. None of these</p>
7	The value of relative permittivity of different dielectrics are:	<p>A. Equal</p> <p>B. Different</p> <p>C. Greater than one</p> <p>D. None of these</p>

		<p>16px;">Smaller than one</p> E. <p class="MsoNormal">Both (B) and (C)</p></p>
8	In a metal, the valence electrons are:	<p>A. <p class="MsoNormal" style="text-align:justify">Attach to individual atoms</p> B. <p class="MsoNormal" style="text-align:justify">Not attached to individual atoms</p> C. <p class="MsoNormal" style="text-align:justify">Free to move within the metal</p> D. <p class="MsoNormal" style="text-align:justify">Both (A) and (C)</p> E. <p class="MsoNormal" style="text-align:justify">Both (B) and (C)</p></p>
9	Which of the following substances has got positive temperature coefficient of resistance?	<p>A. Carbon B. Germanium C. Silicon D. Aluminium E. None of these</p>
10	A thermistor is a resistor which is:	<p>A. Light Sensitive B. Heat Sensitive C. Sound Sensitive D. All of these E. None of these</p>
11	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:	<p>A. <p class="MsoNormal">Same</p> B. <p class="MsoNormal">Different</p> C. <p class="MsoNormal">Opposite to each other</p> D. <p class="MsoNormal">At 60° with each other</p> E. <p class="MsoNormal">Both (B) and (C)</p></p>
12	Heating effect of current utilized in:	<p>A. <p class="MsoNormal" style="text-align:justify">Electric motor</p> B. <p class="MsoNormal" style="text-align:justify">Electric toaster</p> C. <p class="MsoNormal" style="text-align:justify">Electroplating</p> D. <p class="MsoNormal" style="text-align:justify">Electric kettle</p> E. <p class="MsoNormal" style="text-align:justify">Both (B) and (D)</p></p>

13	When a constant potential difference is applied across the conductor, the drift velocity of electrons:	<p>A. Increases</p> <p>B. Decreases</p> <p>C. Remains the constant</p> <p>D. Either of these</p> <p>E. None of these</p>
14	The charge carriers in an electrolyte are	<p>A. Positive ions</p> <p>B. Negative ions</p> <p>C. Either A or B</p> <p>D. Both A and B</p> <p>E. Neither A nor B</p>
15	The rate at which the free electrons pass through any section of a metallic wire from right to left is:	<p>A. Greater than the speed at which they pass from left to right</p> <p>B. Less than the speed at which they pass from left to right</p> <p>C. The same speed at which they pass from left to right</p> <p>D. Any of above</p> <p>E. None of them</p>
16	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>
17	Xerography means:	<p>A. Dry writing</p> <p>B. Wet writing</p> <p>C. Poor writing</p> <p>D. Excellent writing</p> <p>E. Both (A) and (B)</p>
		A. Both (A) and (B)

18	When two spherical conducting balls at different potentials are joined by a metallic wire, after some time:	<p>Both the conductors are at the same potential</p> <p>Potential difference across the conductors remain constant</p> <p>Potential difference across the conductors becomes zero</p> <p>Both (A) and (B)</p> <p>Both (A) and (C)</p>
19	The fourth band is a:	<p>A. Silver band</p> <p>B. Red band</p> <p>C. Gold band</p> <p>D. Either A or C</p> <p>E. Either A or B</p>
20	In case of metallic conductors, the charge carries are:	<p>Protons</p> <p>Electrons</p> <p>Antiprotons</p> <p>Positrons</p> <p>Both (A) and (B)</p>