

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	A mass spectrograph sort out	A. molecules B. atoms C. elements D. isotopes
2	The basic circuit element in D.C. circuit is:	A. A capacitor B. A resistor C. An inductor D. Both (A) and (C) E. Both (A) and (B)
3	The pattern of NaCl particles have a shape which is :	A. Cubic B. Body centred cubic C. Simple cubic D. face centred E. Both (A) and (C)
4	What is another name for laminar flow?	A. streamline B. unsteady flow C. turbulent flow D. both (a) and (b)
5	The emf is measured in:	A. Newton B. Volt C. J/C D. Both A and B E. Both B and C
6	In the formula for finding the speed of waves in the spring, unit of m in $\lambda$ units is:	A. kg B. kg-meter C. kg/meter D. Meter/kg
7	The fractional change in resistance per kelvin is known as	A. temperature coefficient B. resistance coefficient C. super temperature D. critical temperature
8	A hole in p-type may be due to:	A. Trivalent impurity B. Breking of some covalent bond C. Pentavalent impurity D. Germanium E. Either (A) or (B)
9	A conducting wire is drawn to double its length. Final resistivity of the material will be	A. Double of the original one B. Half of the original one C. One fourth of the original one D. Same as original one
10	In photoelectric effect the energy of ejected electrons depend on	A. The frequency B. The intensity C. Both frequency and intensity D. None of these
11	The most suitable material for permanent magnet is	A. cobalt B. iron C. steel D. aluminium
12	Plan of a coil makes an angle of $20^\circ$ with the lines of magnetic field. The angle between B and vector area of plane of coil is:	A. Also $20^\circ$ B. $70^\circ$ C. $90^\circ$

		<p>justify; &gt;&lt;/span&gt;&lt;p class= msonormal style= text-align:justify"&gt;&lt;span style="font-size:12.0pt; line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;, &amp;quot;serif&amp;quot;,"&gt;&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>D. 180&lt;span style="font-family: &amp;quot;Times New Roman&amp;quot;, serif; font-size: 12pt; text-align: justify;"&gt;&lt;/span&gt;&lt;p class="MsoNormal" style="text-align:justify"&gt;&lt;span style="font-size:12.0pt; line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;, &amp;quot;serif&amp;quot;,"&gt;&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>E. None of these</p>
13	The SI unit of permittivity is	<p>A. Nm<sup>2</sup>C<sup>2</sup></p> <p>B. N<sup>-1</sup>m<sup>2</sup>C<sup>2</sup></p> <p>C. NmC<sup>2</sup></p> <p>D. Nm<sup>2</sup>C<sup>-1</sup></p>
14	$F = I(L \times B)$ is a	<p>A. vector</p> <p>B. scalar</p> <p>C. unit vector</p> <p>D. none of these</p>
15	One coulomb per second is equal to	<p>A. One volt</p> <p>B. One ampere</p> <p>C. One ohm</p> <p>D. One henry</p>
16	If $F=0.04$ N and $X=4$ cm then $K=$	<p>A. 1 Nm<sup>-1</sup></p> <p>B. 2 Nm<sup>-1</sup></p> <p>C. 3 Nm<sup>-1</sup></p> <p>D. 4 Nm<sup>-1</sup></p>
17	The closed loop gain of the non-inverting amplifier is given by	<p>A. <math>G = R_2/R_1</math></p> <p>B. <math>G = -R_2/R_1</math></p> <p>C. <math>G = 1 + R_2/R_1</math></p> <p>D. <math>G = 1 + R_2/R_1</math></p>
18	Heating effect of current utilized in:	<p>A. Electric motor</p> <p>B. Electric toaster</p> <p>C. Electroplating</p> <p>D. Electric kettle</p> <p>E. Both (B) and (D)</p>
19	Field lines are closer to each other in the region where the field is	<p>A. Stronger</p> <p>B. Weaker</p> <p>C. Much weaker</p> <p>D. Absent</p> <p>E. None of these</p>
20	In crystalline solids, atoms are held about their equilibrium positions depending upon the strength of:	<p>A. Adhesive force</p> <p>B. Nuclear forces</p> <p>C. Inter atomic cohesive force</p> <p>D. Electromagnetic force</p> <p>E. None of these</p>