

## Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Electrostatics is the branch of physics which deals with the study of electro charges:	<p>A. &lt;p class="MsoNormal"&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;At rest&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>B. &lt;p class="MsoNormal"&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;At rest under the action of electric forces&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>C. &lt;p class="MsoNormal"&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;In motion under the action of electric forces&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>D. &lt;p class="MsoNormal"&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;In motion&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p>E. &lt;p class="MsoNormal"&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;At rest under the action of nuclear forces&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p>
2	The number of countries who manage the largest satellite system is:	<p>A. 3</p> <p>B. 24</p> <p>C. 126</p> <p>D. 200</p>
3	If the focal length of the convex lens is 5 cm, then to get the real and inverted image of the same size as that of object, the object should be placed at:	<p>A. 15 cm</p> <p>B. 10 cm</p> <p>C. 20 cm</p> <p>D. 5 cm</p>
4	The closed loop gain of the inverting amplifier is written as	<p>A. <math>G = R_{sub&gt;2}/R_{sub&gt;1}</math></p> <p>B. <math>G = 1 + R_{sub&gt;2}/R_{sub&gt;1}</math></p> <p>C. <math>G = - R_{sub&gt;2}/R_{sub&gt;1}</math></p> <p>D. <math>G = 1 - R_{sub&gt;2}/R_{sub&gt;1}</math></p>
5	Which type of wave can be set up in solids	<p>A. longitudinal waves</p> <p>B. transverse waves</p> <p>C. both of them</p> <p>D. none of them</p>
6	A stone tied to the end of a 20 cm long string is whirled in a horizontal circle. If centripetal acceleration is $9.8 \text{ m/sec}^2$ , then its angular velocity is rad/sec is:	<p>A. <math>22/7</math></p> <p>B. 7</p> <p>C. 14</p> <p>D. 21</p>
7	The speed of the secondary wavelets as mentioned in Huygen's principle is _____ the speed of propagation of the wave itself.	<p>A. Equal to</p> <p>B. Greater than</p> <p>C. Smaller than</p> <p>D. None of these</p>
8	The horizontal component of a projectile moving with initial velocity of $500 \text{ ms}^{-1}$ at an angle $60^\circ$ to x-axis is	<p>A. <math>500 \text{ ms}^{-1}</math></p> <p>B. <math>1000 \text{ ms}^{-1}</math></p> <p>C. <math>250 \text{ ms}^{-1}</math></p> <p>D. Zero</p>
9	Time period of simple pendulum is independent of	<p>A. length</p> <p>B. mass</p> <p>C. acceleration due to gravity</p>

10	The value of current at resonance in series LCR circuit is affected by the value	A. R only B. C only C. L only D. R, C and L
11	The number of different crystals systems based on the geometrical arrangement of their atoms and the resultant geometrical structure are	A. 5 B. 7 C. 9 D. 14
12	The size of the domain is such that they can contain	A. $10^{<sup>2</sup>}$ to $10^{<sup>4</sup>}$ atoms B. $10^{<sup>4</sup>}$ to $10^{<sup>8</sup>}$ atoms C. $10^{<sup>8</sup>}$ to $10^{<sup>12</sup>}$ atoms D. $10^{<sup>12</sup>}$ to $10^{<sup>16</sup>}$ atoms
13	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current, if it dissipates 22.5 W, the resistance of fuse wire will be	A. Zero B. $10 \Omega$ C. $1 \Omega$ D. $0.10 \Omega$
14	Fog droplets are suspended in air when their weight is balanced by:	A. Force of gravity B. Upward thrust due to air C. Surface tension D. None of these
15	The consumption source of energy is:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these
16	de-Broglie's hypothesis was experimentally verified by	A. Maxwell B. Compton C. Einstein D. Davison and Germer
17	The net force acting on a 100 kg man standing in an elevator accelerating downward with $a = 0.8 \text{ m sec}^{-2}$ comes out to:	A. 980 N B. 580 N C. 1380 N D. Zero
18	Hertz is unit of:	A. Time period B. Displacement C. Amplitude D. Frequency
19	Radioactivity was discovered by:	A. Becquerel B. Marie Curie C. Pierre Curie D. All of them E. None of these
20	Silicon can be obtained from	A. Lead B. Uranium C. An isotope of oxygen D. Sand