

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

Sr	Questions	Answers Choice
1	The smooth or steady stream-line flow is know as	<p>A. Laminar flow          B. Turbulent flow          C. Both a and b          D. None of the above</p>
2	In order to have a constant current through wire, the potential difference across its end should:	<p>A. <math>&lt; p \text{ 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;Be zero&lt; o:p &gt;&lt;/ o:p &gt;&lt;/ span &gt;&lt;/ p &gt;</math>          B. <math>&lt; p \text{ class="MsoNormal" style="text-align:justify"&gt;&lt; span style="font-size:12pt; line-height: 107%; font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif;"&gt;Be maintained constant&lt; b &lt; o:p &gt;&lt;/ o:p &gt;&lt;/ b &gt;&lt;/ span &gt;&lt;/ p &gt;</math>          C. <math>&lt; p \text{ 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;Goes on increasing&lt; o:p &gt;&lt;/ o:p &gt;&lt;/ span &gt;&lt;/ p &gt;</math>          D. <math>&lt; p \text{ 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;Go on decreasing&lt; o:p &gt;&lt;/ o:p &gt;&lt;/ span &gt;&lt;/ p &gt;</math>          E. <math>&lt; p \text{ 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;Both (A) and (B)&lt; o:p &gt;&lt;/ o:p &gt;&lt;/ span &gt;&lt;/ p &gt;</math></p>
3	Step up transformer has a transformation ratio of 3:2. What is the voltage in secondary, if voltage in primary is 30V:	<p>A. 45 V          B. 15 V          C. 90 V          D. 300 V</p>
4	A solar cell converts energy of the Sun into:	<p>A. Heat energy          B. Magnetic energy          C. Light energy          D. Sound energy</p>
5	The property of light which does not change with the nature of the medium is	<p>A. Frequency          B. Amplitude          C. Wavelength          D. None of these</p>
6	The electric intensity outside the two oppositely charged parallel metal plates is	<p>A. Maximum          B. Minimum          C. Zero          D. Infinite</p>
7	When a mass 'm' is pulled slowly, the spring stretches by an amount $x_0$ ,then the average force would be	<p>A. <math>F = Kx &lt; sub &gt; 0 &lt; / sub &gt;</math>          B. <math>F = 1/2Kx &lt; sub &gt; 0 &lt; / sub &gt;</math>          C. <math>F = 2Kx &lt; sub &gt; 0 &lt; / sub &gt;</math>          D. <math>F = 4Kx &lt; sub &gt; 0 &lt; / sub &gt;</math></p>
8	The domains are of macroscopic size of the order of	<p>A. centimeters          B. meters          C. millimeters          D. nanometers</p>
9	In case of constructive interference of two waves, the amplitude of the resultant wave is _____ either of the waves	<p>A. Greater than          B. Equal to          C. Smaller than          D. None of these</p>
10	Dimension of mass is written as:	<p>A. M          B. [M]          C. (M)          D. [m]</p>

11	An ambulance moves around a large round-about with its sirens on . For a person standing at the center of the round about, the frequency of ambulance siren heard will be.	A. Equal to the actual siren frequency B. Less than the actual siren frequency C. Greater than the actual siren frequency D. Changing as the ambulance moves frequency
12	The impedance of RLC series resonance circuit at resonant frequency is	A. Greater than R B. Equal to R C. Less than R D. None of these
13	If we increase the length of a simple pendulum four times, its time period will become	A. 2 times B. 3 times C. 4 times D. 6 times
14	The linear momentum of the body is defined as	A. $p=ma$ B. $p=1/2ma$ C. $p=mv$ D. $p=1/2mv$
15	If two bulbs one of 60 W and other of 100 W are connected in parallel, then which one of the following will flow more?	A. 60 W bulb B. 100 W bulb C. Both equally D. None of these
16	The smallest three dimensional basic structure in a crystalline solid is called	A. lattice point B. crystal lattice C. cubic crystal D. unit cell
17	Each atom in metal crystal:	A. Remains fixed B. Vibrates about a fixed point C. Moves randomly D. Rotates about center of a crystal E. None of these
18	The terminal velocity of water droplet of radius $1 \times 10^{-4}$ m and density $1000 \text{ kg m}^{-3}$ descending through air of viscosity $19 \times 10^{-6} \text{ kg. m}^{-1} \text{ s}^{-1}$ is	A. $2.5 \text{ ms}^{-1}$ B. $3.2 \text{ ms}^{-1}$ C. $4.3 \text{ ms}^{-1}$ D. $1.1 \text{ ms}^{-1}$
19	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
20	Solar cell converts sunlight directly into	A. potential energy B. thermal energy C. mechanical energy D. electrical energy