

## ECAT Physics Online Test

| Sr | Questions  | Answers Choice  |
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| 1  | Change in momentum is one second called.   | A. Impulse<br>B. Force<br>C. Energy<br>D. Work  |
| 2  | According to Einstein, with the great increase in the speed of the body, the relativistic mass of the body | A. Remains constant<br>B. Decreases<br>C. Increases to infinity<br>D. Reduced to zero   |
| 3  | In describing functions of digital systems, a closed switch will be shown as                               | A. 0<br>B. 1<br>C. low<br>D. any one of these   |
| 4  | The effects of bends in a wire on its electrical resistance are:   | A. <code>&lt;p 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;, serif;"&gt;Zero&lt;b&gt;&lt;o:p&gt;&lt;/o:p&gt;&lt;/b&gt;&lt;/span&gt;&lt;/p&gt;</code><br>B. <code>&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;Much larger&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</code><br>C. <code>&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;Larger&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</code><br>D. <code>&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;Smaller&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</code><br>E. <code>&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;None of these&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</code> |
| 5  | If $F=0.04$ N and $X=4$ cm then $K=$   | A. $1 \text{ Nm}^{\sup>-1}$<br>B. $2 \text{ Nm}^{\sup>-1}$<br>C. $3 \text{ Nm}^{\sup>-1}$<br>D. $4 \text{ Nm}^{\sup>-1}$  |
| 6  | Wave disturbances may also come in a concentrated bundle, like shock wave from an aeroplane flying at      | A. subsonic speed<br>B. sonic speed<br>C. super sonic speed<br>D. any one of them   |
| 7  | Substances that flow easily have   | A. large coefficient of viscosity<br>B. small coefficient of viscosity<br>C. either of them<br>D. none of them  |
| 8  | The resistance of the given conductor can be increased by  | A. Increasing the area<br>B. Changing resistivity<br>C. Decreasing the length<br>D. None of the above because change does not matter because in any case the volume remains the same  |
| 9  | A typical rocket consumes about  | A. $100 \text{ kg s}^{\sup>-1}$ of fuel<br>B. $1000 \text{ kg s}^{\sup>-1}$ of fuel<br>C. $10000 \text{ kg s}^{\sup>-1}$ of fuel<br>D. $100000 \text{ kg s}^{\sup>-1}$ of fuel  |
| 10 | Absolute temperature can be calculated by  | A. Means squares velocity<br>B. Motion of the molecule<br>C. Both A and B<br>D. None of these   |
| 11 | To designate the voltage as lower 0 by a logic gate, the specified minimum value is                        | A. 0.2 volt<br>B. 0.8 volt<br>C. 0 volt   |

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| 11 | To designate the voltage as low or 0 by a logic gate, the specified minimum value is:   | <p>C. 0 volt</p> <p>D. 2.0 volt</p> <p>E. 5.0 volt</p>  |
| 12 | It is customary represent a current flowing towards the reader by a symbol  | <p>A. (x)</p> <p>B. (+)</p> <p>C. (.)</p> <p>D. (-)</p> <p>E. (<span style='font-family: "Times New Roman", serif; font-size: 12pt; text-align: justify;'>&lt;span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif";&gt;&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</span>)</p>  |
| 13 | The SI unit of charge is  | <p>A. Ampere</p> <p>B. Watt</p> <p>C. Coulomb</p> <p>D. Volt</p> <p>E. Joule</p>  |
| 14 | The vibratory or oscillatory motion of a body is  | <p>A. translatory motion</p> <p>B. back and forth motion about its mean position</p> <p>C. free all motion</p> <p>D. circular motion</p>  |
| 15 | The number of isotopes of hydrogen are  | <p>A. 2</p> <p>B. 1</p> <p>C. 3</p> <p>D. 4</p>   |
| 16 | A water hose with an internal diameter of 20 mm at the outlet discharges 30 kg of water in 60 s. What is water speed at the outlet if density of water is 1000 kg/m <sup>3</sup> during its steady flow | <p>A. 1.3 m/s</p> <p>B. 1.6 m/s</p> <p>C. 1.9 m/s</p> <p>D. 2.2 m/s</p>   |
| 17 | The rate at which the free electrons pass through any section of a metallic wire from right to left is:   | <p>A. <span &quot;serif&quot;;&gt;less="" &quot;times="" at="" font-family:="" from="" left="" new="" p="" p&gt;<="" pass="" right&lt;="" roman&quot;,="" span&gt;&lt;="" speed="" style='font-family: "Times New Roman", "serif";&gt;Greater than the speed at which they pass from left to right&lt;/span&gt;&lt;/p&gt;&lt;/p&gt; &lt;p&gt;B. &lt;span style=' than="" the="" they="" to="" which=""> <p>C. <span &quot;serif&quot;;&gt;any="" &quot;times="" above&lt;="" font-family:="" new="" of="" p="" p&gt;<="" roman&quot;,="" span&gt;&lt;="" style='font-family: "Times New Roman", "serif";&gt;The same speed at which they pass from left to right&lt;b&gt;&lt;/b&gt;&lt;/span&gt;&lt;/p&gt;&lt;/p&gt; &lt;p&gt;D. &lt;span style='> <p>E. </p></span></p></span></p> |