

Physics ECAT Pre Engineering MCQ's Test For Full Book

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | The number of vibrating body at any instant from its equilibrium position is called   | A. displacement<br>B. frequency<br>C. amplitude<br>D. time period   |
| 2  | Which one of the following Electro-magnetic wave have the highest frequency and shortest wave-length  | A. X-rays<br>B. Ultraviolet rays<br>C. y-rays<br>D. Cosmic rays   |
| 3  | With reference of figure P-1 which of the following statements relating the average velocity for the complete path and the instantaneous velocity at point Velocity at point C is true. | A. The average velocity and the instantaneous velocity of C are equal<br>B. The relation depends upon the mass of the toy car<br>C. The average velocity is greater than the instantaneous velocity at C equal<br>D. The instantaneous velocity at C is greater than the average velocity.  |
| 4  | The ratio of average e.m.f in the coil to the time rate of change of current in the same coil is called   | A. Mutual induction<br>B. Mutual inductance<br>C. Capacitance<br>D. Self inductance   |
| 5  | When a constant potential difference is applied across the conductor, the drift velocity of electrons:  | A. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;,&quot;serif&quot;">Increases<o:p></o:p></span></p><br>B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;,&quot;serif&quot;">Decreases<o:p></o:p></span></p><br>C. <p class="MsoNormal" style="text-align:justify"><span style="font-size: 12pt; line-height: 107%; font-family: &quot;Times New Roman&quot;; serif;">Remains the constant<b><o:p></o:p></b></span></p><br>D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;,&quot;serif&quot;">Either of these<o:p></o:p></span></p><br>E. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;,&quot;serif&quot;">None of these<o:p></o:p></span></p> |
| 6  | The entity which measures the quantity of motion in a body is called  | A. force<br>B. energy<br>C. momentum<br>D. power  |
| 7  | A current carrying conductor is placed at right angle to the magnetic field. The magnetic force experienced by the conductor is   | A. minimum<br>B. maximum<br>C. zero<br>D. none of these   |
| 8  | A solar cell is made from:  | A. Iron<br>B. Silicon<br>C. Germanium<br>D. Copper  |
| 9  | In order to produce pair production, a photon must have a energy  | A. 0.511 Me v<br>B. 0.256 Me v<br>C. 1.02 Me v<br>D. 0.956 Me v   |
| 10 | The example of irreversible process is  | A. slowly liquification<br>B. slowly evaporation<br>C. an explosion<br>D. all of them   |

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| 11 | Work-energy principle states that work done on the body by applied force is equal to change in:   | A. Potential energy<br>B. Kinetic energy<br>C. Linear momentum<br>D. None of these  |
| 12 | Which of the following are the units of intensity of light  | A. Pois<br>B. Lux<br>C. Siemen<br>D. Candela  |
| 13 | A uniform resistance wire of Length L and diameter d has a resistance R. Another wire of same material has length, 4L and diameter 2d, the resistance will be | A. 2 R<br>B. R<br>C. R/2<br>D. R/4  |
| 14 | The property of light which does not change with the nature of the medium is  | A. Frequency<br>B. Amplitude<br>C. Wavelength<br>D. None of these   |
| 15 | Some charge is being given to a conductor. Then its potential   | A. Is maximum at surface<br>B. Is maximum at centre<br>C. Is remain same throughout the conductor<br>D. Is maximum somewhere between surface and centre |
| 16 | Units of impedance are  | A. Henry<br>B. Ohms<br>C. moh<br>D. Watt  |
| 17 | Escape velocity from surface of Moon as compared to that from Earth surface is:   | A. Greater<br>B. Smaller<br>C. Equal<br>D. None of these  |
| 18 | A flywheel accelerates from rest to an angular velocity of 7 rad/sec in 7 seconds. Its average acceleration will be:  | A. $49 \text{ rad/sec}^2$<br>B. $1 \text{ rad/sec}^2$<br>C. $0.16 \text{ rev/sec}^2$<br>D. Both A and C<br>E. Both B and C                              |
| 19 | Physical quantities are often divided into _____ categories   | A. 3<br>B. 2<br>C. 9<br>D. 5  |
| 20 | A thermistor is a resistor which is:  | A. Light Sensitive<br>B. Heat Sensitive<br>C. Sound Sensitive<br>D. All of these<br>E. None of these  |