# ECAT Pre General Science Physics Online Test

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Wave length of that color as compared to that of violet color is: | A. Smaller<br>B. Longer<br>C. Equal<br>D. None of these |
| 2 | Huygen principle is used to determine: | A. Speed of light<br>B. Location of wavefront<br>C. About polarized or unpolarized light<br>D. None of them |
| 3 | The mass 'm' of a body moving at 0.8 c (whose rest mass is mo) becomes | A. 2 mo<br>B. 1.67 mo<br>C. 0.67 mo<br>D. 2.67 mo |
| 4 | Work has the dimension as that of: | A. Torque<br>B. Angular momentum<br>C. Linear momentum<br>D. Power |
| 5 | Light year is a unit of: | A. Time<br>B. Distance<br>C. Velocity<br>D. Intensity of light |
| 6 | If the number of turns of a solenoid (carrying a steady current I) is doubled without changing the length of a solenoid, then magnetic field: | A. Becomes Half<br>B. Becomes double<br>C. Is not affected<br>D. Becomes one fourth<br>E. None of these |
| 7 | If the velocity time graph is a straight line parallel to time-axis, then it means that: | A. The body is moving with uniform velocity<br>B. The body is moving with uniform acceleration<br>C. The body is at rest<br>D. None of above |
| 8 | 1 amu is equal to | A. 1.66 x 10<sup>-24</sup>kg<br>B. 1.66 x 10<sup>-19</sup>kg<br>C. 1.66 x 10<sup>-34</sup>kg<br>D. 1.66 x 10<sup>-27</sup>kg |
| 9 | Which of the following represents an electric current? | A. C<sup>-1</sup><br>B. CS<sup>-1</sup><br>C. J.S<sup>-1</sup><br>D. dynes<sup>-1</sup> |
| 10 | The quantity having dimension of $ML^2T^{02}$will earth is: | A. 80 sec<br>B. 500 sec<br>C. 1.802 X 10<sup>4</sup>sec<br>D. Aerophysics |
| 11 | For production of beats the two sources must have | A. Different frequencies and same amplitude<br>B. Different frequencies<br>C. Different frequencies, same amplitude and same phase<br>D. Different frequencies and same phase |
| | | A. Negative charge is moving in the same direction<o:p></o:p> <br>B. Positive charge is moving in the opposite direction<span style="font-size: 12.0pt;line-height:107%;font-family:"Times New |

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| 12 | The positive charge moving in one direction is equivalent in all external affects to a: | Roman","serif""><o:p></o:p> <br>C. Negative charge moving in the opposite direction<o:p></o:p> <br>D. Positive charges moving in the same direction<o:p></o:p> <br>E. None of these<o:p></o:p> |
| 13 | The displacement of body executing SHM is | A. x<sub>o</sub>coswt<br>B. x<sub>o</sub>sinwt<br>C. x<sub>o</sub>sin<sup>2</sup>wt<br>D. Both A, B |
| 14 | An aircraft is moving with a velocity of 300 $ms^{-1}$. If all the forces acting on it are balanced, then | A. It still moves with the same velocity<br>B. It will be just floating at the same point in space<br>C. It will be fall down instantaneously<br>D. It will lose its velocity gradually |
| 15 | Transformer is used to | A. Increase alternating current<br>B. Increase d.c voltage<br>C. Increase & Decrease emf<br>D. All answers are right |
| 16 | The magnitude of the force producing an acceleration of 10 $m/sec^2$in a body of mass 500 grams is: | A. 3 N<br>B. 4 N<br>C. 5 N<br>D. 6 N |
| 17 | If the slope of the velocity-time graph increases at constant rate with time, then the body is said to have | A. uniform deceleration<br>B. uniform negative acceleration<br>C. average acceleration<br>D. uniform positive acceleration |
| 18 | Ohm established a relation between | A. voltage and resistance<br>B. voltage and charge<br>C. voltage and current<br>D. voltage resistance and charge |
| 19 | The direction of induced current is always so as to oppose the cause which produces it. This is | A. Lenz's law<br>B. Ampere's law<br>C. Faraday's law<br>D. Coulomb's law<br>E. None of these |
| 20 | During the free fall motion of an object, when its weight becomes equal to the drag force, then it will move with | A. maximum speed<br>B. zero speed<br>C. maximum speed<br>D. none of them |