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

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The instantaneous velocity of a body moving along a circle is directed | A. along the radius<br>B. along the tangent<br>C. away from the circle<br>D. none of them |
| 2 | When a position comes close to an electron they annihilate into photons such that | A. each photon has energy 0.51 Me v<br>B. each photon has energy 1.02 Me v<br>C. each photon has energy 0.25 Me v<br>D. none of these |
| 3 | At a certain instant a stationary transverse wave is found to have maximum kinetic energy. The appearance of string of that instant is | A. Sinusoidal shape with amplitude A/3<br>B. Sinusoidal shape with amplitude A/2<br>C. Sinusoidal shape with amplitude A<br>D. Straight line |
| 4 | Rocket engines lift a rocket from the earth surface, because hot gas with high velocity | A. Push against the air<br>B. React against the rocket and push it up<br>C. Heat up the air which lifts the rocket<br>D. Push against the earth |
| 5 | Linear momentum is a | A. fixed quantity<br>B. constant quantity<br>C. scalar quantity<br>D. vector quantity |
| 6 | An electric field is generated along the wire when: | A. Its resistance is very high<o:p></o:p> <br>B. A constant potential is maintained across the wire<o:p></o:p> <br>C. Net current through the wire is zero<o:p></o:p> <br>D. A constant potential difference is maintained across the wire<o:p></o:p> <br>E. Either (A) or (D)<o:p></o:p> |
| 7 | The value of the potential difference across the depletion region for the case of germanium is | A. 0.3 V<br>B. 0.5 V<br>C. 0.7 V<br>D. 0.9 V |
| 8 | If the distance between two charges is doubled, the force between them will become: | A. Double<br>B. Half<br>C. Three times<br>D. One fourth<br>E. One third |
| 9 | Circular motion is an example of motion in: | A. One dimension<br>B. Two dimensions<br>C. Three dimensions |

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| | | D. None of these |
| 10 | In rotational motion, analogue of force F us called: | A. Couple<br>B. Torque<br>C. Mass<br>D. Moment of intertia |
| 11 | 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 |
| 12 | If a wave can be polarized, it must be | A. An electromagnetic wave<br>B. A longitudinal wave<br>C. A progressive wave<br>D. A transverse wave |
| 13 | Mechanical waves on the surface of a liquid are | A. Transverse<br>B. Longitudinal<br>C. Torsional<br>D. both transverse and longitudinal |
| 14 | Waves transport energy | A. without transport energy<br>B. with matter<br>C. both of them<br>D. none of them |
| 15 | Mathematical manipulation of the two quantized states can be best carried if they are represented by | A. high - low<br>B. yes - no<br>C. on - off<br>D. 0 - 1 |
| 16 | Which one of the following is an example of SHM | A. Motion in a plane<br>B. Motion in a swing<br>C. Motion in a car<br>D. None of these |
| 17 | The relation between charge 'Q' and current 'I' is given by | A. Q = I/t<br>B. Q = It<br>C. Q = I<sup>2</sup>t<br>D. Q = I<sup>2</sup>/t |
| 18 | The way through which electromagnetic radiations or photons interact with matter depends upon their: | A. Wavelength<br>B. Frequency<br>C. Energy<br>D. Temperature<br>E. All of these |
| 19 | The current of 1 ampere is passing through a conductor. The charge passing through it in half a minute is: | A. One coulomb<o:p></o:p> <br>B. 0.5 coulomb<o:p></o:p> <br>C. 30 coulomb<o:p></o:p> <br>D. 2 coulombs<o:p></o:p> <br>E. None of these<o:p></o:p> |
| 20 | A heat engine is that which converts | A. mechanical energy into thermal energy<br>B. thermal energy into mechanical energy<br>C. K.E into potential energy<br>D. heat energy into light energy |