

ECAT Pre General Science MCQ's Test For Physics Full Book

| Sr | Questions | Answers Choice |
|----|--|---|
| 1 | If a given spring of spring constant K is cut into two identical segments, the spring constant of each segment is: | A. K/2 B. 2 K C. 4 K D. None of these |
| 2 | The electrons in the outermost shell of an atom are called | A. core electrons B. valence electrons C. high energy electrons D. none of them |
| 3 | Newton published laws of motion in his famous book "principia" in | A. 1867 B. 1667 C. 1676 D. 1687 |
| 4 | In transverse waves, the individual particles of the medium move: | A. In circles B. Perpendicular to the direction of level C. Parallel to the direction of level D. None of these |
| 5 | Centripetal acceleration is also called _____ acceleration | A. Tangential B. Radial C. Angular D. None of these |
| 6 | Work done is independent of path followed in _____ | A. Gravitational field B. Magnetic field C. Electric field D. All of these |
| 7 | The horizontal component of a projectile moving with initial velocity of 500 ms^{-1} at an angle 60° to x-axis is | A. 500 ms^{-1} B. 1000 ms^{-1} C. 250 ms^{-1} D. Zero |
| 8 | A rotating body tends to be slower, when its angular acceleration is: | A. Positive B. Negative C. Zero D. Infinity |
| 9 | According to the special theory of relativity | A. mass and energy are same entities B. mass and energy are same entities but interconvertible C. mass and energy are different entities but interconvertible D. mass and energy are different entities but non-interconvertible |
| 10 | The SI unit of current is | A. watt B. coulomb C. volt D. ampere |
| 11 | In the compton's effect, it is found that the wavelength of incident x-rays is | A. greater than the wavelength of scattered x-rays B. equal to the wavelength of scattered x-rays C. less than the wavelength of scattered x-rays D. any one of these |
| 12 | Galvanometer is a device used for the detection of | A. voltage B. current C. temperature D. pressure |
| 13 | At 'resonance' the transfer of energy from deriving source to the oscillator is | A. maximum B. minimum C. zero D. none of them |
| 14 | The waves which propagate out in the space due to oscillations of electric and magnetic | A. Mechanical waves B. Electromagnetic waves |

| | | |
|----|---|--|
| | fields are called: | C. Matter waves D. All of them |
| 15 | The threshold frequency of sodium is 6×10^6 MHz. The cut-off wavelength for this metal will be | A. 500 m B. 500 nm C. 500 km D. 500 cm E. None of these |
| 16 | For the working of a heat engine, there must be | A. a source of heat at high temperature B. a sink at low temperature C. both of them D. none of them |
| 17 | Which of the following does not have the same units: | A. Work B. Heat C. Kinetic energy D. Power |
| 18 | Work done by the force of friction is always | A. Positive B. Zero C. Negative D. Maximum |
| 19 | If the displacement of a body executing S.H.M is plotted against time, then the curve is known as | A. frequency of S.H.M B. period of S.H.M C. wave form D. none of them |
| 20 | The penetration power of β -particle is | A. zero B. less than α -particle C. equal to α -particle D. greater than α -particle |