

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

Sr	Questions	Answers Choice
1	The energy of a photon is represented by	A. $\frac{h}{c^2}$ B. $\frac{h}{T}$ C. $hc^2$ D. $hf^2$
2	A tight wire is clamped at two points 2.0 m apart. It is plucked near one end. Which are the three longest wavelengths present on the vibrating wire.	A. 2.0 m, 1m, 0.67 m B. 4.0 m, 2.0 m, 1m C. 4.0 m, 2.0 m, 1.33 m D. 1m, 0.5 m, 0.33 m
3	A charged particle moving at right angle to the magnetic field will experience	A. minimum force B. maximum force C. zero D. moderate force
4	When the upward drag force of the fluid becomes equal to downward force of gravity of the droplet, then its velocity:	A. Starts increasing B. Starts decreasing C. Becomes constant D. Is called escape velocity
5	The force experienced by a single charge carrier moving with velocity 'v' i magnetic field of strength 'B' is given by	A. $F = q(v/B)$ B. $F = q^2(v \times B)$ C. $F = q(v \times B)$ D. $F = vx B$
6	The angular speed of a particle moving along a circular path is $5\pi$ rad $\text{sec}^{-1}$ , Its period of motion is:	A. 2.5 sec B. 0.06 sec C. 15.7 sec D. 0.4 sec
7	When a large number of atoms are brought close to one another to form a solid, each energy level of an isolated atom splits into sub-levels, called	A. energy bands B. energy shells C. states D. all of them
8	Davison and Germer performed experiment to verify	A. de-Brogile hypothesis B. theory of relativity C. Newton's law of gravitation D. Mass-energy relation
9	A 120 m long train is moving in a direction with speed 20 m/s. A train B moving with 30 m/s in the opposite direction and 130 m long crosses the first train in a time	A. 6 s B. 36 s C. 38 s D. None of these
10	A capacitor is charged with a battery and then it is disconnected. A slab of dielectric is now inserted between the plates, then	A. The charge in the plates reduces and potential difference increase B. Potential difference between the plates increase, stored energy decreases and charge remains the same C. Potential difference between the plates decreases and charge remains unchanged D. None of the above
11	The thermistors are usually made of	A. Metals with low temperature coefficient of resistivity B. Metals with high temperature coefficient of resistivity C. Metal oxides with high temperature coefficient of resistivity D. Semi conducting materials having low temperature coefficient of resistivity
12	The body oscillates due to _____ accelerates and overshoots the rest position due to _____:	A. Applied force, inertial B. Restoring force, friction C. Frictional force, inertial D. Restoring force, inertial
13	In a straight current carrying conductor, the direction of magnetic field can be found by	A. right hand rule B. left hand rule C. head to tall rule D. none of these

14	The unit of decay constant is	<p>A. sex</p> <p>B. <math>\text{sec}^2</math></p> <p>C. <math>\text{sec}^{-1}</math></p> <p>D. <math>\text{sec}^{-2}</math></p>
15	The law of conservation of mass gives us the	<p>A. equation of continuity</p> <p>B. Bernoulli's theorem</p> <p>C. both of them</p> <p>D. none of them</p>
16	The formula of Brackett series can be obtained by putting in the general formula, the value of n equal to:	<p>A. one</p> <p>B. two</p> <p>C. three</p> <p>D. four</p> <p>E. five</p>
17	The unit of spring constant is	<p>A. J-sec</p> <p>B. Metre</p> <p>C. <math>\text{Nm}^{-1}</math></p> <p>D. None of these</p>
18	Physics deals with the study of	<p>A. Matter</p> <p>B. Energy</p> <p>C. Both of them</p> <p>D. Human Body</p>
19	The greatest stress that a material can endure without losing the proportionality between stress and strain is called	<p>A. plastic line</p> <p>B. breaking point</p> <p>C. proportional limit</p> <p>D. none of them</p>
20	When a positron comes close to an electron they annihilate into	<p>A. one photon</p> <p>B. two photons which travel in the same direction</p> <p>C. two photons which travel in the opposite direction</p> <p>D. two photons which travel in any direction</p>