

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

Sr	Questions	Answers Choice
1	The magnetic force exerted on an electron moving with velocity 'v' at right angle to the magnetic field is given by	A. $F = eVB$ B. $F = e^2 V/B$ C. $F = e/VB$ D. $F = B^2 V/ev$
2	The displacement coincides with the path of the motion when a body moves is a	A. curved line B. straight line C. may be curved or straight D. none of them
3	Which one of the following is dimensionless:	A. Acceleration B. Velocity C. Density D. Angle
4	Velocity of sound in a diatomic as is 300 m/sec. what is its rms velocity?	A. 400 m/sec B. 40 m/sec C. 430 m/sec D. 300 m/sec
5	If d is the displacement of the body in time t, then its average velocity will be	A. $\frac{V}{b} \times \frac{av}{t} = \frac{d}{t}$ B. $\frac{V}{b} \times \frac{av}{t} = \frac{t}{d}$ C. $\frac{V}{b} \times \frac{av}{t} = \frac{d}{t}$ D. $\frac{V}{b} \times \frac{av}{t} = \frac{d}{t}$
6	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
7	transverse wave motion is possible in:	A. Air B. A mixture of NH_3 and O_2 C. Strings D. All of these
8	Under the elastic region, the deformation produced in the material, the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
9	When an object moves with a uniform angular velocity, then its instantaneous angular velocity is equal to:	A. Zero B. Its average velocity C. Its angular displacement D. None of these
10	The quantity having the same unit as that of emf is:	A. Force B. Energy C. Potential D. Current E. Charge
11	In an experiment the uncertainty in the value of a resistor is 2% furthermore, the uncertainty in the potential difference across the same resistor is 1% . The uncertainty in the power loss in the resistor is.	A. Approximately 3% B. Approximately 5% C. Approximately 4% D. Approximately 6%
12	According to the law of conservation of linear momentum, the total linear momentum of an isolated system	A. increases B. decreases with time C. remains constant D. none of them
13	Some charge is being given to a conductor. Then its potential	A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre

14	When quarter of a circle is completed, phase of vibration is:	<p>line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</p> <p>B. 180°</p> <p>C. 45°</p> <p>D. 360°</p>
15	When a nucleus emits an alpha particle, its atomic mass decreased by	<p>A. 2</p> <p>B. 1</p> <p>C. 4</p> <p>D. 3</p>
16	One radian is equal to:	<p>A. 30.3°</p> <p>B. 45.3°</p> <p>C. 50.3°</p> <p>D. 57.3°</p>
17	Good absorbers of heat are	<p>A. Poor emitters</p> <p>B. Non emitters</p> <p>C. Good emitters</p> <p>D. Highly polarized</p>
18	Heavy water is made of one oxygen atom and two atoms of:	<p>A. Protium</p> <p>B. Deuterium</p> <p>C. Tritium</p> <p>D. Any of these</p> <p>E. None of these</p>
19	The missing mass which is converted to energy in the formation of nucleus, is called	<p>A. packing fraction</p> <p>B. mass defect</p> <p>C. binding energy</p> <p>D. none of these</p>
20	Astrophysics is a branch of physics, which deals with	<p>A. Sub-atomic</p> <p>B. Stars and galaxies</p> <p>C. Light and sound</p> <p>D. Music</p>