

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

Sr	Questions	Answers Choice
1	Physical quantities are often divided into _____ categories	A. 3 B. 2 C. 9 D. 5
2	A current carrying wire loop is placed in between the poles of a magnet as shown in the figure below. The direction of current flow is also shown in the figure with respect to the axis, the wire loop will tend to.	A. Rotate clockwise B. Not move at all C. Rotate anti-clockwise D. Move towards magnetic north
3	If a car starts acceleration uniformly to a speed of 144 km/h in 20 s it covers a distance of	A. 20 m B. 400 m C. 1440 m D. 2880 m
4	If the time period of a simple pendulum is 2 s, its frequency would be	A. 2 Hz B. 1.5 Hz C. 1.0 Hz D. 0.5 Hz
5	One coulomb of charge is created by	A. 10 electrons B. 1.6×10^{-19} electrons C. 6.25×10^{18} electrons D. 6.25×10^{21} electrons
6	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC generator D. Both (A) and (C) E. Both (A) and (B)
7	Which of the following is not a thermodynamic function?	A. Enthalpy B. Work done C. Gibbs' energy D. Internal energy
8	Velocity of sound in vacuum (in m/s) is	A. 330 B. 1000 C. 156 D. 0
9	Which one of the following has a larger value of relative permittivity ϵ_r at room temperature?	A. Vacuum B. Air C. Glass D. Water
10	When a certain nucleus emits an α particle, its mass number:	A. Increases by one B. Decreases by one C. Remains the same D. Decreases by four E. None of these
11	A diode characteristic curve is a plot between	A. current and time B. voltage and time C. voltage and current D. forward voltage and reversed voltage
12	0.1 kg mass will be equivalent to the energy	A. 9×10^{15} J B. 5×10^8 J C. 6×10^{16} J D. 9×10^{-16} J
13	Laws of reflection and refraction can also be explained by:	A. Particle nature of light B. Quantum nature of light C. Wave nature of light D. Complex nature of light
14	A traveling wave has a shape of:	A. Square wave B. Sine wave C. Parabola D. Hyperbola

15	The electric flux through any surface depends upon:	<p>New Roman"and, "and, serif">Intensity of electric field</p></p> <p>B. <p class="MsoNormal">Area of the surface</p></p> <p>C. <p class="MsoNormal">Angle between intensity and area</p></p> <p>D. <p class="MsoNormal">All of these</p></p> <p>E. <p class="MsoNormal">None of these</p></p></p> </p></p></p></p>
16	When an object moves with a uniform angular velocity, then its instantaneous angular velocity is equal to:	<p>A. Zero B. Its average velocity C. Its angular displacement D. None of these</p>
17	Consider a spherical shell of metal at the centre of which a positive point charge is kept	<p>A. The electric field is zero outside the shell B. The electric field is zero everywhere C. The electric field is zero in the region inside the shell D. The electric field is non-zero in both regions outside and inside the shell</p>
18	A body with frequency f would complete one vibration in:	<p>A. f seconds B. $1/f$ seconds C. 1 second D. f^2 second</p>
19	Torque is also called:	<p>A. Momentum B. Linear inertia C. Moment of a force D. Mass</p>
20	If the acceleration of a body is negative, then slope of the velocity-time graph will be:	<p>A. Zero B. Positive C. Negative D. Infinity</p>