

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

Sr	Questions	Answers Choice
1	The emission of electrons from a metal surface when exposed to light of suitable frequency is called the	A. pair production B. Compton effect C. photoelectric effect D. relativity
2	The time required for a radioactive material to decrease in active by one half is called	A. half time B. half life C. disintegration time D. mean life
3	The principle of superposition states that	A. The total displacement due to several waves is the sum of the displacement due to those waves acting individually B. Two stationary waves superimpose to give two progressive waves C. A diffraction pattern consists of many interference patterns superimposed on one another D. Two progressive waves superimpose to give a stationary wave
4	In case of mechanical waves, we study the motion of	A. a single particle B. collection of particle C. any one of them D. none of them
5	Which one of the following is dimensionless:	A. Acceleration B. Velocity C. Density D. Angle
6	Pressure exerted by a gas is	A. Independent of density of the gas B. Inversely proportional to the density of the gas C. Directly proportional to the square of the density of the gas D. Directly proportional to the density of the gas
7	A pair of quark and antiquark makes a:	A. Meson B. Baryon C. Proton D. Neutron E. None of these
8	The work done on the body will be zero if:	A. No force is applied on the body B. Force is applied but no displacement C. Angle between F(force) and d(displacement) is 90° D. All of these are correct
9	The direction of a vector in space requires:	A. X-axis B. X and Y-axes C. XYZ axes D. Y and Z-axes
10	If the focal length of the convex lens is 5 cm, then to get the real and inverted image of the same size as that of object, the object should be placed at:	A. 5 cm B. 20 cm C. 10 cm D. 15 cm
11	When a wall is pushed by a person very strongly, he has done:	A. Maximum work B. Zero work C. Positive work

		<p>C. Positive work D. Negative work</p>
12	With increase of temperature, the viscosity of liquid and gases	<p>A. Increases for both B. Decreases for both C. Increases for liquids and decreases for gases D. Decreases for liquids and increases for gases</p>
13	A flywheel accelerates from rest to an angular velocity of 7 rad/sec in 7 seconds. Its average acceleration will be:	<p>A. 49 rad/sec^2 B. 1 rad/sec^2 C. 0.16 rev/sec^2 D. Both A and C E. Both B and C</p>
14	0.0001210 has _____ significant figures.	<p>A. Four B. Three C. Seven D. Eight</p>
15	One coulomb of charge is created by	<p>A. 10 electrons B. 1.6×10^{-19} electrons C. 6.25×10^{18} electrons D. 6.25×10^{21} electrons</p>
16	When a conductor is moved across a magnetic field, the redistribution of charge sets up:	<p>A. Magnetic field B. Electrostatic field C. Electromagnetic field D. All of these E. None of these</p>
17	A train cover 90 km in half an hour. the time taken by it to travel 15 km will be:	<p>A. 20 minutes B. 48 minutes C. 10 minutes D. 5 minutes</p>
18	A real gas can be approximated to an ideal gas at	<p>A. Low density B. High pressure C. High density D. Low temperature</p>
19	On colliding in a closed container, the gas molecules	<p>A. Transfer momentum to the walls B. Momentum becomes zero C. Move in opposite directions D. Perform Brownian motion</p>
20	Which of the following statements for an object in equilibrium is not true?	<p>A. The object must be at rest B. The object can be at rest C. The object is moving at constant speed D. The acceleration of the object is zero</p>