

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Which one of the following is the unit of electric field intensity	A. JC^{-1} B. Vm^{-1} C. Cm^{-1} D. CJ^{-1}
2	According to kinetic theory of gases, molecules of a gas behave like	A. Inelastic spheres B. Perfectly elastic rigid sphere C. Perfectly elastic non-rigid spheres D. Inelastic non-rigid spheres
3	The substances whose resistance decreases with the increase in temperature these substances have coefficient of	A. positive temperature B. negative temperature C. absolute temperature D. zero temperature
4	The way through which electromagnetic radiations or photons interact with matter depends upon their:	A. Wavelength B. Frequency C. Energy D. Temperature E. All of these
5	Which waves are used in sonography?	A. Microwaves B. Infra red waved C. Sound waves D. Ultrasonic waves
6	Sound waves in air always	A. Longitudinal B. Transverse C. Stationary D. Electromagnetic
7	The decrease in velocity per unit time is called	A. deceleration B. acceleration C. uniform acceleration D. variable acceleration
8	The waves in which the particles of the medium are displaced in a direction perpendicular to the direction of propagation of waves are known as	A. longitudinal waves B. transverse waves C. non-mechanical waves D. none of them
9	The heat required to raise the temperature of one mole of the gas through 1 K at constant volume is called	A. heat capacity B. specific heat capacity C. molar specific heat D. molar specific heat at constant volume
10	The bands below the valence band are	A. completely filled and play active part in conduction process B. completely filled and plays no part in conduction process C. completely filled and play active part in conduction process D. not completely filled and play no part in conduction process
11	Max Planck received the Nobel Prize for his discovery of energy quants in:	A. 1718 AD B. 1918 AH C. 1818 AD D. 1918 AD E. None of these
12	Swimming is based on the principle of	A. Newton's 1st law B. Newton's 2nd law C. Newton's 3rd law D. All
13	On the power stroke, a spark fires the mixtures causing a rapid increase in pressure and temperature and the burning mixture expands	A. adiabatically B. isothermally C. isochorically D. isobarically
14	The direction of the linear momentum is the direction of	A. speed B. velocity C. weight D. ...

		D. none of them
15	The chemical properties of an element depends upon the number of	A. electron B. position C. photons D. neutrons
16	In an N-type silicon, which of the following statement is true	A. Electrons are majority carriers and trivalent atoms are the dopants B. Electrons are minority carriers and pentavalent atoms are the dopants C. Holes are minority carriers and pentavalent atoms are the dopants D. Holes are majority carriers and trivalent atoms are the dopants
17	Tesla is the unit of	A. Magnetic induction or flux density B. Magnetic flux C. Self inductance D. None of these
18	Plan of a coil makes an angle of 20° with the lines of magnetic field. The angle between B and vector area of plane of coil is:	A. Also 20° B. 70° C. 90° D. 180° E. None of these
19	The energy of photon 'E' is proported to	A. The magnetic field H B. The electric field E C. Both the electric and magnetic field H and E D. Frequency
20	The relationship between Boltzmann constant k with R and N_A is given as:	A. $k = R/N_A$ B. $k = R/N_A$ C. $k = NR/N_A$ D. None of these