

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	According to the electromagnetic wave theory of light, increasing the intensity of incident light should increase the	A. number of photoelectrons B. size of the photoelectrons C. charge on photoelectrons D. K.E of photoelectrons
2	A 10 F capacitor is charged to a potential difference of 50 V and is connected to another uncharged capacitor in parallel. Now the common potential difference becomes 20 volt. The capacitance of second capacitor is	A. 10 µ F B. 20 µ F C. 30 µ F D. 15 µ F D. 15 µ F
3	A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s	A. One coulomb B. 0.5 coulomb C. 30 coulombs D. 2 coulombs E. None of these
4	If the slope of the velocity-time graph increases at constant rate with time, then the body is said to have	A. uniform deceleration B. uniform negative acceleration C. average acceleration D. uniform positive acceleration
5	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
6	When thorium nucleus emits a β -particle, the daughter nucleus is called:	A. Protactinium B. Actinium C. Uranium D. Radium E. Redon
7	Velocity of a body changes if	A. direction of the body changes B. speed of the body changes C. neither speed nor direction changes D. either speed or direction changes
8	The fourth band is a:	A. Silver band B. Red band C. Gold band D. Either A or C E. Either A or B
9	Strictly speaking, the earth is:	A. An accelerated frame of reference B. A non-inertial frame of reference C. An inertial frame of reference D. ^{A non-accelerated frame of reference} E. Both (A) and (B)
10	A unit cell is smallest basic structure which is:	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional E. None of these
11	Inertial frame of references are those frame of references which are moving with	A. increasing velocity B. decreasing velocity

		C. constant velocity D. all of them
12	Which of the following material has longer half life	A. radium B. polonium C. radium D. uranium
13	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
14	Mass of proton is of order of	A. 10 ⁻³¹ gm B. 10 ⁻²⁷ kg C. 10 ⁻²⁴ gm D. 10 ⁺²⁷ kg
15	The analysis of the distribution of wavelengths of the radiation emitted from a hot body set the foundation of new mechanics, known as	A. classical mechanics B. Newtonian mechanics C. quantum mechanics D. statistical mechanics
16	The basic circuit elements of A.C circuit are	A. Resistor B. Inductor C. Capacitor D. All the three
17	The chemical properties of an element depends upon the number of	A. electron B. position C. photons D. neutrons
18	Terminal velocity is the maximum velocity attained by a spherical droplet when the drag forcethe weight of droplet:	A. Is smaller than B. Is greater than C. Becomes equal to D. None of these
19	Adiabatic change occurs when the gas	A. expands B. compressed C. expands or compressed D. expands or compressed rapidly
20	Above the curie temperature, iron becomes	A. ferromagnetic B. paramagnetic C. diamagnetic D. any one of them