

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

Sr	Questions	Answers Choice
1	The time period of a simple pendulum is independent of its:	A. Length B. Mass C. Value of g D. Both A and B
2	The cause of mirage observed in deserts in bright sunlight is due to	A. Refraction of light B. Reflection of light C. Scattering of light D. Total internal reflection of light
3	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
4	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
5	Coulomb's force between two point charges depends upon	A. Magnitude of charges B. Distance between them C. Medium in which they are located D. All of the above
6	If there identical strings each of constant K are hooked together the spring constant of resultant spring will be:	A. 3 K B. 2 K C. K/4 D. K/3
7	Distance covered by a freely falling body in 2 sec will be	A. 4.9 m B. 19.6 m C. 29.2 m D. 44.1 m
8	In an A.C. circuit, the current lags behind the emf. The power factor is 50%. In order to make it 100%, What additional component is to be used?	A. Impedance B. Inductance C. Capacitance D. Resistance
9	If the velocity of the body decreases non-uniformly then the slope of the velocity-time graph will have	A. different values B. same values C. zero values D. constant values
10	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current. If it dissipates 22.5 W, the resistance of fuse wire will be	A. Zero B. $10\ \Omega$ C. $1\ \Omega$ D. $0.10\ \Omega$
11	A body moving along the circumference of a circle of radius R completes one revolution. The radius of the covered path to the angle subtended at the center is:	A. Radius of the circle B. Twice the radius C. Thrice the radius D. None of these
12	The basic circuit element in A.C. circuits are:	A. Resistor and capacitor B. Resistor and Inductor C. Capacitor only D. Both (B) and (C) E. None of these

13	If the length of the conductor is double and its cross sectional area is halved, its conductance will	<p>A. Increase four fold</p> <p>B. Become one-fourth</p> <p>C. Become one-half</p> <p>D. Remains unchanged</p>
14	1 gm-cm^{-3} is equal to:	<p>A. 10^3 kg-m^{-3}</p> <p>B. $10^{-3} \text{ kg-m}^{-3}$</p> <p>C. 1 kg-m^{-3}</p> <p>D. 10^6 kg-m^{-1}</p>
15	In a voltmeter the conduction takes place due to	<p>A. Electrons only</p> <p>B. Holes only</p> <p>C. Electrons and holes</p> <p>D. Electrons and ions</p>
16	Fidelity refers to	<p>A. Reproduction of original sound</p> <p>B. Reproduction of original image</p> <p>C. Reproduction of music</p> <p>D. Reproduction of a CD from original copy</p>
17	A rotating wheel accelerates up to the value of 0.75 rev/sec^2 after 2 seconds of its start. Its angular velocity becomes:	<p>A. 9.42 rad/sec</p> <p>B. 2.6 rev/sec</p> <p>C. 1.5 rev/sec</p> <p>D. Both A and C</p>
18	Wavelength of light, on the average, is given by	<p>A. 10^{-14} m</p> <p>B. 10^{-10} m</p> <p>C. 10^{-6} m</p> <p>D. 10^{-4} m</p>
19	In a container having water filled up to a height h , a hole is made in the bottom. The velocity of water flowing out of the hole is	<p>A. Independent of h</p> <p>B. Proportional to $h^{1/2}$</p> <p>C. Proportional to h</p> <p>D. Proportional to h^2</p>
20	The amplitude of oscillation of each atom in a metallic crystal rises with the	<p>A. rise in temperature</p> <p>B. decrease in temperature</p> <p>C. even temperature remains constant</p> <p>D. all of them</p>