ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	The amplitude of oscillation of each atom in a metallic crystal rises with the	A. rise in temperature B. decrease in temperature C. even temperature remains constant D. all of them
2	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
3	The vast majority of solids are in the form of	A. amorphous structure B. polymeric structure C. crystalline structure D. all of them
4	The neighbours of every molecule in crystalline solids are arranged in	A. an irregular manner B. a regular manner C. any manner D. none of them
5	The solids which has structure in-between order and disorder are called	A. amorphous solids B. polymeric solids C. crystalline solids D. all of them
6	There is a regular arrangement of molecules in a	A. amorphous solids B. polymeric solids C. crystalline solids D. none of them
7	If a freely oscillating system is subjected to an external force, then	A. free vibrations will take place B. the body will move with its natural frequency C. forced vibrations will take place D. none of them
8	The natural frequency of a pendulum which is vibrating freely, depends upon its	A. mass B. length C. material D. all of them
9	The frequency of free vibrations is known as	A. free frequency B. forced frequency C. natural frequency D. un-natural frequency
10	A body is executing free vibrations when it oscilates	A. with the interference of an external force B. without the interference of an external force C. with the interference of an internal force D. none of them
11	If a simple pendulum is shifted from karachi to K-2 cliff, its time period	A. remains the same B. decreases C. increases D. none of them
12	The time period of pendulums of different lengths would be	A. same B. different C. both of them D. none of them
13	A second's pendulum is a pendulum whose time period is	A. 1 second B. 2 seconds C. 3 seconds D. 4 seconds
14	If the mass of the simple pendulum becomes double, its time period	A. increase B. decreases C. remains constant D. none of them

15	If we increase the length of a simple pendulum four times, its time period will become	A. 2 times B. 3 times C. 4 times D. 6 times
16	Energy is dissipated and consequently the energy mass system do not oscillate indefinitely because of	A. very small energy B. very large energy C. frictional forces D. acceleration due to gravity
17	The total energy of spring mass system is	A. zero B. changing with time C. constant D. none of them
18	When the bob of simple pendulum is at mean position, its K.E will be	A. maximum B. minimum C. zero D. all of them
19	When the bob of simple pendulum is at extreme position, its K.E. will be	A. maximum B. minimum C. zero D. all of them
20	When a mass 'm' is pulled slowly through a distance 'x_o' , the elastic potential energy of the spring would be	A. P.E=Kx² _o B. P.E= 1/2kx_o C. P.E=1/2Kx² _o D. P.E=Kx² _o
21	When a mass 'm' is pulled slowly, the spring stretches by an amount x_o, then the work done will be	A. W=Kx_o B. W=1/2Kx_o C. W=1/2Kx² _o D. W=4Kx_o
22	When a mass 'm' is pulled slowly, the spring stretches by an amount x_0,then the average force would be	A. F= Kx₀ B. F=1/2Kx₀ C. F=2Kx₀ D. F=4Kx₀
23	If the time period 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
24	If the length of a simple pendulum is 0.25 m its time period would be	A. 1.0 s B. 2.0 s C. 3.0 s D. 4.0 s
25	Time period of simple pendulum is independent of	A. length B. mass C. acceleration due to gravity D. none of them
26	Time period of a simple pendulum depends upon the	A. length of the pendulum B. acceleration due to gravity C. none of them D. both of them
27	If the length of second pendulum becomes four times then its time period will become	A. Four time B. Two times C. Six times D. Eight times
28	The weight 'mg' of the bob is resolved into	A. one component B. two components C. three components D. four components
29	The bob of a simple pendulum is suspended by	A. string B. heavy inextensible string C. light extensible string D. light inextensible string
30	A simple pendulum consists of a	A. small light bob B. small heavy bob C. big light bob D. big heavy bob