

ECAT Pre General Science Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	The force which maintain the strict long-range order between atoms of a crystalline solid is the:	A. Nuclear force B. Cohesive force C. Adhesive force D. Coulomb force E. None of these
2	In the doping process, the ratio of the doping atoms to the semi conductor atom is	A. 1 to 10 B. 1 to 10^3 C. 1 to 10^6 D. 1 to 10^9
3	Any superconductor with critical temperature above 77 K, is referred as	A. low temperature superconductor B. high temperature superconductor C. very low temperature superconductor D. none of them
4	The band above the valence band is called	A. high energy band B. conduction band C. empty band D. none of them
5	The measure of the deformation in a solid when stress is applied to its is called	A. elastic constant B. young's modulus C. strain D. elasticity
6	The transition from solid state to liquid state is:	A. Abrupt B. Slow C. Continuous D. Discontinuous E. Both (A) and (D)
7	The ratio of shearing stress/shearing strain is called as	A. Modulus B. Pascal modulus C. Hooker's modulus D. Shear modulus
8	If the stress increased beyond the elastic limit of the material. the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
9	Glass is an example of	A. crystalline solid B. amorphous solid C. polymeric solid D. none of them
10	When relatively simple molecules are chemically combined into massive molecules, the reaction is called:	A. Fission reaction B. Fusion reaction C. Polymerization D. Any of these E. None of these
11	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
12	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
13	Each atom in a metal crystal vibrates about a fixed point with an amplitude that:	A. Decrease the rise in temperature B. Is not affected by rise in temperature C. Increase with rise in temperature D. Both (B) and (C) E. None of these
14	The magnetism produced by electrons within an atom can arise from	A. electrons orbiting the nucleus B. electrons possess a spin

		<p>C. both motions</p> <p>D. none of these motions</p>
15	In the phenomenon of hysteresis	<p>A. magnetism leads the magnetising current</p> <p>B. magnetism lags behind the magnetising current</p> <p>C. magnetism goes along the magnetising current</p> <p>D. none of them</p>
16	The force applied on unit area to produce any change in the shape, volume or length of a body is known as	<p>A. strain</p> <p>B. elasticity</p> <p>C. stretching</p> <p>D. stress</p>
17	The ratio of linear stress/linear strain is called as	<p>A. Young's modulus</p> <p>B. Bulk modulus</p> <p>C. Shear modulus</p> <p>D. Modulus</p>
18	Which of the following theory completely explain the three types of materials	<p>A. Bohr model of electron distribution</p> <p>B. Rutherford atomic model</p> <p>C. Pauli's exclusion principle</p> <p>D. energy band theory</p>
19	The materials in which there are plenty of free electrons for electrical conduction are known as	<p>A. conductors</p> <p>B. insulators</p> <p>C. semi-conductors</p> <p>D. all of them</p>
20	The results of mechanical tests are usually expressed in terms of	<p>A. stress</p> <p>B. strain</p> <p>C. stress and strain</p> <p>D. neither stress nor strain</p>