

ECAT Pre General Science Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	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
2	On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost	A. 600° B. 7600° C. 800° D. 900°
3	The curie temperature of iron is about	A. 250°C B. 500°C C. 750°C D. 1000°C
4	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
5	The transition from solid state to liquid state is:	A. Abrupt B. Slow C. Continous D. Discontinuous E. Both (A) and (D)
6	Recently a complex crystalline structure known as Yttrium Barium Copper Oxide have been reported to become superconductor at	A. 125 K B. 25 K C. 263 K D. 163 K
7	Glass is an example of	A. crystalline solid B. amorphous solid C. polymeric solid D. none of them
8	The valence band of an atom in a solid	A. is always empty B. may or may not be empty C. can never be empty D. none of them
9	The modulus of elasticity can be written as	A. stress x strain B. strain/stress C. 1/2 x stress x strain D. stress/strain
10	Polymers are the chemical combination of carbon with:	A. Nitrogen B. Oxygen C. Hydrogen D. All of these E. None of these
11	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
12	When a silicon crystal is doped with a pentavalent element, then the atom of the pentavalent element is known as	A. acceptor B. donor C. either of them

		D. none of them
13	The vast majority of solids are in the form of	A. amorphous structure B. polymeric structure C. crystalline structure D. all of them
14	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
15	Under the elastic region, the deformation produced in the material, the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
16	The units of modulus of elasticity are	A. Nm^{-2} B. Nm C. ms^{-1} D. Pascal
17	The greatest stress that a material can endure without losing the proportionality between stress and strain is called	A. plastic line B. breaking point C. proportional limit D. none of them
18	Which of the following theory completely explain the three types of materials	A. Bohr model of electron distribution B. Rutherford atomic model C. Pauli's exclusion principle D. energy band theory
19	The first super conductor was discovered in	A. 1811 B. 1890 C. 1901 D. 1911
20	In a semi-conductor material, the total current is	A. only the +ve current B. only the electronic current C. sum of +ve and electronic current D. all of them