

Physics ECAT Pre Engineering Chapter 17 Physics of Solid

Sr	Questions	Answers Choice
1	Each atom in metal crystal:	A. Remains fixed B. Vibrates about a fixed point C. Moves randomly D. Rotates about center of a crystal E. None of these
2	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
3	The bonding between the semi-conductor materials is	A. covalent B. ionic C. either of them D. none of them
4	An ordinary glass gradually softens into a 'paste -like' state before it becomes a very viscous liquid. It happens almost at:	A. 800 ^o C B. 500 ^o C C. 300 ^o C D. 100 ^o C E. None of these
5	When small number of atoms from some other suitable element is added to the semi-conductor material, then this process is known as	A. impurification B. adding C. doping D. extrinsivity
6	Semi-conductor elements have atoms with	A. 2 valence electrons B. 3 valence electrons C. 4 valence electrons D. 5 valence electrons
7	Synthetic materials fall into the category of	A. crystalline solids B. amorphous C. polymeric solids D. all of them
8	The cohesive forces between atoms, molecules or ions in crystalline solids maintain the strict	A. short range order B. long range order C. both of them D. none of them
9	The number of different crystals systems based on the geometrical arrangement of their atoms and the resultant geometrical structure are	A. 5 B. 7 C. 9 D. 14
10	In a cubic crystal, All solids meet at:	A. 60 ^o B. 90 ^o C. 109 ^o D. 30 ^o E. 10 ^o
11	Tick the one which is not a crystalline solid:	A. Zirconia B. Glass C. Copper D. Ceramic solid E. An ionic compound
12	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
13	Each atom in a metal crystal vibrates about a fixed point with an amplitude that:	A. Decrease the rise in temprature B. Is not affected by rise in temprature C. Increase with rise in temprature D. Both (B) and (C) E. None of these
		A. amorphous solids B. crystalline solids

14	There is a regular arrangement of molecules in a	B. polymeric solids C. crystalline solids D. none of them
15	Ferromagnetic substances lose their magnetism when heated above a certain temperature, known as	A. critical temperature B. curie temperature C. high temperature D. fixed temperature
16	The force applied on unit area to produce any change in the shape, volume or length of a body is known as	A. strain B. elasticity C. stretching D. stress
17	The modulus of elasticity can be written as	A. stress x strain B. strain/stress C. $1/2 \times \text{stress} \times \text{strain}$ D. stress/strain
18	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
19	The solids are classified as:	A. Metals B. Crystalline C. Amorphous D. Polymeric E. All except (A)
20	Arsenic, antimony and phosphorus are the elements from	A. third group B. fourth group C. fifth group D. none of them