

ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	Semi-conductor elements have atoms with	A. 2 valence electrons B. 3 valence electrons C. 4 valence electrons D. 5 valence electrons
2	when the deformation produced in the material become permanent, this type of behaviour is called	A. proportionality B. elasticity C. plasticity D. none of them
3	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
4	When a stress changes the shape, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
5	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
6	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
7	The smallest three dimensional basic structure in a crystalline solid is called	A. lattice point B. crystal lattice C. cubic crystal D. unit cell
8	When the shear stress and shear stain are involved, then their ratio is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. all of them
9	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
10	Examples of crystalline solids are:	A. Cooper B. NaCl C. Zirconia D. Both (A) and (B) E. All of these
11	Recent studies of ferromagnetism have shown that there exists in ferromagnetic substances small regions called	A. tiny regions B. domains C. vectors D. none of them
12	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
13	In the phenomenon of hysteresis	A. magnetism leads the magnetising current B. magnetism lags behind the magnetising current C. meganetism goes along the magnetising current D. none of them
14	Zirconia is classified as:	A. Ceramic solid B. Ionic compound C. Metal D. Either (A) or (B)

		E. Either (B) or (C)
15	Synthetic materials fall into the category of	A. crystalline solids B. amorphous C. polymeric solids D. all of them
16	Polymeric solids have	A. low specific gravity B. high specific gravity C. either of them D. none of them
17	The crystalline structure of NaCl is	A. rectangular B. hexagonal C. tetrahedral D. cubical
18	The charged nucleus of an atom itself spins its magnetic field	A. equal to the field produced by orbital electrons B. greater than the field produced by orbital electrons C. much weaker than the field produced by orbital electrons D. none of these
19	The materials in which there are plenty of free electrons for electrical conduction are known as	A. conductors B. insulators C. semi-conductors D. all of them
20	The vast majority of solids are in the form of	A. amorphous structure B. polymeric structure C. crystalline structure D. all of them