

ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	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
2	The conduction band in a solid	A. may be empty B. cannot be empty C. should be filled D. all of them
3	When a stress changes the shape, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
4	When a stress changes length, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
5	The smallest three dimensional basic structure is called as:	A. An atom B. Unit cell C. Crystal lattice D. Polymer E. None of these
6	The SI unit of strain is	A. N B. Dynes C. Pascal D. Dimensionless
7	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
8	The whole structure obtained by the repetition of unit cells is called:	A. Crystal lattice B. Amorphous solid C. Polymeric solid D. Polysterne E. None of these
9	The arrangement or molecules or atoms in a crystalline solid can be studied by using:	A. Chemical methods B. Neutrons C. X-ray techniques D. Copper atoms E. Both (A) and (B)
10	The units of modulus of elasticity are	A. Nm^{-2} B. Nm C. ms^{-1} D. Pascal
11	Polymeric solids have	A. low specific gravity B. high specific gravity C. either of them D. none 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	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
14	A unit cell is smallest basic structure which is:	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional E. None of these

15	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
16	The magnetism produced by electrons within an atom can arise from	A. electrons orbiting the nucleus B. electrons posses a spin C. both motions D. none of these motions
17	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
18	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
19	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
20	In crystalline solids, atoms are held about their equilibrium positions depending upon the strength of:	A. Adhesive force B. Nuclear forces C. Inter atomic cohesive force D. Electromagnetic force E. None of these