

ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	Arsenic, antimony and phosphorus are the elements from	A. third group B. fourth group C. fifth group D. none of them
2	When a silicon crystal is doped with a pentavalent element, such an extrinsic semi-conductor is called	A. p-type semi-conductor B. n-type semi-conductor C. either of them D. none of them
3	The doped semi-conductor materials are known as	A. intrinsic semi-conductor B. extrinsic semi-conductor C. either of them D. none of them
4	The domains are of macroscopic size of the order of	A. centimeters B. meters C. millimeters D. nanomneters
5	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
6	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
7	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
8	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
9	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
10	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
11	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
12	Recently a complex crystalline structure known as Yetrium Barium Copper Oxide have been reported to become superconductor at	A. 125 K B. 25 K C. 263 K D. 163 K
13	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
14	The SI unit of stress is	A. N/m ² B. Nmc C. dynes/m D. N
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 curie temperature of iron is about	A. 250 °C B. 500 °C C. 750 °C D. 1000 °C
17	The pattern of crystalline solid is:	A. One dimesional B. Two dimensional C. Three dimensional D. None of these E. Either (A) or (B)
18	Within each domain, the magnetic field of all the spinning electrons are	A. parallel B. antiparallel C. perpendicular D. all of them
19	Substances which break just after the elastic limit is reached, are known as	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
20	Amorphous solids:	A. Have definite melting points B. Are called glassy solids C. Have no definite melting point D. Both (B) and (C) E. Both (A) and (C)