

## ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	When a large number of atoms are brought close to one another to form a solid, each energy level of an isolated atom splits into sub-levels, called	A. energy bands B. energy shells C. states D. all of them
2	Tick the one which is not a crystalline solid:	A. Zirconia B. Glass C. Copper D. Ceramic solid E. An ionic compound
3	The curie temperature of iron is about	A. 250 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> B. 500 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> C. 750 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> D. 1000 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span>
4	The smallest three dimensional basic structure in a crystalline solid is called	A. lattice point B. crystal lattice C. cubic crystal D. unit cell
5	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
6	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
7	When a stress changes length, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one 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 electrons in the outermost shell of an atom are called	A. core electrons B. valence electrons C. high energy electrons D. none of them
10	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
11	Which of the following can become a good temporarily magnet	A. iron B. steel C. both of them D. none of them
12	The pattern of crystalline solid is:	A. One dimensional B. Two dimensional C. Three dimensional D. None of these E. Either (A) or (B)
13	A solid is called a glassy solid if it	A. Have definite melting points B. Are called glassy solids

13	Amorphous solids:	C. Have no definite melting point D. Both (B) and (C) E. Both (A) and (C)
14	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
15	When a stress changes the shape, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
16	In the stress-strain graph, stress is increased linearly with strain until a point is reached, this point is known as	A. plastic limit B. plastic deformation C. proportional limit D. elastic behaviour
17	The SI unit of stress is	A. $\text{N/m}^2$ B. $\text{N/mc}$ C. dynes/m D. N
18	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
19	The smallest three dimensional basic structure is called as:	A. An atom B. Unit cell C. Crystal lattice D. Polymer E. None of these
20	The transition from solid state to liquid state is:	A. Abrupt B. Slow C. Continuous D. Discontinuous E. Both (A) and (D)