

## ECAT Pre General Science Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	The critical temperature of mercury is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
2	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
3	The size of the domain is such that they can contain	A. $10^{2-4}$ atoms B. $10^{4-8}$ atoms C. $10^{8-12}$ atoms D. $10^{12-16}$ atoms
4	The substance in which atoms cooperate with each other in such a way so as to exhibit a strong magnetic effect, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
5	On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost	A. $600^{\circ}\text{C}$ B. $7600^{\circ}\text{C}$ C. $800^{\circ}\text{C}$ D. $900^{\circ}\text{C}$
6	Every crystalline solid has	A. definite melting point B. different melting points C. may or may not be definite D. none of them
7	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
8	The curie temperature of iron is about	A. $250^{\circ}\text{C}$ B. $500^{\circ}\text{C}$ C. $750^{\circ}\text{C}$ D. $1000^{\circ}\text{C}$
9	In case of the three dimensional deformation, when volume is involved, the ratio of applied stress to volumetric strain is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. all of them
10	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
11	The transition from solid state to liquid state is:	A. Abrupt B. Slow C. Continuous D. Discontinuous E. Both (A) and (D)
		A. easily oriented along external field

12	In a soft iron, domains are	and do not return to original random positions B. easily oriented along external field and readily returns to originally random position C. do not oriented along external field and also do not returns to originally random position D. none of them
13	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
14	The transition from solid to liquid is actually from:	A. Order to disorder B. Disorder to order C. Order to order D. Disorder to disorder E. None of these
15	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
16	The band above the valence band is called	A. high energy band B. conduction band C. empty band D. none of them
17	An ordinary glass gradually softens into a 'paste -like' state before it becomes a very viscous liquid. It happens almost at:	A. 800 <sup>o</sup> C B. 500 <sup>o</sup> C C. 300 <sup>o</sup> C D. 100 <sup>o</sup> C E. None of these
18	Synthetic materials fall into the category of	A. crystalline solids B. amorphous C. polymeric solids D. all of them
19	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
20	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