

## ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	An ordinary glass gradually softens into a 'paste -like' state before it becomes a very viscous liquid. It happens almost at:	<p>A. 800<sup>o</sup>C</p> <p>B. 500<sup>o</sup>C</p> <p>C. 300<sup>o</sup>C</p> <p>D. 100<sup>o</sup>C</p> <p>E. None of these</p>
2	The materials in which there are plenty of free electrons for electrical conduction are known as	<p>A. conductors</p> <p>B. insulators</p> <p>C. semi-conductors</p> <p>D. all of them</p>
3	An atom in which there is a resultant magnetic field, behaves like a tiny magnet and is called as	<p>A. magnetic</p> <p>B. magnetic dipole</p> <p>C. magnetic monopole</p> <p>D. none of them</p>
4	There are some whose resistivity becomes zero below a certain temperature, called	<p>A. absolute zero</p> <p>B. 0<sup>o</sup>C</p> <p>C. critical temperature</p> <p>D. lower fixed point</p>
5	The ability of the body to return to its original shape is called	<p>A. deformation</p> <p>B. stretching</p> <p>C. compressing</p> <p>D. elasticity</p>
6	In a cubic crystal, All solids meet at:	<p>A. 60<sup>o</sup></p> <p>B. 90<sup>o</sup></p> <p>C. 109<sup>o</sup></p> <p>D. 30<sup>o</sup></p> <p>E. 10<sup>o</sup></p>
7	The charged nucleus of an atom itself spins its magnetic field	<p>A. equal to the field produced by orbital electrons</p> <p>B. greater than the field produced by orbital electrons</p> <p>C. much weaker than the field produced by orbital electrons</p> <p>D. none of these</p>
8	On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost	<p>A. 600<sup>o</sup>C</p> <p>B. 7600<sup>o</sup>C</p> <p>C. 800<sup>o</sup>C</p> <p>D. 900<sup>o</sup>C</p>
9	The band above the valence band is called	<p>A. high energy band</p> <p>B. conduction band</p> <p>C. empty band</p> <p>D. none of them</p>
10	Which of the following can become a good permanent magnet	<p>A. iron</p> <p>B. steel</p> <p>C. both of them</p> <p>D. none of them</p>
11	Experiments revealed that the ratio of the stress to the strain is a constant value for	<p>A. different material</p> <p>B. all materials</p> <p>C. a given material</p> <p>D. all of them</p>
12	The neighbours of every molecule in crystalline solids are arranged in	<p>A. an irregular manner</p> <p>B. a regular manner</p> <p>C. any manner</p> <p>D. none of them</p>
13	The temperature at which the vibrations become so great that structure of the Crystal breaks up, is called:	<p>A. Critical temperature</p> <p>B. Temperature of vaporization</p> <p>C. Melting point</p> <p>D. Both (A) and (C)</p>

		E. Both (A) and (B)
14	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
15	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
16	The maximum stress that a material can withstand, is known as	A. plastic point B. elastic limit C. yield point D. ultimate tensile strength
17	The units of modulus of elasticity are	A. $\text{Nm}^{-2}$ B. Nm C. $\text{ms}^{-1}$ D. Pascal
18	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
19	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
20	The conduction band in a solid	A. may be empty B. cannot be empty C. should be filled D. all of them