

## ECAT Physics Chapter 17 Physics of Solids

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Sr	Questions	Answers Choice
1	Every crystalline solid has	A. definite melting point B. different melting points C. may or may not be definite D. none of them
2	The materials in which there are plenty of free electrons for electrical conduction are known as	A. conductors B. insulators C. semi-conductors D. all of them
3	The maximum stress that a material can withstand, is known as	A. plastic point B. elastic limit C. yield point D. ultimate tensile strength
4	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
5	The doped semi-conductor materials are known as	A. intrinsic semi-conductor B. extrinsic semi-conductor C. either of them D. none of them
6	The substances in which, atom are so oriented that their fields support each other and the atoms behave like tiny magnets, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
7	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
8	Which of the following theory completely explain the three types of materials	A. Bohr model of electron distribution     B. Rutherford atomic model     C. Pauli's exclusion principle     D. energy band theory
9	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
10	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>
11	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
12	Tick the one which is not a crystalline solid:	A. Zirconia B. Glass C. Copper D. Ceramic solid E. An ionic compound
13	Glass is an example of	A. crystalline solid B. amorphous solid

		C. polymeric solid D. none of them
14	In a semi-conductor material, current flows due to	A. positive charge B. negative charge C. both of them D. none of them
15	An atom in which there is a resultant magnetic field, behaves like a tiny magnet and is called as	A. magnetic B. magnetic dipole C. magnetic monopole D. none of them
16	The critical temperature of tin is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
17	Examples of crystalline solids are:	A. Cooper B. NaCl C. Zirconia D. Both (A) and (B) E. All of these
18	When the shear stress and shear stain are involved, then their ratio is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. all of them
19	Lead, copper and wrought iron are examples of	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
20	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