

## ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	The word amorphous means:	<p>A. Without any structure</p> <p>B. With definite structure</p> <p>C. Regular arrangement of molecules</p> <p>D. Both (B) and (C)</p> <p>E. None of these</p>
2	The pattern of NaCl particles have a shape which is :	<p>A. Cubic</p> <p>B. Body centred cubic</p> <p>C. Simple cubic</p> <p>D. face centred</p> <p>E. Both (A) and (C)</p>
3	When relatively simple molecules are chemically combined into massive molecules, the reaction is called:	<p>A. Fission reaction</p> <p>B. Fusion reaction</p> <p>C. Polymerization</p> <p>D. Any of these</p> <p>E. None of these</p>
4	In the phenomenon of hysteresis	<p>A. magnetism leads the magnetising current</p> <p>B. magnetism lags behind the magnetising current</p> <p>C. magnetism goes along the magnetising current</p> <p>D. none of them</p>
5	The domains are of macroscopic size of the order of	<p>A. centimeters</p> <p>B. meters</p> <p>C. millimeters</p> <p>D. nanometers</p>
6	The whole structure obtained by the repetition of unit cells is called:	<p>A. Crystal lattice</p> <p>B. Amorphous solid</p> <p>C. Polymeric solid</p> <p>D. Polyesterne</p> <p>E. None of these</p>
7	Any superconductor with critical temperature above 77 K, is referred as	<p>A. low temperature superconductor</p> <p>B. high temperature superconductor</p> <p>C. very low temperature superconductor</p> <p>D. none of them</p>
8	Within each domain, the magnetic field of all the spinning electrons are	<p>A. parallel</p> <p>B. antiparallel</p> <p>C. perpendicular</p> <p>D. all of them</p>
9	The magnetism produced by electrons within an atom can arise from	<p>A. electrons orbiting the nucleus</p> <p>B. electrons posses a spin</p> <p>C. both motions</p> <p>D. none of these motions</p>
10	When a silicon crystal is doped with a pentavalent element, such an extrinsic semi-conductor is called	<p>A. p-type semi-conductor</p> <p>B. n-type semi-conductor</p> <p>C. either of them</p> <p>D. none of them</p>
11	The ratio of shearing stress/shearing strain is called as	<p>A. Modulus</p> <p>B. Pascal modulus</p> <p>C. Hooker's modulus</p> <p>D. Shear modulus</p>
12	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>
13	Arsenic, antimony and phosphorus are the elements from	<p>A. third group</p> <p>B. fourth group</p> <p>C. fifth group</p> <p>D. none of them</p>
14	The ratio of linear stress/linear strain is called as	<p>A. Yong's modulus</p> <p>B. Bulk modulus</p>

		C. Shear modulus D. Modulus
15	On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost	A. 600 B. 7600 C. 800 D. 900
16	The units of modulus of elasticity are	A. $\text{Nm}^{-2}$ B. Nm C. $\text{ms}^{-1}$ D. Pascal
17	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
18	The arrangement or molecules or atoms in a crystalline solid can be studied by using:	A. Chemical methods B. Neutrons C. X-ray techniques D. Copper atoms E. Both (A) and (B)
19	Examples of crystalline solids are:	A. Cooper B. NaCl C. Zirconia D. Both (A) and (B) E. All of these
20	Each atom in a metal crystal vibrates about a fixed point with an amplitude that:	A. Decrease the rise in temperature B. Is not affected by rise in temperature C. Increase with rise in temperature D. Both (B) and (C) E. None of these