

## Physics ECAT Pre Engineering Chapter 17 Physics of Solid

Sr	Questions	Answers Choice
1	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 <b>C. Increase with rise in temperature</b> D. Both (B) and (C) E. None of these
2	The substance in which atoms are so oriented that the field produced by spin and orbital motion of the electrons might add up to zero, are called	<b>A. diamagnetic substances</b> B. ferromagnetic substances C. paramagnetic substances D. all of them
3	The SI unit of stress is	<b>A. <math>N/m^2</math></b> B. Nmc C. dynes/m D. N
4	The force applied on unit area to produce any change in the shape, volume or length of a body is known as	<b>A. strain</b> B. elasticity C. stretching <b>D. stress</b>
5	The pattern of NaCl particles have a shape which is :	<b>A. Cubic</b> B. Body centred cubic C. Simple cubic D. face centred <b>E. Both (A) and (C)</b>
6	The solids which has structure in-between order and disorder are called	<b>A. amorphous solids</b> <b>B. polymeric solids</b> C. crystalline solids D. all of them
7	The critical temperature of aluminium is	<b>A. 1.18 K</b> B. 4.2 K C. 3.72 K D. 7.2 K
8	Ferromagnetic substances lose their magnetism when heated above a certain temperature, known as	<b>A. critical temperature</b> <b>B. curie temperature</b> C. high temperature D. fixed temperature
9	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	<b>A. energy bands</b> B. energy shells <b>C. states</b> D. all of them
10	The conduction band in a solid	<b>A. may be empty</b> B. cannot be empty C. should be filled D. all of them
11	The measure of the deformation in a solid when stress is applied to its is called	<b>A. elastic constant</b> B. young's modulus <b>C. strain</b> D. elasticity
12	The SI unit of strain is	<b>A. N</b> B. Dynes C. Pascal <b>D. Dimensionless</b>
13	The smallest three dimensional basic structure is called as:	<b>A. An atom</b> <b>B. Unit cell</b> C. Crystal lattice  D. Polymer E. None of these
14	The results of mechanical tests are usually expressed in terms of	<b>A. stress</b> B. strain <b>C. stress and strain</b> D. neither stress nor strain

15	On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost	A. 600 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">&gt;</b> B. 7600 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">&gt;</b> C. 800 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">&gt;</b> D. 900 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">&gt;</b>
16	A structure of polymeric solid is:	A. An ordered structure B. A disordered structure C. Intermediate between order and disorder D. Any of these E. None of these
17	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
18	Glass is an example of	A. crystalline solid B. amorphous solid C. polymeric solid D. none of them
19	There are some whose resistivity becomes zero below a certain temperature, called	A. absolute zero B. 0 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">&gt;</span> C. critical temperature D. lower fixed point
20	The curie temperature of iron is about	A. 250 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">&gt;</span> B. 500 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">&gt;</span> C. 750 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">&gt;</span> D. 1000 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">&gt;</span>