

## Physics ECAT Pre Engineering Chapter 17 Physics of Solid

Sr	Questions	Answers Choice
1	When small number of atoms from some other suitable element is added to the semi-conductor material, then this process is known as	A. impurification B. adding C. <b>doping</b> D. extrinsivity
2	Above the curie temperature, iron becomes	A. ferromagnetic B. <b>paramagnetic</b> C. diamagnetic D. any one of them
3	The temperature at which the vibrations become so great that structure of the Crystal breaks up, is called:	A. Critical temperature B. Temperature of vaporization C. <b>Melting point</b> D. Both (A) and (C) E. Both (A) and (B)
4	Examples of crystalline solids are:	A. Cooper B. NaCl C. Zirconia D. Both (A) and (B) E. <b>All of these</b>
5	Examples of polymeric substances are:	A. Plastic B. Synthetic rubbers C. Zirconia D. All of these E. <b>Both (A) and (B)</b>
6	Within each domain, the magnetic field of all the spinning electrons are	A. <b>parallel</b> B. antiparallel C. perpendicular D. all of them
7	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	A. <b>diamagnetic substances</b> B. ferromagnetic substances C. paramagnetic substances D. all of them
8	The electrons in the outermost shell of an atom are called	A. core electrons B. <b>valence electrons</b> C. high energy electrons D. none of them
9	The electrons occupying the conduction band are known as	A. conduction electrons B. free electrons C. <b>both of them</b> D. none of them
10	The amplitude of oscillation of each atom in a metallic crystal rises with the	A. <b>rise in temperature</b> B. decrease in temperature C. even temperature remains constant D. all of them
11	The size of the domain is such that they can contain	A. $10^2$ atoms B. $10^4$ to $10^8$ atoms C. $10^8$ to $10^{12}$ atoms D. <b><math>10^{12}</math> to <math>10^{16}</math> atoms</b>
12	In a semi-conductor material, current flows due to	A. positive charge B. negative charge C. <b>both of them</b> D. none of them
13	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. <b>stress</b>
14		A. Zirconia B. Polythene

14	Tick the one which is not polymer solid:	<p>C. Nylon</p> <p>D. Synthetic rubber</p> <p>E. None of these</p>
15	In the doping process, the ratio of the doping atoms to the semi conductor atom is	<p>A. 1 to 10</p> <p>B. 1 to <math>10^3</math></p> <p>C. 1 to <math>10^6</math></p> <p>D. 1 to <math>10^9</math></p>
16	If the stress increased beyond the elastic limit of the material. the deformation produced in the material will be	<p>A. permanent</p> <p>B. temporary</p> <p>C. either of them</p> <p>D. none of them</p>
17	When the deformation produced in the material become permanent, this type of behaviour is called	<p>A. proportionality</p> <p>B. elasticity</p> <p>C. plasticity</p> <p>D. none of them</p>
18	Every crystalline solid has	<p>A. definite melting point</p> <p>B. different melting points</p> <p>C. may or may not be definite</p> <p>D. none of them</p>
19	The ratio of linear stress/linear strain is called as	<p>A. Young's modulus</p> <p>B. Bulk modulus</p> <p>C. Shear modulus</p> <p>D. Modulus</p>
20	The conduction band in a solid	<p>A. may be empty</p> <p>B. cannot be empty</p> <p>C. should be filled</p> <p>D. all of them</p>