

## ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	Under the elastic region, the deformation produced in the material, the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
2	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
3	The bands below the valence band are	A. completely filled and play active part in conduction process B. completely filled and plays no part in conduction process C. completely filled and play active part in conduction process D. not completely filled and play no part in conduction process
4	Polymeric solids have	A. low specific gravity B. high specific gravity C. either of them D. none of them
5	The temperature at which the vibrations become so great that structure of the Crystal breaks up, is called:	A. Critical temparature B. Temperature of vaporization C. Melting point D. Both (A) and (C) E. Both (A) and (B)
6	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
7	In a semi-conductor material, the total current is	A. only the +ve current B. only the electronic current C. sum of +ve and electronic current D. all of them
8	Each atom in a metal crystal vibrates about a fixed point with an amplitude that:	A. Decrease the rise in temprature B. Is not affected by rise in temprature C. Increase with rise in temprature D. Both (B) and (C) E. None of these
9	In the doping process, the ratio of the doping atoms to the semi conductor atom is	A. 1 to 10 B. 1 to $10^{3}$ C. 1 to $10^{6}$ D. 1 to $10^{9}$
10	The substances which break just after the elastic limit is reached, are known as	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
11	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
12	An ordinary glass gradually softens into a 'paste -like' state before it becomes a very viscous liquid. It happens almost at:	A. $800^{\circ}\text{C}$ B. $500^{\circ}\text{C}$ C. $300^{\circ}\text{C}$ D. $100^{\circ}\text{C}$ E. None of these
13	The arrangement of 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)

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14	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
15	The number of different crystals systems based on the geometrical arrangement of their atoms and the resultant geometrical structure are	A. 5 B. 7 C. 9 D. 14
16	Amorphous solids:	A. Have definite melting points B. Are called glassy solids C. Have no definite melting point D. Both (B) and (C) E. Both (A) and (C)
17	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
18	Above the curie temperature, iron becomes	A. ferromagnetic B. paramagnetic C. diamagnetic D. any one of them
19	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;">°</b> C B. 7600 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">°</b> C C. 800 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">°</b> C D. 900 <b style="color: rgb(34, 34, 34); font-family: sans-serif;">°</b> C
20	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

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