

ECAT Physics Chapter 17 Physics of Solids

0	Overations	Arrayana Ohai
Sr	Questions	Answers Choice
1	Electrons of an isolated atom are bound to the nucleus, and	A. can only have distinct energy level B. can only have same energy level C. may or may not have distinct energy levels D. none of these
2	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
3	Tick the one which is not polymer solid:	A. Zirconia B. Polythene C. Nylon D. Synthetic rubber E. None of these
4	Each atom in metal crystal:	A. Remains fixed B. Vibrates about a fixed point C. Moves randomly D. Rotates about center of a crystal E. None of these
5	The electrons occupying the conduction band are known as	A. conduction electrons B. free electrons C. both of them D. none of them
6	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. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
7	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)
8	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
9	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
10	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
11	Synthetic materials fall into the category of	A. crystalline solids B. amorphous C. polymeric solids D. all of them
12	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
13	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
14	The ability of the body to return to its original shape is called	A. deformation B. stretching C. compressing

		D. elasticity
15	Amorphous solids are also called as	A. crystalline solids B. polymeric solids C. glassy solids D. any one of them
16	In the phenomenon of hysteresis	A. magnetism leads the magnetising current B. magnetism lags behind the magnetising current C. meganetism goes along the magnetising current D. none of them
17	When a stress changes the shape, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
18	The pattern of NaCl particles have a shape which is :	A. Cubic B. Body centred cubic C. Simple cubic D. face centred E. Both (A) and (C)
19	The solids are classified as:	A. Metals B. Crystalline C. Amorphous D. Polymeric E. All except (A)
20	An ordinary glass gradually softens into a 'paste -like' state before it becomes a very viscous liquid. It happens almost at:	A. 800 ^o C B. 500 ^o C C. 300 ^o C D. 100 ^o C E. None of these