

MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	A solid subjected to deformation along one dimension	<p>A. Only have tensile stress</p> <p>B. Only have compressive stress</p> <p>C. Have both tensile and compressive stress</p> <p>D. None of them</p>
2	Crystalline solids have the properties such as	<p>A. Regular arrangement</p> <p>B. Covalent bonding</p> <p>C. Some what defective</p> <p>D. All of them</p>
3	The materials in which valence electrons are bound very tightly to their atoms and are not free, are known as	<p>A. conductors</p> <p>B. insulators</p> <p>C. semi-conductors</p> <p>D. all of them</p>
4	If S is the stress and Y is Young's modulus of the material of a wire, the energy stored in the wire per unit volume is	<p>A. $2S^2/Y$</p> <p>B. $S^2/2Y$</p> <p>C. $2Y/S^2$</p> <p>D. $S/2Y$</p>
5	The ability of a body to return to its original shape when applied force is removed is called	<p>A. Stress</p> <p>B. Strain</p> <p>C. Elasticity</p> <p>D. All of them</p>
6	When the stress change length of a body, it is called:	<p>A. Shear stress</p> <p>B. Tensile stress</p> <p>C. Volume stress</p> <p>D. Any of these</p> <p>E. None of these</p>
7	Solids having partially filled conduction bands are	<p>A. Insulator</p> <p>B. Semiconductor</p> <p>C. Super conductor</p> <p>D. Semi conductor</p>
8	The measure of the deformation in a solid when stress is applied to it is called	<p>A. elastic constant</p> <p>B. Young's modulus</p> <p>C. strain</p> <p>D. elasticity</p>
9	Amorphous materials have the properties of solids like	<p>A. No structure</p> <p>B. Like liquid</p> <p>C. Glassy</p> <p>D. a and c</p>
10	The critical temperature T _c for is	<p>A. 1.6 K</p> <p>B. 2.71 K</p> <p>C. 3.72 K</p> <p>D. 2.82 K</p>
11	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 10³</p> <p>C. 1 to 10⁶</p> <p>D. 1 to 10⁹</p>
12	The amorphous material (solids) have	<p>A. No structure</p> <p>B. No melting point</p> <p>C. No definite shape</p> <p>D. All of them</p>
13	In semiconductors, the valence band at room temperature is	<p>A. Completely filled</p> <p>B. Partially filled</p> <p>C. Empty</p> <p>D. None of these</p>
14	Examples of crystalline solids are:	<p>A. Copper</p> <p>B. Zirconia</p> <p>C. NaCl</p> <p>D. All of these</p> <p>E. Both A and B</p>
15	If both the length and radius of rod are doubled, then the modulus of elasticity will	<p>A. Increase</p> <p>B. Decrease</p>

15	If both the length and radius of rod are doubled, then the modulus of elasticity will:	C. Remains the same D. Doubled
16	Longitudinal strain can be produced in	A. Glass B. Water C. Honey D. Hydrogen gas
17	Shear modulus for mercury is	A. 0 B. 12 C. 27 D. 42
18	The symbol K and G have been used to denote respectively:	A. Young's modulus and bulk modulus B. Young's modulus and shear modulus C. Bulk modulus and shear modulus D. Any of these E. None of these
19	_____ does not have linear strain	A. Water B. Copper C. Aluminum D. Iron
20	Stress may cause a change in:	A. Length B. Volume C. Shape D. Any of these E. None of these