MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	In semiconductors, at 0 K, the electrons in conduction band is	A. Partially filled B. No C. Yes D. None of these
2	Stress beyond which a permanent deformation is observed in a body is called	A. Minimum stress B. Maximum C. Yield stress D. Plastic stress
3	The motion of a charged nucleus also produces a magnetic field which is	A. Weaker than orbital electrons B. Stronger than orbital electrons C. Equal than orbital electrons D. None of these
4	The materials in which valence electrons are bound very tightly to their atoms and are not free, are known as	A. conductors B. insulators C. semi-conductors D. all of them
5	Force applied on a unit area of a body to produce any change in its shape, Volume or length of a body is called:	A. Strain B. Stress C. Young's modulus D. Bulk modulus E. Either (C) or (D)
6	The fractional change in volume per unit increase in pressure is called:	A. Bulk modulus B. Compressibility C. Pressure coefficient D. Volume coefficient
7	Which of the following pairs is not correct	A. Strain - dimensional B. Stress - N/m² C. Modulus of elasticity - N/m² D. Shear stress - N/m²
8	If band gap between valence and conduction band material is 5 eV. The material is	A. Insulator B. Good conductor C. Semiconductor D. Such material are not exist
9	A geometric shape of a solid obtained by regular, respetive, three-dimensional arrangements of its molecules,atoms or ions is called a:	A. Crystal B. Crystal Lattice C. Crystal plane D. None of these
10	A mental wire is stretched by suspending weight to if x is the longitudinal strain and y is young s modulus of elasticity then the elastic potential energy per unit volume is	A. 1/2 y x² B. x² / 2y C. y² / 2x D. x² / 2y
11	A bar of length L, cross-section A and Young's modulus Y, is pulled by a force F from both ends so as to produce an elongation x. Then:	A. x∝1/L B. x∝A C. x∝1/A D. x<span style="color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color:

		rgb(255, 255, 224);">∝Y
12	Any superconductor with critical temperature above 77 K, is referred as	A. low temperature superconductor B. high temperature superconductor C. very low temperature superconductor D. none of them
13	A hole in a semi-conductor material is treated as	A. positive charge B. negative charge C. neutral D. none of them
14	Each atom in a metal crystal:	A. Remains fixed B. Vibrates about a fixed point C. Moves randomly D. Rotates about the centre of the crystal E. None of these
15	Young's modulus for steel is	A. 100 B. 200 C. 300 D. 400
16	The ratio of kinetic energy to potential energy for solids is	
17	Stress may be	A. Tensile B. Compressive C. Shear D. All of these
18	If stress is increased beyond the elastic limit and change in solid is permanent this behaviour is called	A. Elasticity B. Plasticity C. Conductivity D. Insulator
19	When a germanium atom is doped with phosphorous atoms it becomes	A. N-type semiconductor B. p-type semiconductor C. An insulator D. None of them
20	Insulators are those materials in which valence band is	A. Empty B. Partially filled C. Full D. None of these