MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	If both the length and radius of rod are doubled, then the modulus of elasticity will:	A. Increase B. Decrease C. Remains the same D. Doubled
2	Amorphous materials have the properties of solids like	A. No structure B. Like liquid C. Glassy D. a and c
3	The magnetism produced by electrons within an atom from motion/motions of electron.	A. One motion B. Two motions C. Three motions D. None of these
4	Bulk modulus for copper is	A. 50 B. 75 C. 140 D. 147
5	Shear modulus for diamond is	A. 156 B. 353 C. 450 D. 477
6	The smallest portion of a crystal lattice that if repeated in three-dimensions will generate the entire lattice is called:	A. Unit cell B. Lattice plane C. Crystal D. None of these
7	Under the elastic region, the deformation produced in the material is	A. permanent B. temporary C. either of them D. none of them
8	The reciprocal of bulk modulus is called:	A. Shear modulus B. Elasticity C. Young's modulus D. Compressibility
9	Shear modulus for steel is	A. 20 B. 84 C. 95 D. 202
10	Unit cell has a basic structure of	A. One dimensional B. Two dimensional C. Three dimensional D. None of these
11	The measure of deformation in a certain solid due to the action of stress is called	A. Hooke's law B. Mechanical advantage C. Stress D. Strain
12	The molecules or ions in a crystalline solid are	A. static B. not static C. randomly moving D. all of them
13	A valance band in solids is	A. Always completely filled B. Empty C. Either completely or partially filled D. None
14	In semiconductors, at 0 K, the electrons in conduction band is	A. Partially filled B. No C. Yes D. None of these
15	The strain is the ratio of	A. Stress/strain B. Strain/stress C. Force area D. change in length/original length

16	The word amorphous means:	A. Without any structure B. With define structure C. Regular arrangement of molecules D. Both B and C E. None of these
17	The modulus of elasticity of material does not depend upon	A. Shape B. Temperature C. Nature of material D. Impurities mixed
18	Shear modulus for bone is	A. 15 B. 40 C. 50 D. 80
19	In a cubic crystal, all the sides meet at:	A. 60<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 109<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. 30<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° E. 10<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°
20	A wire of 100 mm length and 1 mm^2surface area stretches 10 mm under a load of 60 N. A second wire of same material, with half the diameter of the first wire is stretched by the same load. What is the extension in the second wire?	A. 20 mm B. 30 mm C. 40 mm D. 50 mm