

MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	Substances which undergo plastic deformation until they break are called:	<p>A. Ductile B. Brittle C. Malleable D. Soft E. Hard</p>
2	Metals are good conductors of electricity and their conductivities are of the order of	<p>A. 10^3 (Ω m)¹ B. 10^4 (Ω m)¹ C. 10^6 (Ω m)¹ D. 10^7 (Ω m)¹ E. 10^8 (Ω m)¹</p>
3	Which one of the following has only bulk modulus?	<p>A. Diamond B. Glass C. Tungsten D. Water</p>
4	On applying a stress of $20 \times 10^8 \text{ Nm}^{-2}$, the length of perfectly elastic wire is doubled. Its young' modulus is	<p>A. $40 \times 10^8 \text{ Nm}^2$ B. $20 \times 10^8 \text{ Nm}^2$ C. $10 \times 10^8 \text{ Nm}^2$ D. $5 \times 10^8 \text{ Nm}^2$</p>
5	Which of the following is not true for a crystalline substance	<p>A. Shorter range order B. Isotropic electrical conductivity C. Flat surface D. Sharp melting point</p>
6	The pattern of a crystalline solid is:	<p>A. One dimensional B. Two dimensional C. Three dimensional D. Either A or B E. None of these</p>
7	_____ does not have linear strain	<p>A. Water B. Copper C. Aluminum D. Iron</p>
8	Polymers are the physical combinations of carbon with:	<p>A. Oxygen only B. Hydrogen C. Nitrogen D. All of these E. None of these</p>
9	Lead, copper and wrought iron are examples of	<p>A. brittle substances B. ductile substances C. plastic substances D. elastic substances</p>

10	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 D. none of them
11	The value of shear modulus is zero for:	A. Water B. Mercury C. Diamond D. Both (A) and (B) E. Both (A) and (C)
12	In the hysteresis loop, when the current is reduced to zero, the material	A. does not retain magnetism B. retains not retain magnetism C. retains strong magnetism D. none of them
13	When the stress change length of a body, it is called:	A. Shear stress B. Tensile stress C. Volume stress D. Any of these E. <i>None of these</i>
14	While vibrating the atoms are at their	A. Fixed positions B. Extreme position C. Average positions D. None of these
15	If both the length and radius of the wire are doubled, how does the modulus of elasticity change?	A. Becomes one fourth B. Halved C. Doubled D. Remains unchanged
16	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
17	Which of the following is not dimension less	A. Poission ration B. Sharing strain C. Longitudinal strain D. Volume stress
18	High temperature superconductors have temperature	A. Above 77 K B. Below 77 K C. At 77 K D. None of these
19	The cores of electromagnets used for alternating currents where the specimen repeatedly undergoes magnetization and demagnetization should have	A. broad hysteresis curves B. narrow hysteresis curves C. any one of the them D. none of them
20	A geometric shape of a solid obtained by regular, respective, three-dimensional arrangements of its molecules, atoms or ions is called a:	A. Crystal B. Crystal Lattice C. Crystal plane D. None of these