

MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	The greatest stress that a material can endure without losing the proportionality between stress and strain is called	A. Plasticity B. Breaking point C. Proportional limit D. Strain
2	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
3	The fractional change in volume per unit increase in pressure is called	A. Pressure coefficient B. Volume coefficient C. Bulk modulus D. Compressibility
4	In proportional limit (σ) of material, the stress increases with strain	A. Linearly B. Constant C. Abruptly increases D. None of these
5	Crystal lattice is a repetition of	A. Atoms B. Molecules C. Unit cell D. All of them
6	Glass and high carbon steel are	A. Brittle substances B. Insulator C. Ductile substances D. None of these
7	The ratio of applied stress to volumetric strain is called	A. shear modulus B. Young's modulus C. Bulk modulus D. None of these
8	In metallic crystals which of the following thing remains constant?	A. amplitude of oscillations B. temperature of solid C. average atomic positions D. all of them
9	Which of the given pair have same dimension	A. Stress, pressure B. Elastic modulus, pressure C. Stress, elastic modulus D. All have same dimension
10	When a silicon crystal is doped with a pentavalent element, then the atom of the pentavalent element is known as	A. acceptor B. donor C. either of them D. none of them
11	The shearing strain is measured by	A. Angle of rotation B. Shearing stress C. Angle of shear D. Modulus of rigidity
12	Shear modulus for bone is	A. 15 B. 40 C. 50 D. 80
13	When a stress changes its length, it is called	A. Stress B. Tensile stress C. Shear stress D. None of these
14	Amorphous materials have the properties of solids like	A. No structure B. Like liquid C. Glassy D. a and c
15	The conductivities of conductors (metals) have	A. $10^{5-7} \text{ } (\Omega)^{-1}\text{m}^{-1}$ B. $10^{7-8} \text{ } (\Omega\text{m})^{-1}\text{m}^{-1}$ C. $10^{10-11} \text{ } (\Omega)^{-1}\text{m}^{-1}$ D. $10^{12-13} \text{ } (\Omega)^{-1}\text{m}^{-1}$

		<p>C. 10^8 (Ωm)⁻¹</p> <p>D. 10^9 (Ωm)⁻¹</p>
16	The band full of electrons, which do not play any part in the conduction process is known as	<p>A. Conduction band</p> <p>B. Forbidden energy band</p> <p>C. Valence band</p> <p>D. Completely filled band</p>
17	Donor impurities donate	<p>A. Holes</p> <p>B. Electrons</p> <p>C. Both holes and electrons</p> <p>D. None of them</p>
18	The combination of solenoid and a specimen of iron inside it make a powerful magnet called	<p>A. Horse shoe magnet</p> <p>B. Bar magnet</p> <p>C. Electromagnet</p> <p>D. 10^{10} to 10^{18}</p>
19	Each domain contains the atoms of range of	<p>A. 10^{10} to 10^{18}</p> <p>B. 10^{10} to 10^{16}</p> <p>C. 10^{12} to 10^{17}</p> <p>D. 10^{12} to 10^{16}</p>
20	Polymers are the chemical combination of carbon with:	<p>A. Nitrogen</p> <p>B. Oxygen</p> <p>C. Hydrogen</p> <p>D. All of these</p> <p>E. None of these</p>