

MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	In crystalline solids, atoms are held about their equilibrium positions depending upon the strength of:	A. Adhesive forces B. Nuclear forces C. Inter atomic cohesive force D. Electromagnetic force E. None of these
2	Insulators are those materials in which valence band is	A. Empty B. Partially filled C. Full D. None of these
3	According to the Hooke's law the force required to change the length of a wire by '1' is proportional to:	A. 1^2 B. 1 C. 1 D. 1^3
4	Bulk modulus for aluminium is	A. 40 B. 70 C. 75 D. 95
5	Nm^{-2} or Pa are the units of	A. Stress B. Strain C. Modulus of Elasticity D. a and b
6	A material with high retentively and large corcivety most useful to make	A. Electromagnet B. Permanent magnet C. Choke D. None of these
7	When a stress changes length, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
8	The structure of the polymeric solid is:	A. An ordered structure B. A disordered structure C. Intermediate between order or disorder D. Any of these E. None of these
9	The valence energy band can never be	A. Filled B. Partially filled C. Empty D. None of these
10	In terms of energy bands, semiconductors are those materials which at room temperature have conduction band	A. Partially filled B. Full filled C. Slightly filled D. None of these
11	The critical temperature for mercury is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
12	When a silicon crystal is doped with trivalent impurity which are	A. Indium B. Arsenic C. Phosphorous D. None of these
13	Bulk modulus for tungsten is	A. 50 B. 100 C. 150 D. 200
14	The ability of a body to return to its original shape when applied force is removed is called	A. Stress B. Strain C. Elasticity D. All of them
15	Which one of the following is polymer	A. Polythene B. Polystyrene C. Nylon D. None of these

D. All

16 Stress that induces a change in the shape of the body is named as

- A. Tensile stress
- B. Volumetric stress
- C. Shear stress
- D. None of these

17 Young's modulus for diamond is

- A. 700
- B. 913
- C. 1100
- D. 1120

18 What is the Young modulus of a meta?

- A. Extension/force
- B. Force/extension
- C. Strain/stress
- D. Stress/strain

19 What is the unit of the Young's modulus?

- A. N m^{-2}
- B. N m^{-1}
- C. N m
- D. N m^2

20 In proportional limit (σ) of material, the stress increases with strain

- A. Linearly
- B. Constant
- C. Abruptly increases
- D. None of these