

## MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | Super conductors are materials like   | A. Alloys<br>B. Ceramic<br>C. Semiconductors<br>D. a and b  |
| 2  | In the hysteresis loop, when the current is reduced to zero, the material   | A. does not retain magnetism<br>B. retains not retain magnetism<br>C. retains strong magnetism<br>D. none of them   |
| 3  | In semiconductors at 0 K the valence band is  | A. Completely filled<br>B. Partially filled<br>C. No<br>D. Yes  |
| 4  | Experiments revealed that the ratio of the stress to the strain is a constant value for   | A. different material<br>B. all material<br>C. a given material<br>D. all of them   |
| 5  | The forbidden energy gap in semiconductors  | A. Lies just below the valence band<br>B. Lies just above the conduction band<br>C. Is the same as the valence band<br>D. Lies between the valence band and conduction band |
| 6  | A rubber cord 100 cm long is elongated 1 cm by a stretching force of 0.2 N. The cross-sectional area of the cord is $0.04 \text{ cm}^2$ . Find the Young's modulus for that rubber. | A. $0.5 \text{ N cm}^{-2}$<br>B. $0.05 \text{ N cm}^{-2}$<br>C. $50 \text{ N cm}^{-2}$<br>D. $500 \text{ N cm}^{-2}$  |
| 7  | The reciprocal of bulk modulus is called:   | A. Shear modulus<br>B. Elasticity<br>C. Young's modulus<br>D. Compressibility   |
| 8  | Bulk modulus is involved when the deformation is:   | A. One dimensional<br>B. Two dimensional<br>C. Three dimensional<br>D. Any of these<br>E. None of these   |
| 9  | Examples of brittle substances are  | A. Glass<br>B. Copper<br>C. Lead<br>D. None of these  |
| 10 | Ratio between total intensity of magnetic field at equator to poles is  | A. 1 : 1<br>B. 2 : 1<br>C. 1 : 2<br>D. 1 : 4  |
| 11 | The ratio of applied stress to volumetric strain is called  | A. shear modulus<br>B. Young's modulus<br>C. Bulk modulus<br>D. None of these   |
| 12 | Donor impurities donate   | A. Holes<br>B. Electrons<br>C. Both holes and electrons<br>D. None of them  |
| 13 | A semiconductor in its extremely pure form is known as  | A. Extrinsic semiconductor<br>B. Intrinsic semiconductor<br>C. Both a and b<br>D. None of these   |
| 14 | Insulators are those materials which valence electrons are bound  | A. Loosely<br>B. Tightly<br>C. Very tightly<br>D. None of these   |

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| 15 | How many types of strain is   | B. 2<br>C. 3<br>D. 4   |
| 16 | The modulus of elasticity of a liquid is:   | A. Zero<br>B. 1<br>C. Infinity<br>D. A value not one of those mentioned above                          |
| 17 | With the rise of temperature the amplitude of atoms   | A. Slow down<br>B. Fixed<br>C. Increases<br>D. None of these   |
| 18 | Crystalline solids are also   | A. Metals<br>B. Ionic compound<br>C. Ceramics<br>D. All of them  |
| 19 | Young's modulus for diamond is  | A. 700<br>B. 913<br>C. 1100<br>D. 1120   |
| 20 | The cores of electromagnets used for alternating currents where the specimen repeatedly undergoes magnetization and demagnetization should have | A. broad hysteresis curves<br>B. narrow hysteresis curves<br>C. any one of the them<br>D. none of them |