

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

Sr	Questions	Answers Choice
1	When the deformation produced in the material becomes permanent, this type of behaviour is called	A. proportionality B. elasticity C. <b>plasticity</b> D. none of them
2	Polymeric solids have the properties like	A. No definite shape B. No definite structure C. Partially crystalline solids D. <b>All of them</b>
3	Young's modulus for tungsten is	A. 90 B. 190 C. <b>390</b> D. 590
4	The maintaining the elastic limits of any body, the relation stress to strains is called	A. <b>Hooke's law</b> B. Pascal's law C. Young's law D. None of them
5	Stress change the shape, volume or length of a body due to the	A. Applied force B. External force C. Force D. <b>Force on unit area</b>
6	A stress which is along one dimension is known as:	A. Tensile stress B. Linear stress C. Compressive stress D. Both (A) and (C) E. <b>Both (A) and (B)</b>
7	In a soft iron, domains are	A. easily oriented along external field and do not return to original random positions B. <b>easily oriented along external field and readily returns to originally random positions</b> C. do not oriented along external field and also do not returns to original random position D. none of them
8	Each atom in a metal crystal:	A. Remains fixed B. <b>Vibrates about a fixed point</b> C. Moves randomly D. Rotates about the centre of the crystal E. None of these
9	Bulk modulus is involved when the deformation is	A. One dimensional B. Two dimensional C. <b>Three dimensional</b> D. All of these
10	Young's modulus for diamond is	A. 700 B. 913 C. 1100 D. <b>1120</b>
11	A solid subjected to deformation along one dimension	A. <b>Only have tensile stress</b> B. Only have compressive stress C. Have both tensile and compressive stress D. None of them
12	Shear modulus for copper is	A. 20 B. 27 C. <b>44</b> D. 43
13	Amorphous solids are more like	A. crystalline solids B. polymeric solids C. <b>glassy solids</b> D. any one of them

14	A steel wire 12 mm in diameter is fastened to a log and then pulled by a tractor. The length of wire between the log and tractor is 11 m. The force of 10,000 N is required to pull the log. What is stress	<p>A. 84.46 MPa  B. 85.46 MPa  C. 88.46 MPa  D. 89.46 MPa</p>
15	When a stress changes length, it is called the	<p>A. compressional stress  B. tensile stress  C. shear stress  D. any one of them</p>
16	The modulus of elasticity of material does not depend upon	<p>A. Shape  B. Temperature  C. Nature of material  D. Impurities mixed</p>
17	The combination of solenoid and a specimen of iron inside it make a powerful magnet called	<p>A. Horse shoe magnet  B. Bar magnet  C. Electromagnet  D. <math>10^{-10}</math> to <math>10^{18}</math></p>
18	Young's modulus for copper is	<p>A. <math>70 \times 10^{-2}</math>  B. <math>91 \times 10^{-2}</math>  C. <math>110 \times 10^{-2}</math>  D. None of these</p>
19	On applying a stress of $20 \times 10^8 \text{ Nm}^{-2}$ , the length of perfectly elastic wire is doubled. Its young's modulus is	<p>A. <math>40 \times 10^8 \text{ N/m}^2</math>  B. <math>20 \times 10^8 \text{ N/m}^2</math>  C. <math>10 \times 10^8 \text{ N/m}^2</math>  D. <math>5 \times 10^8 \text{ N/m}^2</math></p>
20	Change in length divided by original length is called:	<p>A. Stress  B. Young's modulus  C. Strain  D. Both (B) or (C)  E. None of these</p>