

For More Questions [Click Here](#)

1. Strain is defined as the ratio of

- (a) change in volume to original volume
- (b) change in length to original length
- (c) change in cross-sectional area to original cross-sectional area
- (d) any one of the above
- (e) none of the above.

Ans: d

2. Hooke's law holds good up to

- (a) yield point
- (b) limit of proportionality
- (c) breaking point
- (d) elastic limit
- (e) plastic limit.

Ans: b

3. Young's modulus is defined as the ratio of

- (a) volumetric stress and volumetric strain
- (b) lateral stress and lateral strain
- (c) longitudinal stress and longitudinal strain
- (d) shear stress to shear strain
- (e) longitudinal stress and lateral strain.

Ans: c

4. The unit of Young's modulus is

- (a) mm/mm
- (b) kg/cm
- (c) kg
- (d) kg/cm²
- (e) kg cm².

Ans: d

5. Deformation per unit length in the direction of force is known as

- (a) strain
- (b) lateral strain
- (c) linear strain
- (d) linear stress
- (e) unit strain.

Ans: c

6. If equal and opposite forces applied to a body tend to elongate it, the stress so produced is called

- (a) internal resistance
- (b) tensile stress
- (c) transverse stress
- (d) compressive stress
- (e) working stress.

Ans: b

7. The materials having same elastic properties in all directions are called

- (a) ideal materials
- (b) uniform materials
- (c) isotropic materials
- (d) paractical materials
- (e) elastic materials.

Ans: c

8. A thin mild steel wire is loaded by adding loads in equal increments till it breaks. The extensions noted with increasing loads will behave as under

- (a) uniform throughout
- (b) increase uniformly
- (c) first increase and then decrease
- (d) increase uniformly first and then increase rapidly
- (e) increase rapidly first and then uniformly.

Ans: d

9. Modulus of rigidity is defined as the ratio of

- (a) longitudinal stress and longitudinal strain
- (b) volumetric stress and volumetric strain
- (c) lateral stress and lateral strain
- (d) shear stress and shear strain
- (e) linear stress and lateral strain.

Ans: d

10. If the radius of wire stretched by a load is doubled, then its Young's modulus will be

- (a) doubled
- (b) halved
- (c) become four times
- (d) become one-fourth
- (e) remain unaffected.

Ans: e