CLASS 11 PHYSICS REVISION NOTES

Class 11 Physics Chapter 8 Mechanical Properties of Solids – Revision Notes

Quick revision notes for Class 11 Physics Chapter 8 (Mechanical Properties of Solids). These Class 11 Physics Chapter 8 notes are ideal for quick revision just before exams.

Contents

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Stress and Strain

Stress=F/A; Strain=fractional deformation (dimensionless).

Hooke's Law: stress ∝ strain (within elastic limit).

Elastic Moduli

Young's modulus $Y=(F/A)/(\Delta L/L)$.

Shear modulus G=shear stress/shear strain.

Bulk modulus $K=-\Delta P/(\Delta V/V)$.

Other Concepts

Poisson's ratio = lateral strain/longitudinal strain.

Elastic PE per unit volume = ½ × stress × strain.

One-Line Summary

Mechanical properties of solids describe how materials deform under stress, quantified through Young's, shear, and bulk moduli, with Hooke's law holding within the elastic limit.

Class 11 Physics Chapter 8 – Solutions and Important Questions

Need full answers or more practice? See the Class 11 Physics Chapter 8 Solutions and Class 11 Physics Chapter 8 Extra Questions.

See also: Chapter 1 | Chapter 2 | Chapter 3 | Chapter 4 | Chapter 5 | Chapter 6 | Chapter 7 | Chapter 8

Practice more: Chapter 1 | Chapter 2 | Chapter 3 | Chapter 4 | Chapter 5 | Chapter 6 | Chapter 7 | Chapter 8

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