



# MECHANICS OF STRUCTURES VOL. I

[STRENGTH OF MATERIALS]

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## ABOUT THE BOOK

This standard text-book along with its companion Vol. II is designed to cover the complete syllabi of the subjects of *Strength of Materials and Theory and Analysis of Structures*.

The outline of the book is:

- Chapters 1 to 8 consist the study of Stresses and Strains
- Chapters 9 and 24 discuss the Testing of Materials
- Chapters 10 and 11 Shear Forces and Bending Moments
- Chapters 12 and 13 Properties of Lines and Areas
- Chapters 14 and 15 Stresses in Beams
- Chapters 16 and 17 Deflections
- Chapters 18 and 19 Analysis of Fixed and Continuous Beams
- Chapters 20 and 21 Composite and Reinforced Concrete Beams
- Chapters 22 Direct and Bending Stresses and Chapter 23 Torsion
- Chapters 25 Columns and Struts of Uniform Section
- Chapters 26 Cylindrical and Spherical Shells
- Chapters 27 and 28 Riveted, Bolted and Welded Joints
- Chapters 29, 30 and 31 consist of special topics such as Shear Centre, Unsymmetrical Bending and Bending Stresses in Curved Bars.

The book within its 971 + 20 pages, it now comprise the following:

- \* 900 Neatly drawn figures
- \* 600 Fully illustrated solved examples
- \* 715 Unsolved examples with answers at the end of chapters
- \* 33 Useful tables

It is hoped that this edition should prove extremely useful to students of Engineering reading for Degree Examinations of all the Universities of India, Diploma Examinations conducted by various Boards of Technical Education, Certificate Courses, as well as for the U.P.S.C., G.A.T.E., A.M.I.E., I.E.S and other similar competitive and professional examinations. It should also prove of great interest and practical use to the practising engineers.

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