



ELEMENTS OF CIVIL ENGINEERING

By
DR. Anurag Kandya

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ABOUT THE BOOK

This is a single comprehensive book of its kind designed primarily to provide a clear-cut, contemporary and stimulating text in a convenient form for the first year engineering students. It provides quite modern and up-to-date coverage of the science and art of Civil Engineering which are changing rapidly. With the inclusion of the worked out examples, the book is almost a 'self-teaching' text material.

The book has been divided into 5 sections namely *Engineering Materials*, *Building Construction* (including Earthquake Resistant Structures), *Surveying and Levelling*, *Transportation engineering* and *Environmental Engineering* (including Global Environmental Problems).

It begins with an Introduction to Engineering and spreads in 45 chapters. It contains:

- * 700 Self-explanatory and neatly drawn diagrams
- * 145 Useful tables
- * 425 Questions at the end of the chapters

A detailed list of *various signs and symbols used in civil engineering drawings* (as per Indian standards) has been included in the Appendix. A very extensive glossary of the key words used in civil engineering has been prepared which would greatly help the students in learning the fundamentals of the subject. Search engine, provided at the end, will facilitate the students to quickly find the topics of their interest.

Almost all topics and sub-topics consist of 'memory maps' – the first of their kind. These memory maps consist of key words and will help the readers to crystallize the important points in their minds, thereby helping them to structure their answers in the examinations.

The book almost covers the syllabi prescribed by the various Universities of India for the subjects ELEMENTS OF CIVIL ENGINEERING/BASIC CIVIL ENGINEERING and partially that of MATERIAL SCIENCE and CIVIL ENGINEERING GRAPHICS. It would be of immense help to the students preparing for Degree, Diploma or A.M.I.E. Examinations and various Boards of Technical Education. It should also prove a great asset to the students preparing for U.P.S.C. examinations. Questions from various university examination papers and competition examinations are discussed in the respective chapters. Neatly drawn sketches should definitely make the understanding of the students crystal-clear.

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