



# ENGINEERING MATERIALS

[ MATERIAL SCIENCE ]



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## ABOUT THE BOOK

This well-known text-book provides an up-to-date account of the basic knowledge of all types of *Building Materials* or *Materials of Construction*.

The subject matter is expressed in a simple language and practical manner. The treatment is clear, methodical as well as interesting and easy to follow.

In the chapters of miscellaneous materials it now contains, detailed information about *magnetic materials*, *composites* and *nano materials*. In the chapter of material science, the periodic table along with a *modern periodic table* in colour is discussed in depth.

The entire subject matter is systematically canvassed in the chapters like: Properties of Engineering Materials, Stones, Clay Products and Refractories, Bricks, Lime, Cement, Mortar, Cement Concrete, Timber, Ferrous Metals, Steel, Non-ferrous Metals and Alloys, Corrosion, Glass, Paints, Varnishes and Distempers, Plastics, Miscellaneous Materials, Material Science of Metals.

In Appendix-I, enhanced list of latest B.I.S. codes of important engineering materials is included. Appendix II showing abbreviated terms used in this book are given at the end of the book.

*The book now contains:*

- \* 141 self-explanatory and neatly drawn sketches
- \* 80 useful tables and more than
- \* 475 questions at the end of the chapters.

The book should prove to be extremely useful to the Engineering students preparing for the Degree Examinations of all the Indian Universities, Diploma Examinations conducted by various Boards of Technical Education, Certificate Courses as well as for the AMIE, UPSC, GATE, IES and other similar competitive and professional examinations. It is also useful for the preparation of NATA (National Aptitude Test for Architecture), CEPT (Centre for Environmental Planning and Technology), SBST (School of Building Science and Technology), SID (School of Interior Design), AIEEE (Architecture), GTU (Gujarat Technological University) etc. It should also prove of interest to the practising professionals.

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- Aggregates
- Asphalt, tar and bitumen
- Building stones
- Bricks, tiles and other clay products
- Cement and concrete
- Glass
- Hardware
- Insulating materials
- Paints and varnishes
- Pipes, steel sections, etc.
- Reinforcement and structural steel
- Sheets, light metals and their alloys
- Thinner and solvents
- Water supply and sanitary appliances and fittings
- Wire ropes and wire products
- Wooden and metal doors-windows, timber and wood products
- Varnishes and lacquers

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