



REINFORCED CONCRETE VOL. II

[ADVANCED REINFORCED CONCRETE]

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By  
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## ABOUT THE BOOK

This volume II elucidates the basic principles involved in the analysis and design of Advanced Reinforced Concrete Structures.

The entire subject matter is divided in *Twenty Two* chapters. These chapters are arranged in *four* groups.

The *first* group of chapter *one* to chapter *eight* contains the advanced topics in the design of beams, slabs and foundation. The name of the chapters are circular slabs; Ribbed and Waffle slabs; Flat Slab; Domes; Deep Beams and Corbels; beams Curved in Plan; Grid or coffered floors; Circular Raft Foundations.

The *second* group of chapter *nine* to chapter *sixteen* discusses analysis and design of multi-storeyed buildings with an example of an Unbraced building following the latest IS codes on earth quake and ductile detailing. Shear walls are also introduced. It contains chapter viz., multi-storeyed buildings: Fundamentals; Analysis and design for Gravity Loads: an overview; Lateral Loads, Wind loads, Earthquake loads; Analysis of Lateral loads; Ductility considerations; Unbraced building design examples; Walls in buildings.

In the *third* group of chapter *seventeen* to chapter *twenty one*, the topics on water tanks are introduced and designed in accordance with IS: 3370-2009. The Chapters are: Water Tanks: fundamentals; Circular tanks; Rectangular Tanks; Elevated Water tanks; Intze Tanks are given.

The *fourth* group is chapter *twenty two* which contains chapter on Element of Prestressed Concrete.

*The salient features of the book are:*

- \* Simple, lucid and easy language;
- \* Professional approach to designs;
- \* Step-by-step treatment;
- \* Comprehensive presentation;
- \* Exposition to practical problems;
- \* Excellent detailing.

*This book now contains:*

- \* 303 Self explanatory and neat diagrams
- \* 63 Fully solved designs/problem
- \* 162 Examples and Questions for practice
- \* 156 Useful tables
- \* 64 Short questions with answers.

*It is hoped that the book should be extremely useful to the Civil Engineering and Architecture students preparing for Degree Examinations of all Indian Universities, Diploma Examinations conducted by various Boards of Technical Education, Certificate Courses, as well as for the A.M.I.E., U.P.S.C., G.A.T.E. and other similar competitive and professional Examinations. It should also prove of great interest and practical use to the practicing engineers.*

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