



RAILWAY, BRIDGE AND TUNNEL ENGINEERING

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Edition : 2nd Revised and Enlarged Edition : 2016
ISBN : 9789385039133
Size : 170 mm × 240 mm
Binding : Paperback
Pages : 560 + 16 = 576



₹ 350.00 BUY

ABOUT THE BOOK

This book aims at presenting the topics of Railway, Bridge and Tunnel Engineering written in a simple manner. The subject-matter is characterized by comprehension as well as methodical and easy-to-follow style.

The Section I: Railway Engineering is well divided in to Thirteen chapters including Introduction; Railway track gauges; Surveys and alignment of railway lines; Railway traction; Rails; Sleepers; Ballast; Track fittings; Geometric design of a track; Resistance to traction; Points and crossings; Railway stations and yards; Signalling and interlocking; etc.

The Section II: Bridge Engineering is well divided in to Nine chapters including Introduction; Bridge foundations; Sub-structures; Classification of bridges; Bridge flooring; Bridge bearings; Design of bridges; Construction and erection methods of bridge super-structure; Maintenance of the bridges; etc.

The Section III: Tunnel Engineering is well divided in to Nine chapters including General aspects of tunnelling; Alignment of a tunnel; Shafts and portals; Tunnelling in hard rock; Tunnelling in soft ground; Tunnel lining; Lighting, ventilation and dust control in tunnels; Drainage of tunnels; Safety in tunnel construction; etc.

The Appendix I gives Abbreviated Terms and Appendix II gives five solved examination papers of GTU.

Salient features of this book are:

- * 346 Self-explanatory and neatly drawn sketches;
- * 32 Illustrative problems;
- * 40 Important useful tables;
- * 590 Typical questions at the end of the chapters.

The text-matter has been arranged systematically according to the curriculum developed by the Gujarat Technological University (G.T.U.) for the Sixth Semester students of Civil Engineering (Subject code: 160603) and also it should prove to be extremely useful to the Civil 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 A.M.I.E., U.P.S.C., G.A.T.E., I.E.S. and other similar competitive and professional examinations. It should also prove great of interest and practical use to the practising professionals.

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