



RAILWAY ENGINEERING



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Edition : 27th Edition : 2017
ISBN : 9789385039249
Binding : Paperback
Pages : 432 + 16 = 448
Size (mm) : 235 × 19 × 170
Weight : 550 g

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ABOUT THE BOOK

In the subject of *Transportation Engineering*, study of *Railway Engineering* is essential. This well-known text-book now in its *Twenty Sixth Thoroughly Revised and Enlarged Edition*, provides an up-to-date account of the basic principles on various functions and working of Railways. Its excellent material fills a significant void in the literature of *Railway Engineering*.

The entire subject is systematically arranged in chapters like: Introduction; Railway Track Gauges; Surveys and Alignment of Railway Lines; Railway Traction; Rails; Ballast; Earthwork and Drainage for Railway Track; Plate-laying; Track Fittings; Geometric Design of a Track; Resistance to Traction; Points and Crossings; Railway Stations and Yards; Railway Station Machinery; Signalling; Interlocking; Maintenance of Track; Tunnelling; Rapid Transit System (Metro Rail System); Materials Management.

Appendix I : Units Of The Indian Railway;

Appendix II : Training Institutions of the Indian Railways;

Appendix III : Famous Indian Trains;

Appendix IV : Abbreviated Terms; and

Appendix V : Multiple Choice Questions.

The topics of the subject are covered in 21 well-arranged chapters and 5 appendices; it now contains:

- * 242 Self-explanatory and Neatly Drawn Diagrams
- * 26 Useful Tables
- * 29 Solved Illustrative Problems
- * 191 Multiple Choice Questions
- * 394 Questions at the end of the chapters.

The book 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 of interest to the practising professionals.

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 - (5) Locomotives
 - (6) Maintenance of track
 - (7) Permanent way
 - (8) Psycho-technical cell
 - (9) Rolling stock
 - (10) Signalling and telecommunication
 - (11) Testing of materials
- A-I-6. Rail India Technical and Economic Services Limited (RITES)
- A-I-7. Indian Railway Construction Company Limited (IRCON)

Appendix II TRAINING INSTITUTIONS OF THE INDIAN RAILWAYS

- A-II-1. The Railway Staff College, Vadodara
- A-II-2. Indian Railways Institute of Civil Engineering (IRICEN), Pune
- A-II-3. Indian Railways Institute of Signal Engineering and Tele-communications (IRISET), Secunderabad
- A-II-4. Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur
- A-II-5. Institute for Signal and Civil Engineering Officers at South Lallaguda, Secunderabad
- A-II-6. Indian Railways Institute of Electrical Engineering (IRIEN), Nasik
- A-II-7. Indian Railways Institute of Transport Management (IRITM), Lucknow
- A-II-8. Jagjivan Ram Railway Protection Force Academy, Lucknow
- A-II-9. Railway University, Vadodara

Appendix III FAMOUS INDIAN TRAINS

- A-III-1. Palace on Wheels
- A-III-2. Royal Orient
- A-III-3. Fairy Queen
- A-III-4. Kangra Queen
- A-III-5. Desert Queen
- A-III-6. Deccan Odyssey
- A-III-7. Darjeeling Himalayan Railway (DHR)
- A-III-8. Nilgiri Mountain Railway (or Ooty Rack Railway)
- A-III-9. Toy Trains
- A-III-10. Rajdhani Trains
- A-III-11. Shatabdi Express Trains
- A-III-12. Frontier Mail
- A-III-13. Flying Raneer
- A-III-14. Deccan Queen
- A-III-15. Boat Mail
- A-III-16. Janata Express, Jansewa Express, Matrubhumi Express, Jana Shatabdi Express, Garib Rath trains
- A-III-17. Samjhauta Express
- A-III-18. Lifeline Express
- A-III-19. Patiala State Monorail
- A-III-20. The Presidential Saloon
- A-III-21. DEMU, MEMU, EMU trains

Appendix IV ABBREVIATED TERMS

Appendix V MULTIPLE CHOICE QUESTIONS

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