



THERMAL ENGINEERING VOL. I

[THERMODYNAMICS AND HEAT ENGINES]

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## ABOUT THE BOOK

This text-book along with its companion volume II is designed to cover the entire syllabi of the subject of Thermal Engineering, which is inherent in the study of engineering students.

The entire matter of the book is most comprehensive and presented in lucid language, with number of solved examples, neatly drawn sketches, so that the reader can understand the fundamentals of the subject easily. Number of exercises are given at end of appropriate sections as well as at the end of chapters. Exercises, subjective questions, objective type multiple choice questions are also included at the end of chapters.

*The book has Sixteen chapters. The key feature of the book are:*

- Chapter 1 and 2 deals with Applied Thermodynamics
- Chapter 3 deals with Steam and Steam Cycles
- Chapter 4 to 6 contains Boilers
- Chapter 7 and 8 deals with Fuel and Draught
- Chapter 9 consist of the study of Steam Engine and Testing
- Chapter 10 and 11 deals with Steam Nozzle and Turbine
- Chapter 12 discussing topic on Condenser
- Chapter 13 and 14 contains topics on I. C. Engines Theory and Testing
- Chapter 15 Gas Turbine
- Chapter 16 Air Pollution and Control.

*The book within its 928 pages it comprise the following*

- \* 546 Self-illustrative neatly drawn sketches
- \* 43 Useful tables
- \* 293 Solved Examples
- \* 500 Objective Type Multiple Choice Questions
- \* 905 Exercises and Subjective Questions

It is hoped that this book will satisfy the need of the Mechanical Engineering students preparing for the B.Tech/B.E. examinations of almost 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. and other similar competitive and professional Examinations. It should also be of an immense help to the practising Engineers.

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#### Appendix A SHORT QUESTIONS FOR VIVA-VOCE

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