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DR. SADHU SINGH



REFRIGERATION AIR CONDITIONING

Refrigeration and Air Conditioning

Author :	Sadhu Singh
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Product Description

Refrigeration and Air-Conditioning is a compulsory subject for the B Tech Mechanical Engineering and other allied branches. It is offered in the final year of the degree program. It is also taught to Diploma students. With the global problem of environment pollution, warming and ozone layer depletion, the importance of this subject has increased manifold in the engineering education. The subject is also important from the point of view of job opportunities as it is an essential part of any competitive examination. Many books on this subject are available in the market but most of these books do not cover the various aspects of this subject. The author has a vast experience of teaching and administration in reputed institutions and Universities of the country. The author has also long experience of association with the National level examining bodies like UPSC and State Level Public Service Commissions to conduct examinations for National and State Services. This vast experience of the author has been utilized in writing the book. The book contains seventeen chapters on : Basic Concepts of Thermodynamics, Fundamentals of Refrigeration, Air Refrigeration Cycles, Aircraft Refrigeration Systems, Simple Vapour Compression Systems, Multi - Stage Vapour Compression Systems, Vapour Absorption refrigeration Systems, Refrigerants, Refrigeration Equipment, Cryogenics, Steam Jet Refrigeration System, Psychometric. Comfort Air-Conditioning, Cooling and Heating Load Estimation, Ducts Design, Fans, and Applications of Refrigeration and Air - Conditioning. A large number of Multiple - Choice Questions from Gate and Civil Services Examinations have been given in the form of appendices. Useful Tables and Charts have been given at the end of the book. Numerical Problems from Indian Engineering Services Examinations conducted by the UPSC are given chapter wise.



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Author

Dr. Sadhu Singh is a retired professor of Mechanical Engineering of Govind Ballabh Pant university of Agriculture & Technology, Pantnagar. He graduated in Mechanical Engineering with Hons, from Punjab University, Chandigarh, M.Sc. (Mechanical Design & Production Engineering) and Ph.D. from Kurukshetra University, Kurukshetra. His teaching experience spans 15 years at Regional Engineering College (now NIT), Kurukshetra and 19 years at Pantnagar University. He has been Professor & Head, Mechanical Engineering Department and Dean, Faculty of Engineering & Technology at Pantnagar. He has been Director (Colleges). Punjab Technical University, Jalandhar.

