

## ACKNOWLEDGEMENT

The author is indebted to Dr. B. Banerjee, Head of the Department of Mathematics for his guidance in developing the present thesis, and expresses his gratitude to some of the esteemed foreign reviewers for their scholarly suggestions for improving the presentations of some of the problems. The author also wishes to thank Dr. S. Dutta, Head of the Department of Mechanical Engineering and Dr. P. K. Choudhury, Head of the Department of Physics for their interest in the subject. Thanks are also due to Mr. D. Nandi for his enthusiastic efforts in preparing the final manuscript and to Mr. T. Dutta for drawing the figures. Principal Dr. B. Sen deserves, in special, the author's utmost gratefulness for his encouragement and generous support in the pursuit of the present work.