ACKNOWLEDGEMENTS

The author takes this opportunity to express his profound gratitude and appreciation to his thesis supervisor, Prof. M. Lal for his inspiring and valuable guidance and constant encouragement which he provided throughout the course of this research.

The author also wishes to express his deep and sincere thanks to Prof. A. K. Kamal, Head of the Electronics and Comm. Engg. Department, University of Roorkee, for taking keen interest and extending encouragement during the preparation of this work.

It is with a sense of gratitude and affection that the author records his indebtedness to Dr. Harpreet Singh for fruitful discussions, useful comments, helpful advice and his keen interest throughout the period of this investigation.

The author is specially grateful to Prof. S. C. Dutta Roy (IIT Delhi) for useful discussions and helpful suggestions on Chapter V.

The author has pleasure in thanking Prof. R. W. Newcomb, Prof. Sanjib K. Mitra, Prof. Theodre A. Bickart, Prof. B. D. O. Anderson, Prof. Y. Tokae, Prof. A. Ruberti, Prof. C. T. Chen, Prof. V. G. K. Murti, and Prof. R. Yarlagadda, for various suggestions and for the material received from them in connection with the preparation of this thesis.

The author also wishes to thank Mr. R. Parthasarathy, Dr. S. C. Puri and Dr. K. U. Ahmad for discussions and assistance.

The financial support received from the Government of India under the Quality Improvement Programme is gratefully acknowledged. Special thanks are also due to the authorities of the Aligarh Muslim University, Aligarh, in general, and Prof. Jalaluddin—Head of the Elect. Engg. Department—in particular, for deputing the author under QIP for the Ph.D. Programme at the University of Roorkee, Roorkee.

Finally, the author is thankful to Mr. R. C. Sharma for his elegant typing of this manuscript.