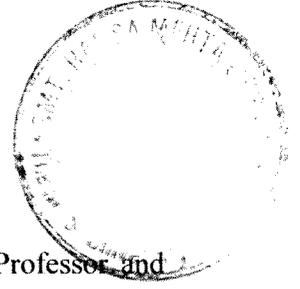


ACKNOWLEDGEMENT



I am highly indebted to my research guide Prof. Smita A. Kanitkar, Professor and Head of Electrical Engineering Department, Faculty of Technology and Engineering, M. S. University Baroda for her valuable guidance, inspiration, support and kind help to complete the research work.

I am grateful to Prof. B. S. Parekh, Dean, Faculty of Technology and Engineering, M. S. University Baroda for his consent and kind cooperation.

I thank all the faculty members of Electrical Engineering Department, Faculty of Technology and Engineering, M. S. University Baroda for their valuable suggestions.

I am also thankful to the administrative and supporting staff of Electrical Engineering Department, Faculty of Technology and Engineering, M. S. University Baroda for helping me in my work.

I would like to thank Prof. A. B. Patel, Prof. A. S. Ranade, Head of Electrical Department and Prof. U. A. Patel, Section Head (EE) of Institute of Technology, Nirma University, for permitting me to do my Ph.D. work under Faculty of Technology and Engineering, M. S. University, Baroda.

Thanks to my parents and family members for their continuous support and encouragement during the research work.

I would also like to acknowledge all my friends whose timely help has gone a long way in this work.

JITENDRA G. JAMNANI