ACKNOWLEDGEMENT

First, I express my gratitude to the Almighty, who blessed me with the zeal and enthusiasm to complete this research work successfully. I am extremely thankful to my supervisor Dr. Ratul Kumar Baruah, Associate Professor and Electronics and Communication Engineering Department, Tezpur University, Tezpur Assam for their motivation and tireless efforts to help me to get deep knowledge of the research area and for supporting me throughout the life cycle of my M. Tech. dissertation work. Especially, the extensive comments, healthy discussions, and fruitful interactions with the supervisors had a direct impact on the final formand quality of M. Tech dissertation work.

I am also thankful to Prof. Santanu Sharma, Head of the Department and Dr. Durlov Sonowal, Assistant Professor, Electronics and Communication Engineering Department, for their fruitful guidance through the early years of chaos and confusion. I wish to thank the faculty members and supporting staff of the Electronics and Communication Engineering Department for their full support and heartiest cooperation.

This thesis would not have been possible without the hearty support of my friends. My deepest regards to my parents for their blessings, affection, and continuous support. Also, Finally, I thank GOD, the Almighty, for giving me the inner willingness, strength, and wisdom to carry out this research work successfully.

(Dorothy Das)