ACKNOWLEDGEMENT

It gives me immense pleasure to put on record my feelings for those who have been instrumental in bringing this thesis to completion. Writing this acknowledgment is one of those rare moments when I look back in time, recall and reminisce things about past. I feel gratitude towards this institution and the people whose unconditional help was mandatory for me to complete my thesis.

To begin with I would like to acknowledge Almighty God who has been the driving force in all my efforts. I owe my deepest sincere thankfulness to my parents who have given me the strength to overcome all my failures and keep me floated above all frustrations and days of no results. I have no words to express my regards and feelings for my grandmom, sisters and Nitin jiju who have just shower me with unconditional love and care during my toughest time.

Sometimes, words are too reticent to mark one’s inward feelings and here I am experiencing the same as I am falling short of words to express my deepest sense of appreciation and regards for my worthy guide, Professor Tiluk, Raj Bhardwaj, former Professor of Pharmaceutical Chemistry, University Institute of Pharmaceutical Sciences Panjab University, Chandigarh. The insight and dynamism with which he guided the work requires no elaboration. What all I know today about the process of research, I have learned it from him. His rational persona, untiring and unlimited support, focused guidance, constructive criticism and above all, his availability to me both when I was delighted with the research and when I was despaired of it, instigated me in putting my hundred percent efforts. He has been a father figure for me all these years I have known him (Thank you sir!)

No words are enough for our mentor Professor Harishan Singh. He has been source of unending energy and his personality, thoughts and charisma gave me motivation for research in field of steroids.

I owe my deepest regards for Dr Manoj Kumar, Associate Professor, Panjab University for being my co-supervisor and guiding force in work. His deep insight into science and constant generation of new ideas helped tremendously in my work. His dedication towards work is infectious. All those uncounted hours he has spent going through the manuscripts and keeping tab on minute details was highly appreciable. His availability round the clock for any problem made me so comfortable that I never felt alone in my efforts.

I owe my sincere thanks to Professor Karan Vasisht, Chairperson, University Institute of Pharmaceutical Sciences, Panjab University Chandigarh for providing me the facilities, support and inspiration to complete my work successfully.

I gratefully acknowledge Professor R.W. Hartmann and Dr Jorg Haupenthal from Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Germany for carrying out 5α-reductase inhibitory activity of synthesized compounds. I would like to express my sincere thanks to Professor Tapas Mukhopadhyay, National Centre for Human Genome Studies and Research, Panjab University, Chandigarh for carrying out the cell line studies. I can’t forget to thank Professor V.R. Sinha who always allowed me to use any facilities which were required for my work and being a constant source of encouragement and inspiration.

Sometimes it is immensely difficult to put plethora of emotions in mere words. The same perplexity haunts my mind in penning down my sincere thanks to my fiancée Ruchita (Ruchi). She
has been my pillar of support. I am lucky to have such a personality in my life who has fulfilled my life with love, care and understanding. Without her being in my life I wouldn’t have been able to complete research work with ease I have been able to as she absorbed all my frustration and negative thoughts. Her constant encouragement, positive thinking and innovative ideas helped me in dealing with the difficulties and pressure at work.

My sincere thanks are due to my lab mate Suresh Thareja for providing congenial atmosphere during work in laboratory. I found a friend and nice person in him. I will never forget his cooperation, timely suggestions and help in my whole life. His dedication towards work is something to be admired of. I wish him good luck in all his future endeavours.

I would also like to thank Abhilaasha Verma, Vaibhav and Nilambara to help me out with the research work. Their selfless attitude towards life is what I learned from them during my interaction with them (Thank you very much).

I extend my deepest regards to all my juniors Preeti, Megha Misra, Priyanka (who later joined Ph.D.), Rohit Shukla, Tania and Amrita who have been great help and support for all the things. They built an atmosphere in laboratory where flow of ideas and mutual respect for each other made work easier. I thank them to listen to all my disappointments and celebrating success together. I won’t forget to say special thanks to my dear friends Kaisar and Amit with whom I shared a true friendship and other colleagues Disha, Rajinder, Aasha, Saurabh, Honey, Vinod, Vipin, Srdhar, Kiran, Poonam, Harikesh, Manoj, Rohit, Pratap and Rajnish who made my stay comfortable and happy at the Panjab University.

I would like to express my sincere thanks to Mr. Avtar Singh who rendered me help in interpreting and running out the NMR spectras. Without him being there my research wouldn’t have been in the shape it is presently. He is a nice person and always helped in time of trouble with his ideas.

It is impossible to forget technical help and cooperation extended to me by Mr. Ravinder, Mr. Kishori Lal, Mr. Ramashankar, Mr. Dhiru, Mr. Sushil, Mr. Dhaman Chand, Mr. Swaran Singh, Mr. Shaadi Lal, Mr. Rikhi Chand, Ms. Maninder, Mr. Mangat, Mr. P.D. Chaudhary, Mr. Dayal, Mr. Sham Singh , Mr. Sahib Singh and Ms. Ranjit Kaur (special thanks to her for relentlessly carrying out the IR spectral analysis).

Mere words cannot enunciate my gratitude, love and affection towards my dear friends Ajay, Sunny, Abhinav, Aditya, Ruchi, Sanchita, Amritjot, Pooja, Lalit, Navejot, Parveen, Haroon, Sudhir, Akhil, Chitresh, Raju, Maansi, Raman, Heena, Rajesh, Jaswant, Harpreet, Gurpreet, Mohit, Deepika and Bhavneet who have made me believe principle, to see the good in everything and be constructive always.

In the end if I miss somebody name that won’t make his or her contribution any less in my life and work and I owe an apology to them for missing their names.

The financial assistance to carry out research work received from University Grants Commission is gratefully acknowledged so are the gift samples of steroids received from CIPLA Ltd., Mumbai and Dr. Reddy’s Laboratories, Hyderabad.