ACKNOWLEDGEMENT

With great reverence, I express my warmest feelings with deepest sense of gratitude to my Major Guide, Er. H. H. Mashru, Professor, Department of Soil and Water Conservation Engineering, College of Agricultural Engineering and Technology, JAU, Junagadh. I have no words to express my heartfelt thanks for his illuminating guidance, unfailing encouragement, scholarly suggestions and constructive criticism during the course of my research and preparation of this thesis. I deem it as my privilege to work under his able guidance. I ever remain grateful to him.

May I make this opportunity to thank all the members of my advisory committee, Minor Guide Dr. P. N. Sarsavadiya, Professor, Department of Renewable Energy Engineering, CAET, JAU, Junagadh, Dr. H. D. Rank, Professor and Head, Department of Soil and Water Conservation Engineering, CAET, JAU, Junagadh, Dr. H. R. Vadar, Associate Professor and member of Advisory committee, DFRS, JAU, Targhadiya and Dr. D. V. Patel, Associate Professor, Department of Statistics, College of Agriculture, JAU, Junagadh for their constant attention, formulation of curriculum and offering valuable suggestions throughout the period of investigation.

I express my warmest feelings with deepest gratitude to Dr. A. R. Pathak, Hon’ble Vice-Chancellor, Junagadh Agricultural University, Junagadh, Dr. V. P. Chovatia, Director of Research and Dean PG Studies, Junagadh Agricultural University, Junagadh, Dr. N. K. Gontia, Principal and Dean, CAET, JAU, Junagadh for giving me opportunity for completing research work and providing necessary academic facilities.

My heartfelt thanks to Dr. H. V. Parmar, Associate Professor, Department of Soil and Water Conservation Engineering, CAET, JAU, Junagadh, Dr. G. V. Prajapati, Associate Professor, Research Testing and Training Centre, CAET, JAU, Junagadh, Dr. R. J. Patel, Assistant Professor, Department of Soil and Water Conservation Engineering, CAET, JAU, Junagadh, Prof. P. B. Vekariya, Assistant Professor, Department of Soil and Water Conservation Engineering, CAET, JAU, Junagadh, Prof. D. S. Thanki, Assistant Professor, CAET, JAU, Junagadh and Er. P. J. Bagada, Technical Assistant, CAET, JAU, Junagadh and all other staff members of the Department of Soil and Water Conservation Engineering, JAU, Junagadh, for their support during the period of my study.
I would like to thank Dr. J. M. Modhvadiya, Farm manager, Mr. H. K. Lakhnotra, Agricultural Assistant and all other staff members of instructional farm, Department of Soil and Water Engineering, CAET, JAU, Junagadh for their support during the period of my study to move this work.

I am fortunate to have good friends Er. Janaki, Er. Hemangi, Er. Daksh, Er. Saurav, Er. Kashyap, Er. Mamtha, Er. Sreeja, Er. Dhaval, Er. Maithili and Nidhi for their great support, timely help and kind cooperation during the course of my study and field work. and I would also like to thank my all junior friends for their great support during my field work.

It is difficult to find words to express how much gratitude and heartfelt respect I have for my beloved Family, specially my Father Mr. Arajnabhai Karangiya, Mother Mrs. Lakhiben Karangiya, my brother Mahesh and my sister Chetna for their continued encouragement and inspiration throughout the study.

From the depth of my heart I express my deep sincere gratitude to the Almighty “Lord Krishna” and “Goddess veravri ma”, for the Blessings they had bestowed upon me to do this work.

Place: Junagadh
Date: 04/07/2018 (Karangiya Bhavisha A.)