

Acknowledgements

I would like to take this opportunity to thank all the people who assisted and advised me during my study. First and foremost, I would like to express my deepest gratitude to my supervisors, Prof. Dr. Abdul-karim L. Beheer and Asst. Prof. Dr. Fatima R. Abdulhussein , for providing me with their invaluable insight and constructive criticism for the research I have done, and for their endless inspiration, guidance, and encouragement.

I would like to thank Prof. Dr. Majeed J. Hussein, Prof. Dr. Ahmed A. Kazam, Prof. Dr. Salam N. Baqer, Asst. Prof. Ala'a D. Amir, and Dr. Uday A. Al-Jarah for their help and support. And thanks for Inst. Hayder Abdul-Zahrah who helped with the statistical part in the study.

I would like to express my thankfulness to all of my friends, very special thanks to my friends, Iman H. Hussein, Hala A. Ahmed, Zulala H. Abbed, and Luma K. Hessani for their help and solidarity.

Also, I would like to thank my kind family, my dad, sisters and brothers, for their help and support that they offer to me without fail, and for being always there when I need them during my whole life.