PREFACE

The author would like to express hers gratitude to God Almighty for all of His love and blessings, so the author enabled to accomplish this research on time. The title of this thesis is "The Effect of Using Android-Based Learning Media in Increasing Motivation and Physics Learning Outcomes" and it was written for a Bachelor's degree in Physics Education at University Medan State's Faculty of Mathematics and Natural Sciences.

On this occasion, the author wishes to express his gratitude to Prof. Dr. Ridwan Abdullah Sani, M.Si, as thesis supervisor who has given the author with invaluable assistance and recommendations during the production of this thesis. Prof. Sahyar, Yul Ifda Tanjung S.Pd, M.Pd, Prof. Dr. Derlina, M.Si and Dr. Nurliana Marpaung, M.Pd, as examiner lecturers who has provided author with numerous comments, suggestion and ideas from research planning to the conclusion of this thesis. To Bilingual Class Coordinator, Dr. Ely Djulia, M.Pd and secretary for Bilingual Class Dr. Techn Marini Damanik, M.Si. The authors also express their gratitude to the lecturers and staff of the Department of Physics who have helped the author during the completion of her studies at Unimed.

The author would also thank you to Mr Bambang Hardian Damanik, S.Pd as the Principal of Al-Ulum Integrated Islamic High School and to Mrs. Yosrafikah Nursah, S S.Pd as a teacher in the field of physics studies who has helped and guided the author during the research and to the teachers and administrative staff of Al-Ulum Integrated Islamic High School who have helped the writer during the research. Thanks also to the students of class X MIA 1 and X MIA 2 Al-Ulum Integrated Islamic High School who have supported the preparation of this thesis.

Especially, the author would like to thank the author's parents, beloved father mother who always give love, attention, support, motivation, prayers and materials that the author can complete this thesis properly. The author also thanks to PESP 17's comrades, who have provided enthusiasm and motivation in undergoing lectures. Thanks also to the writer's friends Eri Santi, Aulia Ramadhani, Elfi Dwi Ansa

Nainggolan, Dwi Anggreani who always help and giving advices to author during this thesis writing.

The author realizes that this thesis still has shortcomings and deficiency; however, while expecting constructive criticism and suggestions, the author hopes that this thesis can be useful for readers and related parties.

