ACKNOWLEDGEMENT

First and foremost, the writer would like to devote the greatest thankfulness to The Almighty God Jesus Christ, for His guidance, love and blessing that He gives in her life especially in doing this thesis.

In this opportunity, she would like to express her deepest gratitude to Prof. Dr. Herbert Sipahutar, M.S, M.Sc as her thesis supervisor for his endless precious time spared in guiding, advising and correcting the draft of the thesis until its present form. The gratitude are also expressed to Prof. Dr. Binari Manurung, M.Si, Dr. Fauziyah Harahap and Dra. Martina Restuati as her examiner for their suggestion, guidance and great inputs in the attempt to meet the requirements of the content presented in this thesis.

The writer would like also to extend her sincere thankfulness to Prof. Drs. Motlan, M.Sc, Ph. D., as dean of the Faculty of Mathematics and Natural Science, State University of Medan, to Prof. Dr. rer.nat Binari Manurung, M.Si as Coordinator of Bilingual Program, to Drs Zulkifli Simatupang as head of Biology Departement, to Drs M. Yusuf Nasution as her academic supervisor who has guide during academic program, and to all lecturers who have taught the valuable knowledge to her. May God protect them in all activities they do.

In the process of undertaking her study, the writer wishes to express her profound and sincere gratitude to her beloved father L Ginting and mother H Br Tarigan for their everlasting love, pray, education in life, moral and financial support. Also thanks to her sister Lea Christianna Ginting who have walk together and fighting together during the study, her brother Jhon Chalvin Ginting for his, pray and support. All of writer families whose names are not mentioned also receive her appreciation for their encouragement that has made her to finish the study.

Her thanks should also go to Mr Tomi Jaya Principal of SMA Negeri 1 Kabanjahe, Bastaria Sinulingga, S.Pd., M.Pd Principal of SMA Negeri 2 Kabanjahe, Alberto Colia, S.Pd., M.Pd principal of SMA Negeri 1 Berastagi and Drs Josua Perangin angin Principal of SMA Negeri 1 Tigapanah for their
cooperative attitude in allowing her to conduct the research in the school. Also thanks to I Perangin –angin, S.Pd Biology teacher in SMA Negeri 1 kabanjahe, Dra M br Ginting Biology teacher in SMA Negeri 2 Kabanjahe, F br Ginting Biology teacher in SMA Negeri 1 Berastagi and H Nainggolan Biology teacher in SMA Negeri 1 Tigapanah for their kindness participate and help in research.

She would like to takes this opportunity to thank to all friends in Bilingual Biology Education Program 2010, to her friend Kalawati and Evi S Ginting, to her small Group in KTB Manna Community (Dewi, Helma, Herlina, Marta, Tiara and Sist Henny Manurung), to her brothers & sisters in KK Tedissalyk Beruriah (Dolly, Sadar, Yoseph, Theo, Siska, Dian, Leusy, Kamsia, Emmy), to her SADO Fretty and Lisca, to my friends Koordinasi UMKKP UP MIPA 2014 (Oripa, Meyta, Reni, Fretty, Dewi, RinaB, RinaR, Tahando, Hertianna, Marta, Apriani, Sulastry) and all of ministry component for their pray and support

Finally, the writers realizes that this thesis could possibly be far from being perfect, for its improvement all contributive critics are warmly appreciated. Thank you.
May God Bless us.

Medan, 7 April 2015
Writer
Lea Christina Br Ginting