FOREWORD

Praise and thanks to God Almighty, for all His Grace and guidance as well as the blessings of faith and health so that the author can complete the thesis with the title "Analysis of Student Misconception Using Three-Tier Multiple-Choice Diagnostic Tests on Reaction Rate Material in SMA Negeri 2 Percut Sei Tuan". The preparation of this thesis is one of the requirements to obtain a Bachelor of Education degree in the Department of Chemistry, Faculty of Mathematics and Natural Sciences, State University of Medan.

On this occasion the author would like to thank Mrs. Apt. Nora Susanti, S.Si., M.Sc. as the thesis supervisor who has provided a lot of guidance and advice to the author since the beginning of the proposal preparation, proposal seminar, research implementation until the preparation of this thesis until completion. Thanks also go to the examiners Prof. Dr. Ramlan Silaban, M.Sc, Prof. Dr. Muhammad Yusuf, M.Si, and Mrs. Susilawaty Amdayani, S.Si., M.Pd. who have provided input and suggestions for the perfection of the preparation of this thesis. Thank you to the lecturers of the chemistry department, especially to Mrs. Elfrida Ginting, S.Si., M.Sc., Ph.D. as the Academic Advisor who has provided motivation.

Thanks also go to the Principal, teachers and students of SMA Negeri 2 Percut Sei Tuan who have helped carry out this research. This sheet is also a medium for the author to express his gratitude to all those who always support the author in working on the thesis. The author realizes that all efforts will not be realized without the help of all parties, therefore with all humility the author would like to thank:

The Savior Lord Jesus Christ who is always there at every step of the author
in completing this journey. Thank you for always giving hope and miracles
at the right time in the midst of the author's despair and for carrying the
author when unable to move forward and being a source of strength in the
midst of uncertainty. Thank you for being a home for the author to shed tears
of joy.

strength in the midst of uncertainty. Thank you for being a home for the author to shed tears of joy.

- 2. The author's first love, Dad Ramendra Tarigan and Mom Rasta Barus who always give encouragement, hugs, prayers, and affection to the author. The figure of parents who managed to make the author rise from the word give up. The author realizes that every word in this thesis is the fruit of hard work and prayers of parents. This thesis is an offering to you from your little daughter who has now grown up.
- 3. My three dearest siblings, brother Rava Suranta Tarigan, sister Priska Claudia Tarigan, and younger brother Radikha Tarigan who always provide support and encouragement.
- The extended family of grandparents, grandmothers, and all siblings of father and mother who always provide support, moral and material assistance.
- 5. My best friend, Naomi Naibaho who always provides support and encouragement to the author. A great woman who always convinces the author to go through various life challenges. Thank you for being a good listener for the author.

The author realizes that this thesis still has many shortcomings and limitations. Therefore, the author expects helpful criticism and suggestions for the improvement of this thesis. The author hopes that this thesis can be useful for related parties.

Medan, May 29, 2024 Author,

Gracia Kristy Tarigan

IDN: 4201131003