Thesis:

Analysis of Student Misconceptions Using Three-Tier Multiple-Choice Diagnostic Tests on Reaction Rate Material in SMA Negeri 2 Percut Sei Tuan

Name

: Gracia Kristy Tarigan

IDN

: 4201131003

Study Program : Bilingual Chemistry Education

Department

: Chemistry

Approval: Thesis Superviso

apt. Nora Susanti, S.Si., M.Sc IDN. 19781022 200912 2 001

Acknowledge:

Chemistry Deparment

Head,

Dr. Ayi Darmana, M.Si IDN. 19660807 199010 1 001 **Bilingual Program** Coordinator,

Dr. Ely Djulia, M.Pd

IDN. 19660724 199103 2 012

9680730 199203 2 001

Graduated: May 22, 2024

ORIGINALITY STATEMENT PAGE

I declare with truth that this thesis manuscript is my own work, and all sources, both quoted and referred to in the manuscript, have been correctly stated in the citation sources and bibliography.

If in the future it is known and can be proven that there are elements of plagiarism in this thesis manuscript, I am willing to have this thesis canceled and processed in accordance with applicable laws and regulations (Law No. 20 of 2003, article 25 paragraph 2 and article 70).

Medan, May 29, 2024

Declare,

Gracia Kristy Tarigan

IDN. 4201131003

APPROVAL PAGE FOR PUBLICATION OF FINAL THESIS FOR ACADEMIC PURPOSES

As an academic member of Medan State University, I am the undersigned:

Name : Gracia Kristy Tarigan

IDN : 4201131003

Study Program : Chemistry Education Study Program

Faculty : Faculty of Mathematics and Natural Sciences

Type of Work : Thesis

for the development of science, agree to grant Medan State University Non-

Exclusive Royalty Free Rights to my scientific work entitled:

"Analysis of Student Misconceptions Using Three-Tier Multiple-Choice

Diagnostic Tests on Reaction Rate Material in SMA Negeri 2 Percut Sei

Tuan"

along with existing devices (if needed). With this Non-Exclusive Royalty Free

Right, Medan State University has the right to store, transfer/format, manage in

the form of a database, maintain, and publish my final project as long as I keep

my name as the author/creator and as the copyright owner.

Thus I make this statement in fact to be used properly.

Made in: Medan

On Date: May 29, 2024

Which,

Gracia Kristy Tarigan

IDN. 4201131003

iii

CURRICULUM VITAE



Gracia Kristy Tarigan, the author of the thesis entitled "Analysis of Student Misconceptions Using Three-Tier Multiple-Choice Diagnostic Tests on Reaction Rate Material in SMA Negeri 2 Percut Sei Tuan", was born in Tanjung Selamat, December 13, 2001. The author is the second child (of four siblings) of Ramendra Tarigan (father) and Rasta Barus (mother). The author started formal education at SD Negeri 118154 Bandar Gula Timur/PNKA (2018-2014). After elementary school, the author continued his education at SMP Negeri 1 Bilah Barat (2014-

2017). Then the author continued his education at SMA Negeri 3 Rantau Utara, majoring in science (2017-2020). In 2020, through the SNMPTN route, the author became a student in the Bilingual Chemistry Education Study Program, Department of Chemistry, Faculty of Mathematics and Natural Sciences, State University of Medan. On May 22, 2024, the author passed the thesis defense examination, and was entitled to use the Bachelor of Education (S.Pd) degree.