

PREFACE

Praise the author's gratitude to Allah SWT for His blessings and grace, which have given health and safety so that the author can complete this thesis properly. This thesis is entitled "**The Development Test Instrument Based on Procedural Knowledge of Fluid Dynamic Topic**". This thesis is submitted to complete some of the requirements for obtaining a Sarjana Pendidikan degree in the Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan. The preparation of this thesis has gone through a long and exhausting path and various stages in accordance with the standard procedures applicable at FMIPA Unimed, starting from the stage of determining the research topic, preparing and conducting seminars on proposals, conducting research, preparing the thesis, and defending the thesis. The selection of research topics is based on current problems.

The author realizes that the preparation of this thesis will not be completed without the support of various parties, both directly and indirectly. Through this opportunity, the author would like to express his gratitude to all those who have helped in the preparation of the thesis. A great thanks goes to Mr. Sabani, S.Pd., M.Si as Thesis Supervisor, for his extraordinary guidance, motivation, and direction so that all stages in the preparation of this thesis can be passed well. To Mr. Prof. Dr. Sahyar, M.S., M.M, Mrs. Prof. Dr. Derlina, M.Si, and Mr. Mukti Hamjah Harahap, M.Si as examiners who have provided a lot of criticism and suggestions for improvement starting from the proposal seminar to the stage of defending the thesis, so that this thesis can be completed properly. The author also expresses his deepest gratitude to Mr. Dr. Ridwan Abdullah Sani, M.Si, Mr. Drs. Abu Bakar, M.Pd, Mrs. Irma Imama Nst, S.Pd and Mrs. Shabrina Dzahroh, M.Pd for their invaluable assistance through validation of research instruments. The author also does not forget to thank the Headmaster, Physics Teachers and students at SMA PAB 8 Saentis, for their help in accepting and allowing the author to conduct research at the school.

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Medan, April 25th, 2024
Author

A handwritten signature in black ink, appearing to read 'Eri Santi', with a stylized flourish at the end.

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