

ABSTRAK

Ramadhani, Ilham. 2023. *Pengembangan Instrumen Five Tier Multiple Choice Diagnostic Test untuk Mengidentifikasi Miskonsepsi Siswa dan Penyebabnya pada Materi Hidrolisis Garam*. Skripsi. Tanjungpinang: Jurusan Pendidikan Kimia, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Hilfi Pardi, S.Si., M.Si. Pembimbing II: Dina Fitriyah, S.Pd., M.Si.

Kata Kunci: *five tier multiple choice diagnostic test, miskonsepsi, hidrolisis garam.*

Penelitian ini merupakan penelitian pengembangan dengan model pengembangan 4D. Tujuan dari penelitian ini adalah untuk mengembangkan sebuah instrumen berupa five tier multiple choice diagnostic test untuk mengidentifikasi miskonsepsi siswa dan penyebabnya pada materi Hidrolisis Garam. Subjek dari penelitian ini adalah siswa kelas XI MIPA 1 SMA Negeri 1 Teluk Sebong. Hasil dari uji miskonsepsi, ditemukan miskonsepsi siswa sebesar 27.5% pada kesetimbangan ion dalam larutan garam, 37.5% miskonsepsi siswa pada identifikasi perubahan warna indikator lakmus merah dan biru dalam beberapa larutan garam, 35% miskonsepsi siswa pada analisis sifat asam basa dari suatu larutan garam, 45% miskonsepsi siswa pada analisis reaksi kesetimbangan ion dalam larutan garam, dan 29% miskonsepsi siswa saat menentukan pH larutan garam. Sumber jawaban siswa yang mengalami miskonsepsi sebesar 79,07% bersumber dari pemikiran siswa sendiri sementara 20,93% bersumber dari penjelasan guru.

ABSTRACT

Ramadhani, Ilham. 2023. *Development of a Five Tier Multiple Choice Diagnostic Test Instrument to Identify Students' Misconceptions and Their Causes in Hydrolysis of Salt Material*. Thesis. Tanjungpinang: Chemistry Education Department, Teacher Training and Education Faculty, University of Maritim Raja Ali Haji. Advisor: Hilfi Pardi, S.Si., M.Si. Co-advisor: Dina Fitriyah, S.Pd., M.Si.

Keywords: *five tier multiple choice diagnostic test, misconception, hydrolysis salt*

This research is a Research and Development (RnD) type research using 4D Development model. The purpose of this research is to Development an instrument in the form of five tier multiple choice diagnostic test that is used to identify students' misconceptions and their causes in Hydrolysis of Salt. The subjects of this research are students from XI MIPA 1 SMA Negeri 1 Teluk Sebong. To obtain the data, researcher used several methods such as interview, questionnaire, and test. From the misconception test, a total of 27.5% of students' misconceptions were found on the ionic balance in saline solution, 37.5% of students' misconceptions were found on the identification of color changes in the red and blue litmus paper in several saline solutions, 35% of students' misconceptions were found on the analysis of acid-base properties in a saline solution, 45% of students' misconceptions were found on the ionic balance reaction in a saline solution, and 29% of students' misconceptions were found in determining the pH of a saline solution. A total of 79.07% of the students' misconception answers were coming from the students' comprehension itself , while 20.93% of misconceptions were coming from the teacher's explanation.