

ABSTRAK

Ayu Masytah Dewi, NIM 4191121012 (2023). Pengembangan Tes Objektif *Higher Order Thinking* (HOT) Pada Materi Keseimbangan dan Dinamika Rotasi Di SMA/MA.

Penelitian ini bertujuan untuk mengembangkan instrumen tes objektif *Higher Order Thinking* (HOT) pada materi keseimbangan dan dinamika rotasi di SMA/MA yang memenuhi kualifikasi pada aspek validitas, reliabilitas, tingkat kesukaran, daya beda, efektivitas pengecoh dan respon siswa terhadap instrumen yang dikembangkan. Jenis penelitian yang digunakan yaitu *Research and Development* (R&D) yang mengacu pada model ADDIE. Penelitian ini dilakukan di SMA Negeri 16 Medan dengan subjek penelitian dari kelas XII MIA 2 dan XII MIA 3. Berdasarkan hasil uji validasi ahli diperoleh instrumen tes objektif sangat valid pada aspek isi, konstruksi, dan bahasa berdasarkan indeks V Aiken. Hasil penelitian uji coba butir soal diperoleh bahwa dari 50 soal yang dikembangkan 30 soal dinyatakan layak dan valid. Uji reliabilitas diperoleh nilai sebesar 0,928 dengan kategori reliabilitas sangat tinggi. Tingkat kesukaran diperoleh nilai dengan rentang 0,30-0,67 kriteria 30 butir soal dinyatakan sedang. Uji daya beda dengan rentang 0,067- 0,667 kriteria 25 butir soal baik, 5 butir soal cukup. Efektivitas pengecoh diperoleh 10 butir soal sangat baik, 14 butir soal baik, dan 6 butir soal cukup sehingga pengecoh telah berfungsi. Instrumen tes yang dikembangkan mendapat 74,4% respon positif dari peserta didik dengan kategori baik. Kesimpulan dari penelitian pengembangan yang telah dilakukan adalah instrumen tes objektif *higher order thinking* (hot) pada materi keseimbangan dan dinamika rotasi dengan menggunakan metode ADDIE menghasilkan soal yang layak (valid dan reliabel) dan mendapat respon yang baik dari pengguna.

Kata Kunci: *Higher order thinking* (Hot), tes objektif, Keseimbangan dan Dinamika Rotasi



ABSTRACT

Ayu Masytah Dewi, NIM 4191121012 (2023). *Development of a Higher Order Thinking (HOT) Objective Test on Balance and Rotational Dynamics in SMA/MA.*

This research aims to develop an objective Higher Order Thinking (HOT) test instrument on balance and rotation dynamics in SMA/MA that meets the qualifications in the aspects of validity, reliability, level of difficulty, difference, effectiveness of distractors and student responses to the instrument developed. The type of research used is Research and Development (R&D) which refers to the ADDIE model. This research was conducted at SMA Negeri 16 Medan with research subjects from classes XII MIA 2 and XII MIA 3. Based The results of the expert validation test showed that the objective test instrument was very valid in the aspects of content, construction and language based on the V Aiken index. The results of the research on the test items showed that of the 50 questions developed, 30 questions were declared feasible and valid. The reliability test obtained a value of 0.928 with very high category. The level of difficulty was obtained with a value in the range of 0.30-0.67, the criteria for 30 questions were declared moderate. Different power test with a range of 0.067-0.667, the criteria for 25 questions were good, and 5 The question items were sufficient. The effectiveness of the distractor was found to be 10 very good questions, 14 questions were good, and 6 questions were sufficient so that the distractor was functioning. The test instrument developed received 74.4% positive responses from students in the good category. The conclusion of the development research that has been carried out is that the Higher Order Thinking (HOT) objective test instrument on balance and rotation dynamics using the ADDIE method produces appropriate questions (valid and reliable) and gets a good response from users.

Keywords: *Higher order thinking (Hot), objective test, balance and rotational dynamics*

