CHAPTER V CONCLUSION AND SUGGESTION

5.1. Conclusion

The conclusions that can be drawn from this development research refer to the research objectives and discussion as follows:

- 1. An objective test of the conceptual knowledge of Mechanical Waves material has been developed in high school. The development of this objective test uses the revised ADDIE development research model based on expert input, namely 2 lecturers and 1 teacher and a limited field test for 35 students and a broad field test for 70 students of class XI MIA SMA Negeri 2 Percut Sei Tuan. Judging from the qualitative analysis, the quality of the objective test of conceptual knowledge of Mechanical Waves material in SMA is very good. Meanwhile, in terms of quantitative analysis, 40 items (80%) were valid and 10 items (20%) were revised because they did not meet the existing criteria.
- 2. The objective test of conceptual knowledge that has been developed has a reliability of 0.91 (high test reliability).
- 3. Based on the level of difficulty, 7 items (18.4%) were easy, 27 items (71%) were moderate, and 4 items (10.6%) were difficult.
- 4. Based on the discriminatory power, 30 items (78.9%) were very good, 5 items (13.2%) were good, 2 items (5.3%) were sufficient, and 1 item (2.6%) was bad.
- 5. Based on the effectiveness of the distractors, 20 distractors were found to be inefficient or the distractors were not functioning.

5.2. Suggestion

Based on the results of research on the development of objective tests of conceptual knowledge of physics on Mechanical Waves material in high school, the following suggestions can be put forward:

- 1. The objective test instrument for conceptual knowledge can be developed on materials other than mechanical wa[ves,
- 2. This test instrument that has been tested and analyzed can be used as a question bank for conceptual knowledge of Mechanical Wave material that can be used in schools,
- 3. Other researchers who want to do similar research are advised to follow the rules of good question preparation and choose other materials so that conceptual knowledge questions for all physics materials are available in the field,
- 4. Other researchers who want to conduct similar research wherever possible take subjects from schools of varying quality, so that with many subjects with different conceptual knowledge will make the data more accurate and varied,
- 5. Other researchers are advised to use other applications to analyze the items quantitatively so that the time required is more effective.

