## **CHAPTER V**

## **CONCLUSIONS AND RECOMMENDATIONS**

## 5.1 Conclusion

Based on the results of the data analysis that has been carried out in this study, the following conclusions can be drawn:

- 1. The results of the analysis of the needs for assessment instruments at SMA Negeri 14 Medan stated that they needed HOTS Literacy based cognitive assessment tools on acid base material and based on a questionnaire, it was found that 100% of students agreed to develop assessment tools, especially cognitive domains based on HOTS Literacy as a form of training thinking skills high level students.
- 2. The development of a HOTS Literacy based cognitive assessment tool was carried out by creating an initial product, then it was validated by 5 validators consisting of 4 material expert validators and 1 practitioner expert validator, namely a chemistry teacher at SMAN Negeri 14 Medan. This assessment tool follows the BSNP criteria and several feasibility tests are carried out, such as validity, reliability, difference power and difficulty level tests.
- 3. The level of feasibility of the HOTS Literacy based cognitive assessment tools on acid base material based on assessment according to the BSNP resulted in an average percentage of 83% with the acquisition of criteria, namely high and in valid/eligible category.
- 4. Based on the responses given by students in trials of the HOTS Literacy based cognitive assessment tools on acid base material, the criteria were very high with an average percentage of 97%. This shows that the HOTS Literacy-based cognitive assessment tool developed is considered very good.

## 5.2 **Recommendations**

As for some suggestions in this study are as follows:

- Researchers suggest chemistry teachers to use this assessment tool on the subject of acids and bases as one of the learning tools, because this assessment tool has been declared very good and feasible to be applied or used in chemistry learning activities, especially on acid-base material.
- 2. Development of HOTS Literacy based cognitive assessment tolls on acid base material can be made on other chemistry materials, so that they can measure higher-order thinking skills and increase students' understanding of other chemical concepts.
- 3. This research can provide an overview and further explanation of the measurement of high-level thinking skills of students at school in solving a chemistry problem on the subject of acids and bases or other subjects to be used as a comparison in further research.

