CHAPTER V
CONCLUSION AND SUGGESTION

5.1. Conclusion

Based on the result and data obtained, the research conclusion concerning the research objectives that have been formulated are as follows:

1. The feasibility level of HOTS-based test instruments based on material experts is declared very feasible to use. 20 items of multiple-choice questions and 5 items of essay questions have an average feasibility score of 100.
2. The feasibility level of HOTS-based test instruments based on evaluation experts is declared very feasible to use. 20 items of multiple-choice questions and 5 items of essay questions have an average feasibility score of 88.
3. The validity of HOTS-based biology summative test instrument in the form of multiple-choice an essay question is 100% valid.
4. The reliability of HOTS-based biology summative test instrument in the form of multiple-choice question is 0,77 (high reliability category) and essay question is 0,64 (enough reliability category).
5. The difficulty index of HOTS-based biology summative test instrument is dominated by medium level (72% in multiple-choice question and 75% in essay question). The difficulty index of multiple-choice question nearly approached the balanced proportion, while essay question was still far from the balanced proportion.
6. The discriminating index of HOTS-based biology summative test instrument is dominated by items categorized as good (72% in multiple-choice question and 100% in essay question).
7. The distractor function of HOTS-based biology summative test instrument is dominated by item categorized as very good (67%).

5.2. Suggestion

Based on the result and conclusions that have been obtained in this study, the following point is suggested:

1. Future research of the development of HOTS-based biology test instrument should be ensure that the question was arranged in accordance with the construction and language aspects.
2. Future research of the development of HOTS-based biology test instrument should be ensure that the question was arranged with a balanced proportion of difficulty level.
3. Biology teachers and biology preservice students should continuously develop and implementing the use of validated HOTS-based questions in biology evaluation to train students' higher order thinking skills.