CHAPTER V CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the result research of image-based student worksheet in human digestive system for grade XI Science SMA previously stated, and then it can be concluded as follows:

- To develop worksheet as the new additional learning resource media in the human digestive system topic was conducted by researcher. Then validated to material and learning design experts. The results of expert validation in human digestive system topic by material and learning design experts showing that: (1) material aspect (73.3%); (2) presentation aspect (66.67%); (3) readability aspect (73.3%); and (4) graffiti aspect (92%).
- 2. The image-based student worksheet effect the learning outcome of student. The result implementation of the worksheet on student's learning outcome can be concluded as follows: (1) The average of student's learning outcome by using image-based student worksheet was 79,48, and using student's handbook was 74,65 where as the average result had been reached minimum criteria of completeness in that school. (2) The increasing of student's learning outcome in experiment class (image-based student worksheet as instruction students) was significantly 6,47% higher than control class (handbook as instruction students).

5.2 Recommendations

Based on research findings outlined in conclusion of the study, proposed some recommendation as follow:

1. For students, image-based student worksheet can be used to improve learning outcome of student caused its systematic and attractive performance that able to interest and stimulate students to learn independently then students are motivated to learn and be able to assess their own ability.

- 2. For biology teachers in SMA N 1 Sidikalang, image-based student worksheet can be used as instructional material especially in implementing the learning activities on human digestive system topic as an alternative to improve student's learning outcome.
- 3. For researcher as prospective teacher in the next future, the results of this study can be used as information source and feedback to increase information and knowledge about the benefit of using image-based student worksheet as instructional material in teaching and learning process.