CHAPTER V
CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Based on the results and discussion, the following conclusion are:

1. The average rate of the critical thinking skills of biology education students class of 2019 in the microbiology courses through online learning at Universitas Negeri Medan are in the medium category and it is 59,78. The average rate of critical thinking skill indicators are: elementary clarification was in the high level (77,14), basic support was also in the high level (64,68), inference was in the low level (44) advanced clarification was in the high level (55,37),strategy and tactic (57,71). Students can be categorized as having good enough critical thinking skills
2. The average rate of the creative thinking skills of biology education students class of 2019 in the microbiology courses through online learning at Universitas Negeri Medan are in the medium category and it is 57,97. The average rate of creative thinking skill indicators are: fluency was in the high level (70), flexibility in the medium level (54,90) , originality was in the medium level (46,53) and elaboration was in the medium level (60,46). Students can be categorized as having good enough creative thinking skills

5.2. Recommendation

Based on the results and discussions of this study, the recommendations from this study are as follows:

1. For students to focus more on improving critical and creative thinking skills in the microbiology course by increasing the frequency of study hours and more often practicing critical and creative thinking skills questions during online learning.
2. For lecturers who teach in the microbiology course to be able to develop learning methods that can improve students' critical thinking and creative

thinking skills, so that students can improve their critical and creative thinking skills during online learning.

3. For advanced researcher on students' critical thinking and creative thinking skills in microbiology courses to further improve students' critical thinking and creative thinking skills during online learning.