## CHAPTER V CONCLUSION AND SUGGESTION

## **1.1 Conclusion**

The conclusion of this research according to the research result data ,Systematic presentation is done according to the research purpose that have been formulated. The conclusion that have been obtained is as follows :

- Test instrument have been made that based on E-learning on sound material, the test in developed using ADDIE method, where the step include Analyze, Design, Develop, Implement and Evaluate
- 2. The test instument that have been developed have fullfiled the requirement of good test intrument include validity and item analysis. Means the test instrument is feasible to test the critical thinking skills on E-learning, and able to train student critical thinking skill.
- 3. Validity were declared valid with presentations for large-scale classes, namely: {0.74; 0.76; 0.63; 0.72; 0.77; 0.44; 0.22 }. the reliability scores obtained from large-scale classes are in the range of {0.72} with reliability being in the high category.
- 4. Dificulty level obtained in the range of: {0.71; 0.57; 0.57; 0.44; 0.50; 0.5;
  0.3 } obtained 72% of the questions are in the medium category, 14% of the questions are in the difficult category and 14% of the questions are in the easy
  - category. As for the Discriminating power data obtained with scores in the range of {0.39; 0.46 ; 0.35 ; 0.24 ; 0.36 ; 0.15 ; 0.12 }. So that the data obtained in large classes 72% of questions have Discriminating Power, 14% questions have good Discriminating Power and 14% questions have poor Discriminating Power.

- 5. The process of converting essay questions into question type questions in Moodle consists of several steps, namely:
  - a. Move all questions to Moodle
  - b. enter the results and units for each answer
  - c. Determine the value of each Answer and unit error
- 6. The result of critical thinking test is 9 student with high level thinking skill, 9 with low level thinking skills and 9 with Low level critical thinking skill.

## **1.2 Suggestion**

According to the result and conclusion in this research, as the follow-up in this research there are several suggestion as follow :

- 1. For further researchers who want to conduct similar research, it is better if the research subjects used are students who have just studied the related material so that students are able to answer based on the results of their understanding of the material and students can be more conducive in working on the questions.
- 2. When conducting this type of research, further researchers are advised to accompany students when working on questions. This is because the online test are vulnerable to cheating.
- 3. Students are expected to practice working on Physics problems from HOTS type questions, especially questions with a creative level (C6) and in the form of contextual questions or questions relating to everyday life. This is so students are used to being able to solve various math problems. Students are expected to be accustomed to solving questions in a coherent way from understanding problems, planning solutions, implementing plans, and reviewing the truth of problem solving
- 4. The research can be further continued by analyzing answer sheet of every answer made.