

TABLE OF CONTENT

	<i>Page</i>
Approval Sheet.....	<i>i</i>
Originality Statement Sheet.....	<i>ii</i>
Publication Approval Sheet	<i>iii</i>
Biography	<i>iv</i>
Abstrak	<i>i</i>
Abstracts	<i>i</i>
Acknowledgement	<i>i</i>
Table of Content	<i>ii</i>
List of Figure.....	<i>v</i>
List of Table	<i>vi</i>
List of Attachments.....	<i>vii</i>
CHAPTER I INTRODUCTION	
1.1. Research Background.....	1
1.2. Problem Identification.....	4
1.3. Scope of the Problem	4
1.4. Formulation of the Problem	4
1.5. Limitation of the Problem	5
1.6. Objectives of Research.....	5
1.7. Benefits of Research.....	6
1.8. Operational Definitions	6
CHAPTER II THEORITICAL REVIEW	
2.1. Theoritical Framework.....	7
2.1.1. Understanding of Learning	7
2.1.2. Understanding Learning Result	8
2.1.3. Cognitive Ability	9
2.1.3.1. The Cognitive Process	9
2.1.3.2. The Knowledge Dimensions	9
2.1.4. Understanding Learning Difficulties.....	14
2.1.5. Causes of Learning Difficulties	15

2.1.5. 1. Internal Factors.....	17
2.1.5. 2. External Factors.....	18
2.1.6. Diagnosis of Learning Difficulties	19
2.1.7. Learning Difficulties Characteristics	20
2.1.8. Efforts to Overcome Learning Difficulties.....	22
2.2. Virus Material.....	24
2.2.1. Virus History.....	24
2.2. 2. Characteristic of Virus	25
2.2. 2.1. Size and Shape.....	25
2.2.2.2. Structure and Function.....	26
2.2.3. Reproduction of Virus	27
2.2.3.1. Reproduction of Bacteriophage.....	28
2.2.3.2. Reproduction of Animal Virus	29
2.2.4. Habitat.....	29
2.2.5. Classification	30
2.2.5.1. Bacterial Viruses	30
2.2.5.2. Eukaryotic Microorganism Viruses	30
2.2.5.3. Plant Viruses	31
2.2.5.4. Animal Viruses.....	31
2.2.6. Viruses in Human Life.....	31
2.2.6.1. Advantages Viruses.....	31
2.2.6.2. Dis-Advantages Viruses	32
2.2.7. Prevention Against the Virus	34
CHAPTER III RESEARCH METHODS	
3.1. Research Location and Time.....	35
3.2. Population and Sample.....	35
3.2.1. Population	35
3.2.2. Sample	35
3.3. Types of Research	35
3.4. Research Procedure.....	36
3.5. Research Instruments	37
3.5.1. Multiple- Choice Tests.....	37

3.5.2. Questionnaires	39
3.5.3 Questionnaire Validity Test.....	40
3.6. Data Collection Technique	40
3.6.1. Validity Test.....	40
3.6.2. Reliability Tests	41
3.6.3. Test difficulty level.....	42
3.6.4. Discriminatory Power	43
3.7. Data analysis technique	44
3.7.1. Analysis of Learning Test Results	44
3.7.2. Analysis of Questionnaire Results	47
CHAPTER IV RESULTS AND DISCUSSIONS	
4.1. Results	49
4.1.1. Student's Learning Results	49
4.1.1.1. Test Results Analysis (Cognitive Process Aspects)	51
4.1.1.2. Test Results Analysis (Indicator Aspects)	54
4.1.1.3. Student's Learning Difficulty Factors.....	58
4.2. Discussions	60
4.2.1. Student's Learning Results	60
4.2.2. Student's Learning Difficulty (Cognitive Process Aspects) ...	60
4.2.3. Student's Learning Difficulty (Indicator Aspects)	70
4.2.4. Student's Learning Difficulty Factors.....	76
CHAPTER V CONCLUSIONS AND SUGGESTIONS	
5.1. Conclusions	86
5.2. Suggestions	88
REFERENCES	89
ATTACHMENTS	96

LIST OF FIGURE

	<i>Page</i>
Figure 2.1. Viral studies in plants	24
Figure 2.2. The virus forms	26
Figure 2.3. Body Structure of Virus.....	26
Figure 2.4. Bacteriophage reproduction (phage)	27
Figure 2.5. Animal Virus Reproduction.....	29
Figure 2.6. Virus that attacks tobacco leaves and a dog	31
Figure 2.7. Ebola virus (<i>Ebola virus</i>) causes Ebola disease.....	32
Figure 2.8. Plants attacked by the virus	33
Figure 3.1. Research Procedure Scheme	37
Figure 4.1. Average Score of Test	51
Figure 4.2. Learning Difficulty Factors Diagram	59

UNIVERSITAS NEGERI
MEDAN
UNIMED

THE
Character Building
UNIVERSITY

LIST OF TABLE

	<i>Page</i>
Table 3.1 Amount of Student Samples	32
Table 3.2. Learning Outcomes Test Grid	35
Table 3.3. Questionnaire Answer Score Scale.....	37
Table 3.4. Student Learning Difficulty Questionnaire Grid	37
Table 3.5. Reliability Tests Level	40
Table 3.6. Difficulty Test Level.....	40
Table 3.7. Criteria Discriminatory Power.....	41
Table 3.8. Percentage of the Learning difficulty category	43
Table 3.9. Distribution of Student Learning Difficulties in Cognitive Aspects.....	43
Table 3.10. Distribution of Student Learning Difficulties on Virus Material Learning Indicators.....	44
Table 3.11. Tabulations of Learning Difficulties Factors	46
Table 3.12. Percentage of Influence Learning Difficulties Factors	47
Table 4.1. Frequency Distribution Score of Students X MIPA	49
Table 4.2. Distribution of Student's Learning Ability to Answer Question Based on Cognitive Aspects	52
Table 4.3. Distribution of Student's Learning Difficulties (Cognitive Aspects)	54
Table 4.4. Distribution of Student's Learning Ability to Answer Question Based on Learning Indicators Aspects	55
Table 4.5. Distribution of Student's Learning Difficulties (Learning Indicators Aspects)	57
Table 4.6. Distribution of Learning Difficulties Factors Through Questionnaires.....	59

LIST OF ATTACHMENT

	<i>Page</i>
Attachment 1. Syllabus	96
Attachment 2. Lessons Plan	97
Attachment 3. Operational Word	108
Attachment 4. Instrument Test.....	109
Attachment 5. Answer Key of Instrument Test	111
Attachment 6. Answer Sheet.....	112
Attachment 7. Questionnaire of Learning Difficulties	114
Attachment 8. Answer Sheet of Questionnaire.....	118
Attachment 9. Validity Test Table	119
Attachment 10. Calculation of Validity Test	120
Attachment 11. Reliability Test Table.....	122
Attachment 12. Calculation of Reliability Test	123
Attachment 13. Table of Test Difficulty Level.....	124
Attachment 14. Calculation of Test Difficulty Level	125
Attachment 15. Discriminatory Power Test Table.....	126
Attachment 16. Calculation of Discriminatory Power Test.....	127
Attachment 17. Student's Learning Score Table.. ..	129
Attachment 18. Learning Results (Cognitive Aspect) Table	133
Attachment 19. Percentage Learning Difficulties (Cognitive Aspect)	143
Attachment 20. Learning Results (Learning Indicators Aspect) Table.....	145
Attachment 21. Percentage Learning Difficulties (Learning Indicators Aspect).....	152
Attachment 22. Questionnaires Results Table.....	154
Attachment 23. Percentage Learning Difficulties Factors.....	160
Attachment 24. Research Documentation.. ..	161