# CONTENTS

| Declaration                                      | i |
| Acknowledgements                                | ii |
| List of Contents                                 | iv |
| List of Tables                                   | viii |

## CHAPTER – I: THE PROBLEM

1.0. Introduction 1  
1.1. Theoretical Frame Work of the Study 2  
1.2. Need and Justification of Study 23  
1.3. Statement of the Problem 26  
1.4. Operational Definitions of the Key Terms Used 26  
1.5. Objectives of the Study 28  
1.6. Hypotheses of the Study 29  
1.7. Delimitation of the Study. 30

## CHAPTER – II: REVIEW OF RELATED LITERATURE

2.0. Introduction 32  
2.1. Studies done Abroad 34  
2.2. Studies done in India 46  
2.3. Trends Emerging from the Review of Related Literature 60  
2.4. The Present Study 62
CHAPTER – III: DESIGN OF THE STUDY

3.0. Introduction 66
3.1. Population 66
3.2. Sample 67
3.3. Tools Used 68
3.4. Method of Study 74
3.5. Data Collection Procedure 75
3.6. Statistical Techniques Used 76

CHAPTER – IV: ANALYSIS AND INTERPRETATION OF DATA

4.0. Introduction 82
4.1. Status of Scientific Attitude, Scientific Aptitude and level of Academic Achievement in Science of Class X Students. 83
4.2. Relationship between Scientific Attitude and Academic Achievement in Science of Class X Students. 86
4.3. Relationship between Scientific Aptitude and Academic Achievement in Science of Class X Students. 88
4.4. Multiple Effect of Scientific Attitude and Scientific Aptitude on Academic Achievement in Science. 89
4.5. Effect of Scientific Attitude on Academic Achievement in Science of Class X Students. 91
4.6. Effect of Scientific Aptitude on Academic Achievement in Science of Class X Students. 92
CHAPTER – V: FINDINGS AND CONCLUSION

5.0. Introduction 95
5.1. Status of Scientific Attitude, Scientific Aptitude and the Level of Academic Achievement in Science of Class X Students. 96
5.2. Relationship between Scientific Attitude and Academic Achievement in Science of class X Students. 97
5.3. Relationship between Scientific Aptitude and Academic Achievement in Science of Class X Students. 98
5.4. Multiple effect of Scientific Attitude and Scientific Aptitude on Academic Achievement in Science of Class X Students. 98
5.5. Effect of Scientific Attitude on the Academic Achievement in Science of Class X Students. 99
5.6. Effect of Scientific Aptitude on the Academic Achievement in Science of Class X Students. 101
5.7. Measures to Improve the Quality of Science education in Schools in East Khasi hills district of Meghalaya. 102

CHAPTER – VI: IMPLICATIONS AND RECOMMENDATIONS

6.0. Introduction 111
6.1. Implications and Recommendations of the Study. 111
6.2. Suggestions for Further Research. 118
CHAPTER – VII: SUMMARY

7.0. Introduction. 121
7.1. Need and Justification of the Study. 122
7.2. Statement of the Problem. 124
7.3. Operational Definitions of the key Terms Used. 124
7.4. Objectives of the Study. 125
7.5. Hypotheses of the Study. 127
7.6. Delimitation of the Study. 128
7.7. Design of the Study. 128
7.8. Analysis and Interpretation of Data. 130
7.9. Findings and Conclusion. 136
7.10. Implications and Recommendations. 141

BIBLIOGRAPHY 145

APPENDICES