CONTENTS

LIST OF TABLES (XI)
LIST OF FIGURES & GRAPHICS (XII)
LIST OF SYMBOLS (XIII)
LIST OF ABBREVIATIONS (XIV)
PREFACE (XV)

CHAPTER 1 INTRODUCTION 1-15

1.1 Introduction
1.2 Roll and importance of study
1.3 The link between historical and conceptual levels of learning

CHAPTER 2 LITERATURE REVIEW 16-63

2.1 A brief review of the work already done in the field
2.2 Background to the study
2.3 Occurrence of Algebra Problems in Indian Works
CHAPTER 3 MOTIVATION AND OBJECTIVES 64-67

3.1 Motivation
3.2 Research Problem
3.3 Objectives

CHAPTER 4 VARIOUS LEVEL AND SUBLEVELS IN THE DEVELOPMENT OF ALGEBRA 68 - 85

4.1 The perceptual level
4.2 The conceptual level
4.3 The abstract level

CHAPTER 5 CONCEPTUALIZATIONS AND ISSUES RELATED TO DEVELOPMENT OF ALGEBRA 86 – 95

5.1 Role of Generalization and Abstraction in Initial Development
5.2 Methodology
5.3 Deduction/Output

CHAPTER 6 A STUDY OF STUDENTS’ BEHAVIOR FOR INTEGRATION OF HISTORY OF MATHEMATICS WITH ALGEBRA 96–103

6.1 Research Questions and tools
6.2 Hypotheses & Statistical technique

6.3 Data Analysis and Interpretation

CHAPTER 7 CONCLUSION & RECOMMENDATION

8.1 Conclusion

8.2 Recommendations

8.3 Future Scope of Work

REFERENCES

APPENDICES

I- List of Papers’ Published

II- List of Seminars & workshop