# TABLE OF CONTENTS

ABSTRACT

LIST OF ABBREVIATIONS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION
   1.1. Prologue 1
   1.2. Wireless networks 2
      1.2.1. Infrastructure Networks 3
      1.2.2. Ad Hoc Wireless Networks 3
   1.3. Mobile ad-hoc networks (MANETS) 3
   1.4. Routing in ad-hoc wireless networks 4
      1.4.1. Classification of Routing Protocol 5
      1.4.2. Proactive protocols 6
      1.4.3. Reactive protocols 7
      1.4.4. Adhoc On demand Distance Vector Routing (AODV) 8
      1.4.5. Dynamic MANET On-demand (DYMO) 9
      1.4.6. Destination-Sequenced Distance-Vector Routing (DSDV) 10
   1.5. Performance metrics 11
   1.6. Flooding scheme in the network 12
   1.7. Scope of the Research 14
   1.8. Objectives of the Proposed Solution 15
   1.9. Problem Statement 15
   1.10. Research contribution 16
   1.11. Structure of the thesis 16
2. LITERATURE REVIEW

2.1. Introduction

2.2. Background of EMMDV Protocol

2.3. Multipath and MPR based AODV (MMDV) protocol
   2.3.1. Introduction
   2.3.2. Description of Multipath And MPR Based AODV (MMDV) Protocol
   2.3.3. Multipath and MPR Based AODV (MMDV) Protocol

2.4. Random Way point Model

2.5. Summary

3. RELATED WORK

3.1. Introduction

3.2. Adhoc On demand Distance Vector Routing (AODV) Protocol
   3.2.1. Introduction
   3.2.2. Description of Adhoc On demand Distance Vector Routing (AODV)

3.3. Destination-Sequenced Distance-Vector Routing (DSDV) Protocol
   3.3.1. Introduction
   3.3.2. Description of Destination-Sequenced Distance-Vector Routing (DSDV)

3.4. Performance Analysis of ADOV & DSDV

3.5. Summary
3.6. Adhoc On demand Multipath Distance Vector Routing (AOMDV) Protocol

3.6.1. Introduction

3.6.2. Description of Adhoc On demand Multipath Distance Vector Routing (AOMDV) Protocol

3.7. Performance Analysis of AODV & AOMDV

3.8. Summary

3.9. Multi Point Relay AODV (MPRAODV)

3.9.1. Introduction

3.9.2. Description of Multi Point Relay AODV (MPRAODV)

3.9.3. Multi Point Reply Flooding Algorithm

3.10. Performance Analysis of AODV & MPRAODV

3.10.1. Simulation Environment

3.10.2. Performance Metrics

3.11. Summary

4. PROPOSED SYSTEM

4.1. Introduction

4.2. Aim and Scope of Research

4.3. Proposed Methodology

4.4. Summary

5. ENHANCED MULTIPATH AND MPR BASED AODV (EMMDV)

5.1. Introduction

5.2. Backward Navigation Method

5.3. Proposed Algorithm

5.3.1. Modified Dynamic MPR (MDMPR)