

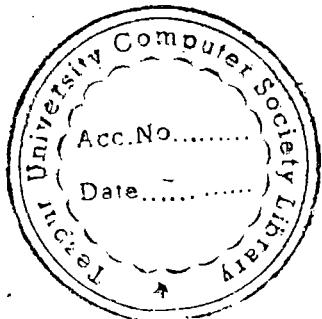
TABLE OF CONTENTS

	Page
1 INTRODUCTION	1
1.1 OVERVIEW.....	1
1.2 Motivation.....	1
1.3 Problem Definition.....	3
2 LITERATURE SURVEY AND RELATED WORKS	3
2.1 NEURAL NETWORKS	3
2.1.1 INTRODUCTION.....	3
2.1.2 BIOLOGICAL BACKGROUND	3
2.1.3 A BRIEF HISTORY OF NEURAL NETWORKS.....	5
2.1.4 COMPUTATIONAL MODEL OF NEURON.....	6
2.1.5 LEARNING	7
2.2 FUZZY INFERENCE SYSTEM	9
2.2.1 INTRODUCTION.....	9
2.2.2 MEMBERSHIP FUNCTIONS.....	10
2.2.3 TYPES OF FUZZY INFERENCE SYSTEM	11
2.3 ADAPTIVE NEURAL FUZZY INFERENCE SYSTEM (ANFIS)	13
2.3.1 INTRODUCTION.....	13
2.3.2 ARCHITECTURE AND BASIC LEARNING RULE	13
2.4 RELATED WORKS	16
3 PROPOSED MODEL FOR TIME SERIES PREDICTION	17
3.1 INTRODUCTION.....	17
3.2 VARIABLE SELECTION.....	18
3.3 DATA PRE-PROCESSING.....	18
3.4 NETWORK ARCHITECTURE.....	19
3.5 FLOW CHART AND ALGORITHM)	20
3.5.1 FLOW CHART FOR TRAINING	20
3.5.2 FLOW CHART FOR TESTING	20
3.5.3 ALGORITHM	21

4 EXPERIMENTAL SETUP AND RESULT	25
4.1 DATA COLLECTION	25
4.2 TOOLS.....	25
4.3 SYSTEM CONFIGRATION.....	25
4.4 RESULTS.....	26
5 FUTURE WORK	27
6 CONCLUSION	27
Bibliography	28

LIST OF FIGURES

FIGURE	Page
2.1 Basic Components of Biological Neurons.....	4
2.2 McCulloch and Pitt's perceptron model.....	7
2.3 Fuzzy inference system.....	9
2.4 Inference system with 2 inputs, 3 rules and 1 output	10
2.5 Network architecture of ANFIS	14
3.1 Network architecture for modified ANFIS	19
3.2 Flow chart for training	20
3.3 Flow chart for training	21



LIST OF TABLES

TABLE

	Page
2.1 Types of membership function.....	11
3.1 Hybrid learning procedure for ANFIS.	17
4.1 prediction result	26
4.2 comparison with results of other research papers on gold price prediction	26
