

**THE COMPARISON OF CHEBYSHEV POLYNOMIAL AND
PADE APPROXIMATION IN MODELLING THE RAINFALL
VOLUME IN MALAYSIA**

FARHAN ISKANDAR BIN ALIAS

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Universiti Teknologi MARA**

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ABSTRACT

Around the world, one of the most difficult subjects is the forecasting of rainfall. Since rainfall is essential to agriculture, forecasting it is important for our company's economics to thrive. In water resource engineering, such as efficient management of flood, drought, and mitigation, rainfall forecasting is crucial. Chebyshev Polynomials and Pade Approximation were the methods which are employed in this work. The goal of this study is to make the comparisons of outcomes of rainfall volume in some states in Malaysia such as Terengganu, Selangor and Perlis using those two methods. The accuracy of each method were estimated using the absolute errors. The finding proves that Pade approximation is the best method in predicting the rainfall volume in Malaysia. Then the whole study of this study is based on the data which provided by the Department of Statistics Malaysia.

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TABLE OF CONTENTS

DECLARATION BY THE SUPERVISOR	i
DECLARATION BY THE STUDENT.....	ii
ABSTRACT.....	iii
ACKNOWLEDGENT	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF GRAPHS	x
INTRODUCTION OF RESEARCH	1
1.1 Introduction.....	1
1.2 Background of study	1
1.3 Problem statement.....	2
1.4 Objectives	2
1.5 Significance of The Project.....	3
1.6 Scope of Project	4
1.7 Project Benefit	4
1.8 Definition of Terms and Concepts	5

1.9	Organization of Report	7
LITERATURE REVIEW		9
2.1	Introduction.....	9
2.2	Literature review	9
2.3	Conclusion	14
METHODOLOGY		16
3.1	Introduction.....	16
3.2	Research steps.....	16
3.3	Conclusion	24
IMPLEMENTATION.....		25
4.1	Introduction.....	25
4.2	Implementation of Methods.....	25
4.3	Conclusion	42
RESULT AND DISCUSSION		43
5.1	Introduction.....	43
5.2	Graph and Explanation	43
5.3	Chebyshev Polynomial Findings	45
5.4	Pade Approximation Findings	51