

## CONTENTS

	Page
Acknowledgement	iv
Abstract in Thai	v
Abstract in English	vi
Chapter 1 Introduction	1
Chapter 2 Preliminaries	3
2.1 Elementary definitions	3
2.2 $BQ$ -semigroups	4
2.3 Some equivalence relations on $BQ$ -semigroups	6
2.4 Semigroups of transformations	7
Chapter 3 Main Results	8
3.1 $(m, n)$ - $BQ$ -semigroups	8
3.2 Some equivalence relations on $(m, n)$ - $BQ$ -semigroups	12
3.3 Some semigroups of transformations which are $(m, n)$ - $BQ$ -semigroups	17
Chapter 4 Conclusion and Open Problems	35
4.1 $(m, n)$ - $BQ$ -semigroups	35
4.2 Some equivalence relations on $(m, n)$ - $BQ$ -semigroups	35
4.3 Some semigroups of transformations which are $(m, n)$ - $BQ$ -semigroups	36
4.4 Problems	37
Bibliography	38
List of Publications	40
Curriculum Vitae	41