

CONTENTS

	<u>Page</u>	
Chapter I	Introduction	001
Chapter II	Multivariate IFR/DFR Distributions.	
2.1	Introduction	10
2.2	MIFR class due to Brindley and Thompson	10
2.3	MIHR class due to Harris	19
2.4	The MDHR class	27
2.5	A subclass of bivariate IHR distributions	29
Chapter III	Multivariate IFRA Distributions.	
3.1	Introduction	36
3.2	Multivariate IFRA conditions due to Esary and Marshall	37
3.3	Inter-relationships among the conditions	39
3.4	Counter Examples	48
3.5	Some properties of the conditions	53
3.6	The MIFRA class due to Block and Savits	57
3.7	Examples of Multivariate IFRA distributions	61
3.8	A modification of definition of MIFRA class	71
Chapter IV	Multivariate NBU Distributions.	
4.1	Introduction	81
4.2	The MNBU [1] class	82
4.3	Closure properties of the class MNBU [1]	91
4.4	Examples of MNBU [1] distributions	94
4.5	The MNBU [2] class	97
4.6	Closure properties of the class MNBU [2]	101
4.7	Relation between MNBU [1] and MNBU [2] classes	107