Contents

Preface								
1	Introduction							
	1.1	Conve	x functions	1				
	1.2	Space	of integrable, continuous and absolutely continuous functions	4				
	1.3							
	1.4	Mean Value Theorems						
	1.5	<i>n</i> -Exponential Convexity						
	1.6	Examples of exponentially convex functions and Cauchy type means						
	1.7	Further Results on Majorization						
	1.8	Majorization Inequalities for Double Integrals						
	1.9	On Ma	ajorization for Matrices	59				
2	Majorization and n-Convex Functions							
	2.1	Majorization and Lidstone Interpolation Polynomial						
		2.1.1	Results Obtained by Lidstone Interpolation Polynomial	67				
		2.1.2	Results Obtained by New Green Functions and Lidstone					
			Interpolation Polynomial	79				
		2.1.3	Results Obtained for Jensen's and Jensen-Steffensen's Inequalities					
			and their Converses via Lidstone Polynomial	97				
	2.2		ization and Hermite Interpolation Polynomial	108				
		2.2.1	Results Obtained by Hermite Interpolation Polynomial	109				
		2.2.2	Results Obtained by Green Function and Hermite					
			Interpolation Polynomial	121				
		2.2.3	Results Obtained by New Green Functions and Hermite	122				
		224	Interpolation Polynomial	133				
		2.2.4	Results Obtained for Jensen's and Jensen-Steffensen's Inequalities	127				
	2.2	Maian	and their Converses via Hermite Interpolation Polynomial	137				
	2.3		ization and Taylor Formula	150				
		2.3.1	Results Obtained by Taylor Formula	150				
		2.3.2	Results Obtained by Green Function and Taylor Formula Results Obtained by New Green Functions and Taylor Formula	162 177				
		4.3.3	Keshus Odiamed by New Offeen Functions and Taylor Formilla	1//				

	2.4	Major	ization and Generalized Montgomery Identity	193			
		2.4.1	Results Obtained by Montgomery Identity	195			
		2.4.2	Results Obtained by Green Function and Montgomery Identity	203			
		2.4.3	Results Obtained by New Green Functions and				
			Montgomery Identity	214			
		2.4.4	Results Obtained for Jensens's and Jensen-Steffensen's				
			Inequalities and their Converses via Montgomery Identity	223			
		2.4.5	Results Obtained for Jensen's and Jensen-Steffensen's Inequalities				
			and their Converses via Green Function and Montgomery Identity	240			
	2.5	Major	ization and Fink Identity	250			
		2.5.1	Results Obtained by A. M. Fink's Identity	251			
		2.5.2	Results Obtained by Green Function and A. M. Fink's	263			
	2.6	Major	ization and Abel-Gontscharoff's Interpolating Polynomial	276			
		2.6.1	Results Obtained by Abel-Gontscharoff's Interpolating				
			Polynomial	277			
		2.6.2	Results Obtained by Green Function and Abel-Gontscharoff's				
			Interpolating Polynomial	288			
3	Majorization in Information Theory						
	3.1	Majorization, Csiszár Divergence and Zipf-Mandelbrot Law in					
		Discre	te Case	301			
	3.2	Major	ization and Csiszár Divergence in Integral Case	311			
	3.3	Furthe	er Results on Majorization and Zipf-Mandelbrot Law	321			
	3.4		ization via Hybrid Zipf-Mandelbrot Law in Information Theory	341			
	3.5	Major	iztion, "useful" Csiszár Divergence and "useful"				
		Zipf-N	Mandelbrot Law	348			
Bi	Bibliography						
In	index						
Αι	Author Index						