Contents

Fo	reword	ix			
Pro	eface	х			
An	Overview	1			
	PART ONE				
Ch	Chapter I: Core Banking Solution (CBS) 7				
1	Introduction	7			
2	General Characteristics	9			
3	System Architecture	11			
4	Access Control	15			
5	Operational Structure	17			
6	Functional Controls	19			
7	Accounting and Data Processing System	20			
8	Management Information System (MIS)	21			
9	Management of Technology Risks	22			
10	Operations Risk Management	25			
11	Limitations	26			
	PART TWO				
Cha	apter II: Cheque Payment System	29			
1	MICR Clearing	29			
2	Speed Clearing	31			
3	Cheque Truncation System (CTS)	31			
Cha	Chapter III: Card Payment System 35				
1	Characteristics of Card	37			
2	Card Payment Switch	39			

3	ATM Networks	40
	a) National Financial Switch (NFS)	40
	b) Other ATM Networks	41
4	Card Payment Network	42
5	Card Payment Devices	43
	a) Automated Teller Machine (ATM)	43
	b) Point of Sale (PoS) Terminal	47
	c) Micro-ATM	49
Cha	pter IV: Electronic Funds Transfer System	53
1	RTGS and NEFT	53
2	Electronic Clearing Service (ECS)	61
3	National Automatic Clearing House (NACH)	63
4	Immediate Payment Service (IMPS)	65
Chapter V: Aadhaar Based Payment Systems 67		
1	Aadhaar Payment Bridge System (APBS)	67
2	Aadhaar Enabled Payment System (AEPS)	69
	PART THREE	
Cha	pter VI: Other Digital Banking Channels	75
1	Internet Banking	75
2	Online Payment of Bills, Taxes and E-Commerce	77
3	Mobile Banking	81
4	Mobile Wallet (M-Wallet)	85
	PART FOUR	
Cha	pter VII: Treasury	91
1	Responsibilities	92
2	Activities	93
3	Organisational Structure	95

4	Systems and Solution	96	
Cha	99		
1	Negotiated Dealing System (NDS)	99	
2	CLS Multi-Currency Settlement System	100	
3	Clearcorp Dealing System	103	
	PART FIVE		
Cha	pter IX: Other Systems and Solutions	109	
1	Asset Liability Management (ALM) Solution	109	
2	Anti-Money Laundering (AML) Solution	111	
3	Wealth Management Solution	113	
4	Cash Management Service (CMS) Solution	115	
5	Customer Relationship Management (CRM) Solution	118	
6	Loan Origination System	120	
7	Online Settlement of Trading in Shares / Securities	122	
8	Aadhaar Based Account Opening	124	
Cha	127		
1	Banknote Processing Machine	127	
2	Cash Deposit Machine	128	
3	Currency Counting Machine	129	
4	Passbook Printer	130	
	PART SIX		
Cha	pter XI: Financial Communication Networks	133	
1	Indian Financial Network (INFINET)	133	
2	Structured Financial Messaging System (SFMS)	134	
3	Mail Messaging System (MMS)	136	
4	Society for Worldwide Inter-bank Financial	137	
Telecommunication (SWIFT)			

PΑ	RI	r Se	:VF	N

	PART SEVEN			
Cl	Chapter XII: Key Technology Initiatives of RBI 145			
1	Development of inter-bank payment system	145		
2	Establishment of Institute for Development and Research in Banking Technology (IDRBT)	148		
3	Promotion of Institutional Infrastructure for Inter-bank Payment, Trading and Settlement in Domestic and Foreign Currency	150		
4	Laws and Regulations	153		
5	Policy Directions	154		
6	Technical Committee on Mobile Banking	157		
Chapter XIII: Moving Forward		163		
Abbreviations		171		
Glossary				