CONTENTS

ACKNOWLEDGEMENTS ... ... ... 1

LIST OF TABLES ... ... ... ii-vi

LIST OF ILLUSTRATIONS ... ... ... vii-viii

CHAPTER I : INTRODUCTION ... ... ... 1 - 9
General Outline 1; Objectives 6; Methodology 7.

CHAPTER II : PATTERN OF URBAN GROWTH ... ... ... 10-23
Trend of Urbanization in India 10; Definition of Urban 11; Trend of Urbanization 11; Classification of Towns and Cities 13; Metropolitan Concept in India 16; Million Cities of India 18; Urbanization in the Year 2000 - 21; Conclusion 22.

CHAPTER III : GROWTH OF URBAN AGGLOMERATIONS IN INDIA 24-37
Introduction 24; Evolution of Cities During 1931-71 - 25; Pattern of Urban Growth 28; Growth Rate During 1951-61 - 30; Rapid Urbanization in 1961-71 - 33; Outlook 36.

CHAPTER IV : HISTORY AND EVOLUTION OF THE INDIAN METROPOLISES 38-69
Introduction 38; Ancient 38; Medieval 41; Modern 42; Evolution and Growth of the Selected Metropolises - Calcutta 46; Bombay 49; Delhi 52; Madras 57; Hyderabad 60; Bangalore 63; Kanpur 67.

CHAPTER V : DEMOGRAPHIC COMPOSITION ... ... ... 70-112
Introduction 70; Urban Population 70; Density Patterns 79; Migration 80; Mortality 82; Fertility 83; Age, Sex, Religion and Literacy 83; Working Population 87; Growth and Demographic Character of the Different Metropolis : Calcutta 88;
CHAPTER V (CONTINUED):

Density 90; Growth 90; Migration 90; Households 91; Sex Ratio 92; Literacy 92; Bombay 93; Age-Sex Distribution 95; Density 95; Migration 96; Literacy 96; Delhi 97; Density 98; Households 98; Migration 98; Sex-ratio 98; Madras 99; Growth 100; Density 100; Migration 101; Hyderabad 102; Bangalore 104; Kanpur 107; Recent Trend and Future Outlook 109.

CHAPTER VI : MORPHOLOGICAL STRUCTURE

Spatial Pattern 113; Standard Models and Indian City Forms 115; Indigenous Pattern 117; European Patterns 121; Military Cantonments 121; Civil Lines 122; Railway Colonies 123; Newly Planned Areas 124; Existing Metropolitan Structure : Population Distribution 124; Central Business Districts 126; Shopping Centres 127; Transformation in the Morphological Zones 128; Shape of the Metropolis 131; Outlook of the Future Pattern 132; Changes in the Morphological Pattern and Land Use : Calcutta 135; Bombay 139; Delhi 142; Madras 145; Hyderabad 147; Bangalore 150; Kanpur 153.

CHAPTER VII : BUSINESS FUNCTIONS

Introduction 156; Central Business District 158; Land Value 163; Sectional or Sub-Central Business Centres 165; Neighbourhood Business Centres 166; Local Business Centres or Isolated Store Clusters 167; Business and Commercial Activities of the Selected Metropolises: Central Business Character of Calcutta 169; Business Activities of Bombay 175; Commercial Centre of Delhi 177; Business Structure of Madras City 181; Commercial Structure of Hyderabad 182; Commercial Functions of Bangalore 186; Central Business Structure of Kanpur 188.

CHAPTER VIII : RESIDENTIAL STRUCTURE

Introduction 193; Residential Areas in the Ancient Period 194; Residential Areas in the Medieval Period 195; Residential Areas in
CHAPTER VIII (CONTINUED):
the Modern Period 196; Morphological Characteristics of the Residential Areas: (1) The Agrarian Setting 197; (2) Administrative Functions 197; (3) Building Types 198; (4) Incomplete Internal Differentiation 199; (5) Community Quarters 200; (6) Western Elements 200; Types of Residential Area 201; Residential Areas in the City Nucleus 203; Residential Areas in City Margins 204; Residential Areas in Relation to Other Land Uses 205; Central Business District 206; Land Values 207; Slums in the Metropolises 208; Slums of Calcutta 208; Slums of Bombay 214; Slums of Delhi 215; Slums in Madras 216; Slums in Hyderabad 217; Slums of Bangalore 218; Slums of Ahmedabad 219; Slums of Kanpur 219; Housing Problems 220; Morphology of Residential Landuse in the Metropolitan Areas of India: Calcutta 225; Bombay 230; Delhi 232; Madras 235; Hyderabad 236; Bangalore 238; Kanpur 240; Outlook 242.

CHAPTER IX: INDUSTRIAL FUNCTIONS
Introduction 244; Initial Growth 246; Impact on Morphology 248; Necessity of Industrialisation 250; Phases of Industrial Growth 251; Industrial Character of the Calcutta Metropolitan District 252; Bombay 260; Delhi 266; Industrial Structure of Madras City 271; Hyderabad 273; Bangalore 275; Ahmedabad 276; Kanpur 280; Regional Specialisation 284; Imbalance in Industrial Location 285; Occupational Structure 286; The Study of Livelihood Structure 291; Conclusion 293.

CHAPTER X: MISCELLANEOUS FUNCTIONS
Introduction 295; Administrative Functions 295; Delhi 296; Other Metropolises 297; Educational Functions 299; Calcutta 300; Delhi 301; Other Metropolises 302; Medical Facilities 304; Recreational Facilities 309; Religious and Cultural Functions 314.
CHAPTER XI: CIVIC AMENITIES

Introduction 316; Mass Transportation 319; Civic Amenities in Calcutta - Water Supply 320; Supply of Electric Power 323; Drainage and Sewerage 324; Garbage Disposal 326; Transportation 327; Calcutta Port 335; Civic Amenities in Bombay - Water Supply 336; Transport 338; Civic Amenities in Delhi - Water Supply 341; Disposal of Wastes 343; Power Supply 343; Transportation 344; Civic Amenities in Madras - Water Supply 347; Sewage 349; Garbage 350; Transport 350; Civic Amenities in Hyderabad - Water Supply 353; Sewerage 353; Transportation 355; Civic Amenities of Bangalore - Water Supply 356; Sewerage 357; Power Supply 358; Transportation 358; Civic Amenities of Kanpur - Water Supply 359; Sewerage 359; Power 360; Transportation 361; Conclusion 362.

CHAPTER XII: HINTERLAND OF THE METROPOLIS

General Outline 364; Umland of Calcutta 368; Hinterland of Calcutta 370; Haldia: A Special Case 375; Hinterland of Bombay 380; Hinterland of Delhi 383; Hinterland of Madras 387; Hinterland of Hyderabad 388; Hinterland of Bangalore 390; Hinterland of Kanpur 393; Conclusion 394.

CHAPTER XIII: METROPOLITAN CHARACTER OF CALCUTTA

— ITS GROWTH, DECAY AND RENEWAL — A CASE STUDY

Introduction 396; Dominance of Calcutta 397; Character of the Calcutta Metropolitan Region 399; Stages of Growth of Calcutta Metropolis and its Metropolitan Regions 401; (1) Pre-Industrial Phase (1690-1855) 401; (2) Period of Industrial Growth & Consolidation (1855-1931) 403; (3) Period of Rapid Urbanization and Metropolitan Growth (1931-1961) 408; Process of Development of the Calcutta Metropolitan District 410; Demographic Characters 410; Growth Rate 419; Growth of Civic Body and its Administration 421; Deterioration of the Urban Environment 423; Measures for Urban Renewal 433; Calcutta Metropolitan Development Authority 439; Changing Profiles of the CMD 443; Conclusion 446.
CHAPTER XIV: OUTLOOK OF THE FUTURE

Various Facets of the Metropolitan Growth 447; Problems in the Million Cities 448; Some Basic Problems - Finance 449; Housing 452; Transport 456; Pollution Hazards 459; Basic Services 460; Population Explosion 461; Metropolitan Government 462; Metropolitan Administration 463; Planning for the Metropolitan Cities 465; Objectives and Shortcomings of Master Plan 468; Outlook 470.

BIBLIOGRAPHY

PAGE 447-472 473-508