

Contents

	Page No.
Acknowledgement	<i>i-ii</i>
Contents	<i>iii-v</i>
List of Tables	<i>vi-viii</i>
List of Figures	<i>ix-xiv</i>
List of Abbreviations	<i>xv-xvi</i>

CHAPTER 1 INTRODUCTION	1-32
---	-------------

1.1	Introduction	1
1.2	History of Industrialisation	2
1.3	Statement of the Problem	4
1.4	Literature Review	5
1.5	Objectives	15
1.6	Hypothesis	15
1.7	Study Area	15
1.8	Database and Methodology	25
1.9	Limitations of the Study	30
1.1	Structure of the Thesis	30
	Resume	

CHAPTER 2 SPATIAL AND SEASONAL PATTERN OFGEOCHEMICAL PROPERTIES OF WATER	33-87
---	--------------

2.1	Introduction	33
2.2	Characteristics of Surface and Sub-Surface Water	36
2.3	Spatial and Seasonal Pattern	51
2.4	Seasonal Variability of Water Parameter	63
2.5	Average Level of Water Parameter During 2011 To 2013	66
2.6	Spatial and Seasonal Pattern of Average (2011-2013) Level of Parameters	72
2.7	Relationship and Seasonal Variability of Water Parameter	83
2.8	Discussion	84-87
	Resume	

88-110

CHAPTER 3
SEASONAL VARIABILITY OF GEOCHEMICAL PARAMETERS
OF SURFACE WATER

3.1	Introduction	88
3.2	Characteristics of Surface Water	88
3.3	Spatial and Seasonal Pattern	99
3.4	Seasonal Variability	106
3.5	Discussion	109
	Resume	

111-132

CHAPTER 4
SPATIAL AND SEASONAL PATTERN OF GEOCHEMICAL
PROPERTIES OF SOIL

4.1	Introduction	111
4.2	Characteristics of Soil	113
4.3	Spatial and Seasonal Pattern	117
4.4	Characteristics of Soil (Average of 2011-2013)	120
4.5	Spatial and Seasonal Pattern (Average of 2011-2013)	121
4.6	Seasonal Variability of Soil Parameters (Average of 2011-2013)	123
4.7	Distribution of Grain Size	124
4.8	Concentration of Iron and Nitrite in Sub-Soil	125
4.9	Correlation between Grain Size Distribution and the Parameters	127
4.1	Correlations between Grain Size (With Depth) and the Parameters	129
4.11	Discussion	129
	Resume	

133-160

CHAPTER 5
ASSESSMENT AND SUITABILITY OF INDUSTRIAL WASTE
DISPOSAL SITES USING GIS

5.1	Introduction	
5.2	Identification of Waste Disposal Sites	133
5.3	General Characteristics of Sub-Surface Water	134
5.4	Spatial Distribution of Sub-Surface Water	137
5.5	Suitability Analysis of Solid Waste Disposal Site	144
5.6	Discussion	148
	Resume	155

<p style="text-align: center;">CHAPTER 6</p> <p style="text-align: center;">HUMAN HEALTH IN THE NEIGHBOURHOOD OF CHEMICAL AND PETROCHEMICAL INDUSTRIES</p>		161-224
6.1	Introduction	
6.2	Overall Prevalence Rate	161
6.3	Age and Gender Wise Prevalence Rate	163
6.4	Prevalence Rate and Sources of Drinking Water	165
6.5	Prevalence Rate and Income	182
6.6	Prevalence Rate and Occupation	187
6.7	Prevalence Rate and Education	191
6.8	Prevalence Rate and Body Mass Index	195
6.9	Comorbidity	199
6.10	Gender Wise Comorbidity	203
6.11	Disease Wise Comorbidity	204
6.12	Correlation between Different Parameters and Prevalence Rate	212
6.13	Prevalence Rate and Socio-Economic Factors	216
	Resume	220
<p style="text-align: center;">CHAPTER 7</p> <p style="text-align: center;">CONCLUSIONS</p>		225-227
References		228-244
Household Schedule		245-246
Paper Cutting		247
Published Paper		