## ILLUSTRATIONS

· · · · ·

· . · · ·

,

.

FIG. NO.	CAPTION	PAGE NO.
. 1	LOCATION MAP	4
2	REGIONAL GEOLOGICAL MAP	24
3	TECTONIC MAP OF CAMBAY BASIN	34
4	LINEAMENTS AND ROSE DIAGRAM [OF LINEAMENTS] AROUND BARODA CITY	39
, 5	REGIONAL GEOMORPHOLOGY	43
_6	GEOMORPHOLOGY IN AND AROUND BARODA CITY	49
7	CONTOUR MAP OF BARODA CITY AND ITS SURROUNDINGS PREPARED FROM BENCH MARKS AVAILABLE IN SURVEY OF INDIA TOPOSHEET NOS. 46.F/3, 4 AND 7 [ 1973 - 75 ]	70
8	GUIDE FOR TEXTURAL CLASSIFICATION IN SOIL FAMILIES AND COMPARISON OF PARTICLE-SIZE SCALES	60
9	SAMPLING STATIONS FOR PHYSICO-CHEMICAL AND GEOTECHNICAL INVESTI- GATIONS	72
10	SOIL TYPES AND THEIR ASSOCIATION AROUND BARODA CITY	73
11	FENCE DIAGRAM OF THE STUDY AREA	74
12	URBAN LAND USE/LAND COVER MAP OF THE BARODA CITY & ITS SURROUND- INGS [BASED ON SURVEY OF INDIA TOPOSHEET NOS. 46.F/3, 4 AND 7 YEAR 1876 - 78]	134
13	URBAN LAND USE/LAND COVER MAP OF THE BARODA CITY & ITS SURROUND- INGS [BASED ON SURVEY OF INDIA TOPOSHEET NOS. 46.F/3, 4 AND 7 YEAR 1959 - 60]	135
14	URBAN LAND USE/LAND COVER MAP OF THE BARODA CITY & ITS SURROUND- INGS [BASED ON SPOT SATELLITE IMAGERY YEAR 1988]	136
15	TEMPORAL AND SPATIAL DISTRIBUTION OF LAND-USE CATEGORIES AND POPULATION GROWTH IN THE STUDY AREA	140
16	MAP SHOWING THE HISTORIC DEVELOPMENT AND DIRECTION OF GROWTH OF BARODA, BETWEEN 1000 B.C. TO 1500 A.D.	150
17	MAP OF BARODA SHOWING IMPORTANT LANDMARKS DURING ITS GROWTH BETWEEN 1511 A.D. TO 1947 A.D.	151
18	DIFFERENT PHASES OF BARODA URBAN SPRAWL	160
19	FRESHWATER AVAILABILITY FOR THE STUDY AREA	166
	Viii	Ibo

.

.

20	LOCATION MAP OF TWO MAIN WATER RESOURCES OF BARODA CITY	182	
21	MAP OF MAHI RIVER SHOWING LOCATION OF WATER QUALITY MONITORING STATIONS MENTIONED IN THE TEXT AND REFERRED TO IN OTHER FIGURES		
22	FOUR GRAPHS ILLUSTRATING THE BASIC PRINCIPLES OF TIME-DISTANCE PLOTS [AFTER HANOR 1988]		
23	TIME-DISTANCE PLOTS FOR TEMPERATURE, pH, CHEMICAL OXYGEN DEMAND [COD], BIOLOGICAL OXYGEN DEMAND [BOD], TOTAL DISSOLVED SOLIDS [TDS] AND CHLORIDES FOR THE WATER YEAR-1988		
24	TIME DISTANCE PLOTS FOR SULPHATES, NITRATES, TOTAL HARDNESS, COLIFORM BACTERIA, FECAL COLIFORM BACTERIA AND TOTAL POLLUTION FOR THE WATER YEAR-1988	190	
<b>25</b>	CONCENTRATION [mg/1] OF TOTAL DISSOLVED SOLIDS [TDS] IN SUB-SURFACE WATER [TUBE WELLS] BETWEEN 1979 AND 1989 IN THE STUDY AREA	214	
26	CONCENTRATION [mg/1] OF TOTAL HARDNESS IN SUB-SURFACE WATER [TUBE WELLS] BETWEEN 1979 AND 1989 IN THE STUDY AREA	215	
27	CONCEENTRATION [mg/l] OF CHLORIDE IN SUBSURFACE WATER [TUBE] WELLS] BETWEEN 1979 AND 1989 IN THE STUDY AREA	216	
28	CONCENTRATION [mg/1] OF SULPHATE IN SUB-SURFACE [TUBE WELLS] BETWEEN 1979 AND 1989 IN THE STUDY AREA	217	
29	CONCENTRATION [mg/1] OF NITRATE IN SUB-SURFACE WATER [TUBE WELLS] BETWEEN 1979 AND 1989 IN THE STUDY AREA	218	
30	CONCENTRATION OF FLUORIDE [A] [mg/1] IN SUB-SURFACE WATER, PRE-MONSOON [B] AND POST-MONSOON [C] [in m] STATIC WATER LEVEL IN THE STUDY AREA [FOR 1988-89]	219	
31	QUALITY OF SUB-SURFACE [TUBE WELLS] WATER BETWEEN 1979-80 AND 1988-89 IN AND AROUND BARODA CITY	220	
32	VISHWAMITRI RIVER SAMPLING STATIONS FOR WATER DISCHARGE VOLUME ASSESSMENT IN THE STUDY AREA	244	
33	VARIATION OF TOTAL RAINFALL IN BARODA CITY [1898-1988]	245	
34	VARIATION OF RAINFALL VERSUS POTENTIAL EVAPO-TRANSPIRATION FOR THE PERIODS 1931-60 AND 1961-88		
35	<ul> <li>[A] VARIATION OF MINIMUM TEMPERATURES IN BARODA CITY [1901-1988]</li> <li>[B] VARIATION OF MAXIMUM TEMPERATURES IN BARODA CITY [1901-1988]</li> </ul>	253	
36	LOCATION/GEOLOGICAL MAP OF STUDY AREA	260	
37	SKETCH SHOWING DISINTEGRATION OF ROCK AGGREGATE AND DISRUPTION OF ROAD SURFACE	268	
•	ix		

.

.