

## T A B L E S

NO.	CAPTION	PAGE NO.
1	LOCALITY INDEX	5 - 6
2	GEOLOGY OF BARODA DISTRICT [ Modified after Bruce Foote 1898 ]	25
3	IDENTIFICATION KEY FOR GEOMORPHOLOGICAL CATEGORISATION FROM LANDSAT SATELLITE DATA	44
4	SOIL CLASSIFICATION OF THE STUDY AREA	68
5	A POSSIBLE CORRELATION BETWEEN GEOMORPHIC UNITS, ELEVATIONAL RANGE AND SOIL SERIES	71
6	STATEMENT OF IMPORTANT SOIL CHARACTERISTICS	75
7	ANALYTICAL STATEMENT OF PHYSICO-CHEMICAL PROPERTIES OF SOIL SERIES	76 - 77
8	STATEMENT OF GEO-TECHNICAL PROPERTIES OF SOILS IN AND AROUND BARODA CITY	107
9	SOIL TYPES : THEIR DISTRIBUTION, CHARACTERISTICS, LAND-USE, PROBLEMS AND REMEDIAL MEASURES	110 - 111
10	LAND-USE PATTERN AND POPULATION GROWTH FOR STUDY AREA FROM CENSUS REPORTS	116 - 123
11	IDENTIFICATION KEY FOR LAND-USE AND LAND COVER CLASSIFICATION SYSTEM FROM [SPOT-1] SATELLITE DATA	126
12	LAND-USE AND LAND COVER CLASSIFICATION SYSTEM AS APPLICABLE FOR THE STUDY AREA FOR USE WITH REMOTE SENSOR DATA [after Anderson et al 1976]	129
13	U.S.G.S. LEVEL I LAND USE COLOUR CODE	132
14	LEVEL II AND III LAND USE COLOUR CODE	132
15	LAND-USE PATTERN IN THE STUDY AREA	137
16	STATEMENT SHOWING VARIATION IN POPULATION OF BARODA CITY FROM 1872-2001	156
17	URBAN SPRAWL OF BARODA CITY [INCLUDING RESIDENTIAL AND INDUSTRIAL AREAS, AND EXCLUDING OPEN VACANT LAND WITHIN THE STUDY AREA]	161

18	MPN INDEX AND 95% CONFIDENCE LIMITS FOR VARIOUS COMBINATIONS OF POSITIVE RESULTS WHEN FIVE TUBES ARE USED FOR DILUTION [10 ml, 1.0 ml, 0.1 ml]	180
19	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : TEMPERATURE 0°C AT POINT	191
20	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : pH AT LABORATORY	192
21	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : CHEMICAL OXYGEN DEMAND	193
22	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : BIOLOGICAL OXYGEN DEMAND 5 DAY DO	194
23	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : TOTAL DISSOLVED SOLIDS	196
24	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : CHLORIDE AS Cl.	197
25	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : SULPHATE AS SO <sub>4</sub>	199
26	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : NITRATE AS NO <sub>3</sub>	200
27	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : TOTAL HARDNESS CaCO <sub>3</sub>	202
28	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : MPN OF COLIFORM/100 ml.	203
29	ANALYSIS OF WATER SAMPLES OF MAHI RIVER : MPN OF FECAL COLIFORM/100 ml.	204
30	AVERAGE ANNUAL WATER QUALITY OF AJWA RESERVOIR	206
31	ANALYSIS OF WATER QUALITY OF VISHWAMITRI RIVER NEAR SAYAJIBAUG [SOCLEEN, 1988]	207
32	INDIAN STANDARD SPECIFICATION FOR DRINKING WATER	212
33	COMPARATIVE SUB-SURFACE WATER QUALITY OF THE STUDY AREA [YEARS 1979-80, 1982-83, 1985-86 AND 1988]	221 - 226
34	DOMESTIC, INDUSTRIAL AND CATTLE, WATER DEMAND IN THE STUDY AREA [FOR 1981, 1988, 1991 AND 2001]	233
35	A COMPARISON OF EXISTING AND PROPOSED WATER BUDGET IN THE STUDY AREA	235
36	AVERAGE CHANGES IN CLIMATIC ELEMENTS CAUSED BY URBANIZATION [FROM LANDSBERG 1970]	238
37	VARIATION OF RAINFALL [mm] IN BARODA BETWEEN THE YEARS 1898-1988	239 - 240
38	WATER DISCHARGE DATA FOR THE VISHWAMITRI RIVER WITHIN THE STUDY AREA	243

39	SOIL WATER BALANCE OF THE STUDY AREA [BETWEEN 1931 TO 1960 AND 1961 TO 1988]	249
40	VARIATION OF TEMPERATURE FOR 88 YEARS IN BARODA CITY [ 1901-1988 ]	252
41	DESCRIPTION OF VARIOUS QUARRY SECTION	262 - 264
42	LABORATORY TEST RESULTS OF AGGREGATE [INVESTIGATIONS CARRIED OUT AS PER THE SPECIFICATIONS LAID DOWN BY ISI:6579:1972]	266
43	QUALITY OF TREATED WASTE-WATER OF EFFLUENT CHANNEL	275