

Table1. Description of water samples collected from households during monsoon season

S. No.	Study sites / Parameters*	Acceptable Limits (mg/l)	Site I	Site II	Site III	Site IV	Site V	Site VI	Site VII	Site VIII	Site IX	Site X
1	Temperature (°C)	-	27.5-32.0	28.0-34.0	27.0-29.5	25.0-31.0	29.0-31.0	27.0-29.0	23.0-29.0	25.0-28.0	25.0-31.0	27.0-30.0
2	pH	7.0-8.5	7.0-7.2	7.0-7.3	6.8-7.1	7.0-7.2	7.3-7.5	6.9-7.2	6.8-7.3	6.9-7.4	7.1-7.2	6.8-7.0
3	Alkalinity	<200	100-230	120-135	110-140	120-140	90-170	110-120	110-190	120-160	110-130	110-120
4	Total Hardness	<200	42-90	28-40	44-56	40-44	60-64	42-48	40-46	42-86	52-56	52-61
5	Ca hardness	<75	28-60	18-26	30-36	26-30	40-41	28-32	26-31	28-58	34-36	34-40
6	Mg hardness	<30	3.4-7.3	2.4-3.4	3.4-4.8	3.4-3.6	4.8-5.6	3.4-3.9	3.4-3.5	3.4-6.8	4.4-4.8	4.4-5.1
7	Dissolved Oxygen	>5.0	6.1-7.32	4.0-6.7	6.5-7.3	6.1-9	5.7-6.5	6.09-6.9	3.3-7.3	6.1-7.7	6.1-7.5	6.9-7.3
8	TS	-	120-160	105-185	125-135	100-130	-	110-125	115-560	140-510	105-160	120-140
9	TDS	<500	105-110	95-110	105-115	95-100	-	105-110	110-115	105-110	100-110	105-110
10	TSS	-	15-50	10-75	20-30	05-30	-	05-15	05-450	35-400	05-50	15-30
11	Chloride	<200	29-40	29-32	27-33	25-27	29-40	26-32	28-40	25-64	31-33	31-35
12	Salts	<320	47.8-66.0	47.0-52.0	44.5-54.4	41.2-44.5	47.0-66.0	42.8-52.7	46.0-66.0	41.2-105.6	51.0-54.4	51.1-57.7

* Parameters are in mg/l

Table 2. Description of water samples collected from reservoirs, filter plants and hand pumps during monsoon season

S. No.	Study sites /Parameters*	Acceptable Limit (mg/l)	Site I	Site II	Site III	Site IV	Site V	Site VI	Site VII	Site VIII	Site IX	Site X	Site XI	Site XII	Site XIII	Site- XIV
1	Temperature	-	30.0	30.0	29.9	30.0	30.0	28.0	-	-	-	32.0	30.5	29.5	31.5	-
2	pH	7.0-8.5	7.4	7.3	6.6	7.3	7.4	7	-	-	-	6.9	6.5	6.4	6.9	-
3	Alkalinity	<200	150	120	120	120	130	230	-	-	-	520	530	550	450	-
4	Total Hardness	<200	180	210	210	170	210	90	-	-	-	440	590	640	390	-
5	Ca hardness	<75	120	140	145	115	140	63	-	-	-	290	395	425	258	-
6	Mg hardness	<30	14.6	17.0	15.8	13.4	17.0	28.05	-	-	-	36.5	47.4	52.2	32.1	-
7	Dissolved Oxygen	>5.0	6.1	6.5	7.3	6.5	5.3	6.09	-	-	-	4.0	3.2	2.8	5.7	-
8	TS	-	248	180	124	1460	144	160	-	-	-	1606	3084	2944	1680	-
9	TDS	<500	222	150	92	168	84	55	-	-	-	842	1008	2826	1166	-
10	TSS	-	26	30	32	1292	60	105	-	-	-	764	2076	118	514	-
11	Chloride	<200	16.99	20.99	32.0	23.0	65.98	39.98	-	-	-	184.9	404.9	479.8	219.9	-
12	Salts	<320	28.03	34.6	57.8	37.9	108.9	65.98	-	-	-	305.1	668	791.8	362.9	-

*Parameters are in mg/l

Table 3. Description of water samples collected from households during winter season

S. No.	Study sites / Parameters*	Acceptable Limit (mg/l)	Site I	Site II	Site III	Site IV	Site V	Site VI	Site VII	Site VIII	Site IX	Site X
1	Temperature	-	12.0-15.5	16.5-17.0	12.5-14.5	12.5-14.0	14.0-14.5	13.5-14.5	14.5-15.0	12.5-16.5	14.5-16.5	14.0-16.5
2	pH	7.0-8.5	6.9-7.2	6.8-7.1	6.6-7.0	7.0-7.6	7.1-7.3	6.6-7.4	6.9-7.8	6.8-7.2	7.5-7.8	6.9-7.2
3	Alkalinity	< 200	100	30-60	95-120	100-200	90-170	105-110	150-200	40	95-110	110-120
4	Total Hardness	< 200	40-50	130-132	110-116	42-46	90-98	66-80	46-62	88-108	40-68	52-66
5	Ca hardness	< 75	31-36	82-84	75-80	32-34	60-65	41-26	35-46	78-88	30-22	17-22
6	Mg hardness	< 30	2.2-3.4	11.2-12.15	8.5-8.7	2.4-2.9	7.3-8.0	6.1-8.3	2.67-3.9	1.9-4.86	2.4-11.2	8.5-10.7
7	Dissolved Oxygen	> 5.0	3.65-4.46	4.46-5.27	3.65-4.87	4.057	3.65-5.68	4.46-5.27	3.65-4.057	4.86-5.27	4.05-5.68	3.65-5.27
8	TS	-	110-140	95-165	105-115	100-130	95-105	95-105	105-430	120-410	95-110	105-120
9	TDS	< 500	105-120	85-100	95-100	95-100	85-90	85-90	85-115	100-110	85-90	90-95
10	TSS	-	5-20	10-65	10-15	05-30	10-15	10-15	20-315	20-300	10-20	15-25
11	Chloride	< 200	22.99-24.99	23.99	22.9-24.9	22.99	23.99-25.9	22.9-25.9	26.99-85.9	23.99-24.99	21.9-23.9	20.9-24.9
12	Salts	< 320	37.93-41.23	39.58	37.8-41.23	37.93	39.6-42.73	37.8-42.73	44.5-141.8	39.58-41.23	36.1-39.58	34.5-41.23

*Parameters are in mg/l

Table 4. Physico-chemical variations of water samples of reservoirs, filter plants and hand pumps during winter season

S. No.	Study sites / Parameters*	Acceptable Limits (mg/l)	Site I	Site II	Site III	Site IV	Site V	Site VI	Site VII	Site VIII	Site IX	Site X	Site XI	Site XII	Site XIII	Site XIV
1	Temperature	-	16.0	17.0	18.5	16.5	17.5	19.0	-	20.4	20.5	24.5	24.0	24.5	25.0	24.5
2	pH	7.0-8.5	7.3	7.5	6.5	7.8	7.3	6.9	-	7.0	6.9	7.2	6.5	6.6	7.1	6.8
3	Alkalinity	< 200	300	100	50	100	100	100	-	150	200	510	50	480	430	60
4	Total Hardness	< 200	80	66	76	64	62	40	-	122	76	182	236	176	144	236
5	Ca hardness	< 75	56	44	50	46	42	31	-	92	39	126	82	124	124	160
6	Mg hardness	< 30	5.83	5.346	6.31	4.37	4.86	2.2	-	7.24	8.99	13.6	37.42	12.6	4.86	18.46
7	Dissolved Oxygen	> 5.0	5.27	4.86	4.46	4.46	4.86	4.06	-	2.83	2.83	2.02	2.4	2.4	2.02	2.02
8	TS	-	235	1360	120	1420	134	1610	-	2615	2365	1505	2865	2850	1590	2560
9	TDS	< 500	192	1250	82	196	105	1520	-	1702	1694	1042	2158	2746	1026	2340
10	TSS	-	43	110	38	1224	29	90	-	913	671	463	707	104	564	220
11	Chloride	< 200	20.99	19.99	23.99	130.95	67.97	22.99	-	101.9	265.9	173.2	24.99	419.8	98.8	63.98
12	Salts	< 320	34.63	32.98	39.58	216.08	112.16	37.93	-	152.9	398.8	285.7	41.23	692.7	163.02	105.5

*Parameters are in mg/l

Table 5. Description of Industrial air pollution samples collected during winters

S. No.	Study Sites	Permissible limits (CPCB)*		Air quality parameters (range)	
		SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)	SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)
1	Site-I	$\frac{360}{500}$	$\frac{120}{150}$	512.75-536.40	90.00-163.75
2	Site-II	$\frac{360}{500}$	$\frac{120}{150}$	390.20-886.25	195.00-488
4	Site-III	$\frac{360}{500}$	$\frac{120}{150}$	582.77-886.25	86.25-367.50
5	Site-IV	$\frac{360}{500}$	$\frac{120}{150}$	830.125-884.26	131.25-140.12
3	Site-V	$\frac{360}{500}$	$\frac{120}{150}$	613.97-783.70	92.857-116.25
6	Site-VI	$\frac{360}{500}$	$\frac{120}{150}$	859.49-874.12	98.75-104.32

*Time-weighted average Annual Average/ 24 hours

**Table 6. Description of vehicular air pollution samples collected during winter season-
Morning hours**

S. No.	Study sites	Permissible limits (CPCB)*		Air quality parameters (range)	
		SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)	SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)
1	Site-I	$\frac{140}{200}$	$\frac{60}{100}$	1005.60-1212.30	320.00-345.32
2	Site-II	$\frac{140}{200}$	$\frac{60}{100}$	1383.41-1402.20	162.50-165.23
3	Site-III	$\frac{140}{200}$	$\frac{60}{100}$	1069.67-1416.7	197.50-295.00
4	Site-IV	$\frac{140}{200}$	$\frac{60}{100}$	635.33-1291.75	200.00-212.50
5	Site-V	$\frac{140}{200}$	$\frac{60}{100}$	1209.80-1235.65	445.00-455.12
6	Site-VI	$\frac{140}{200}$	$\frac{60}{100}$	634.40-732.98	97.50-102.85
7	Site-VII	$\frac{140}{200}$	$\frac{60}{100}$	593.40-682.95	85.00-175.00
8	Site-VIII	$\frac{140}{200}$	$\frac{60}{100}$	934.58-1430.99	113.33-450

*Time-weighted average Annual Average/ 24 hours

Table 7. Description of vehicular Air pollution samples collected during winter season – Evening hours

S. No.	Study sites	Permissible limits (CPCB)*		Air quality parameters (range)	
		SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)	SPM (mg/m^3)	RSPM (mg/m^3)
1	Site-I	$\frac{140}{200}$	$\frac{60}{100}$	998.00-1045.65	295.00-354.68
2	Site-II	$\frac{140}{200}$	$\frac{60}{100}$	1131.71-1365.80	220.00-284.60
3	Site-III	$\frac{140}{200}$	$\frac{60}{100}$	1129.29-1467.20	217.50-375.00
4	Site-IV	$\frac{140}{200}$	$\frac{60}{100}$	986.30-1401.56	170.00-196.87
5	Site-V	$\frac{140}{200}$	$\frac{60}{100}$	1056.33-1256.6	312.5-412.65
6	Site-VI	$\frac{140}{200}$	$\frac{60}{100}$	634.04-745.56	115.00-146.98
7	Site-VII	$\frac{140}{200}$	$\frac{60}{100}$	748.58-844.00	110.00-249.75
8	Site-VIII	$\frac{140}{200}$	$\frac{60}{100}$	836.17-950.25	315.10-411.21

*Time-weighted average Annual Average/ 24 hours

Table 8. Daily averages of particulate matters of vehicular air pollution during winter season

S. No.	Study sites	Permissible limits (CPCB)*		Air quality parameters (range)	
		SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)	SPM ($\mu\text{g}/\text{m}^3$)	RSPM ($\mu\text{g}/\text{m}^3$)
1	Site-I	$\frac{140}{200}$	$\frac{60}{100}$	942.875	273.75
2	Site-II	$\frac{140}{200}$	$\frac{60}{100}$	989.50	165.00
3	Site-III	$\frac{140}{200}$	$\frac{60}{100}$	1165.021	321.25
4	Site-IV	$\frac{140}{200}$	$\frac{60}{100}$	1091.75	192.50
5	Site-V	$\frac{140}{200}$	$\frac{60}{100}$	1150.6875	345.00
6	Site-VI	$\frac{140}{200}$	$\frac{60}{100}$	608.875	86.25
7	Site-VII	$\frac{140}{200}$	$\frac{60}{100}$	609.958	223.03
8	Site-VIII	$\frac{140}{200}$	$\frac{60}{100}$	641.50	88.75

*Time-weighted average Annual Average/ 24 hours

Table 9. Monthly averages of meteorological data for Jodhpur

Months (Year 2004)	Avg. high temp.	Avg. low temp.	Mean	Precipitation
January	23	6	14	5.1
February	25	8	17	7.6
March	32	15	23	10.2
April	38	22	30	7.6
May	42	27	34	30.5
June	41	28	35	45.7
July	38	27	33	106.7
August	36	27	32	71.1
September	37	24	31	33.0
October	37	19	28	5.1
November	31	12	22	2.5
December	25	7	16	0.0

The maximum average precipitation occurs in July.

*May is the average warmest month.

*On average, the coolest month is January.

*Sunny day/clear, cloudy, raining, dust storms-typhoon

Table 10. Distribution of diseased persons according to their age and sex

Age	Male			Female		
	Examined	Diseased	%	Examined	Diseased	%
<05	11	03	14.29	09	00	00.00
05-14	24	03	14.29	25	03	15.79
15-44	49	07	33.33	57	12	63.16
45-59	08	03	14.29	09	01	5.26
60 +	07	05	23.80	09	03	15.79
Total	99	21	100.00	109	19	100.00

Table 11. Distribution of the diseased persons as per their religion

Religion	Examined	Diseased	%
Hindu	100	11	27.50
Muslim	108	29	72.50
Total	208	40	100.00

Table 12. Morbidity pattern of the diseased persons

Morbidity pattern	Number	%
Respiratory diseases	14	35.00
Non-communicable diseases	5	12.50
Musculo-skeletal diseases	5	12.50
Ophthalmic diseases	5	12.50
Gastrointestinal diseases	4	10.00
Urogenital diseases	4	10.00
Allergic diseases	2	5.00
Head-ache	1	2.50
Total	40	100.00