

**RESULTS OF THE WATER QUALITY PARAMETERS OF THE INSTITUTE
(SAMPLING DATE 30/11/15)**

Parameters	Desirable Limit	Maximum Limit	P1	P2B	P3	P4	P7	P8	P9	P10	P11	P12
pH	6.5 to 8.5	No relaxation	7.3	7.9	7.8	7.4	7.9	8.5	8.1	7.9	7.8	8.1
TDS (mg/l)	500	2000	471	363	452	453	554	751	426	611	689	386
Hardness (mg/l)	300	600	150	150	200	100	150	200	250	200	150	250
Alkalinity (mg/l)	200	600	270	200	300	400	300	220	450	450	270	300
Nitrate (mg/l)	50	No relaxation	0.69	0.95	0.75	0.29	0.39	0.55	0.79	0.95	0.71	0.69
Sulfate (mg/l)	200	400	80	74	40	59	50	69	79	86	94	85
Fluoride (mg/l)	1	1.5	0.95	0.84	0.49	0.78	0.85	0.43	0.96	0.94	0.84	0.97
Chloride (mg/l)	250	1000	175	135	125	125	150	330	75	150	365	100
Turbidity (NTU)	5	10	0	0.002	0.001	0.001	0.001	0	0.002	0.001	0.001	0.001
Arsenic (mg/l)	0.01	No relaxation	0.0016	0.0011	0.0018	0.0017	0.0012	0.0008	0.0016	0.0014	0.0014	0.0020
Copper (mg/l)	0.05	1.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium (mg/l)	0.01	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.05	No relaxation	0.002	BDL	0.0014	0.006	0.002	0.003	0.004	0.006	0.003	BDL
Lead (mg/l)	0.05	No relaxation	0.026	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.3	1	0.162	0.132	0.130	0.178	0.221	0.189	0.156	0.253	0.221	0.156
Zinc (mg/l)	5	15	0.0018	0.0212	0.0067	0.0075	0.0053	0.0005	0.0004	0.0074	0.0103	0.0044
Fecal Coliform (cfu)	0	0	0	0	0	0	0	0	0	0	0	0
E. Coli (cfu)	0	0	0	0	0	0	0	0	0	0	0	0

*BDL Below Detection Limit; NTU – Nephelometric Turbidity Unit; cfu - Colony forming Units in 100 ml of the sample
Detection Limits Pb 0.0001 mg/l, Cu 0.0001 mg/l, Cr 0.0005 mg/l, Fe 0.0001 mg/l, Cd 0.0004 mg/l, As 0.0001 mg/l, Zn 0.0005 mg/l*

TABLE 2 - VARIOUS HOSTELS LOCATIONS

Parameters	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5	Hall 7	Hall 8	Hall 9	Hall 10	GH 1	GH2	RA1	RA2	VH	HC	New SBRA	Old SBRA
pH	7.2	7.8	8.1	7.5	7.9	7.8	7.3	7.3	7.4	7.8	8.3	7.9	7.6	7.6	7.5	7.4	7.9
TDS (mg/l)	675	680	680	671	607	690	269	718	673	547	321	499	703	474	252	692	620
Hardness (mg/l)	150	120	110	170	110	140	20	150	140	200	300	40	130	70	120	150	160
Alkalinity (mg/l)	370	270	320	350	300	350	200	300	380	350	300	300	330	260	100	470	420
Nitrate (mg/l)	0.17	0.20	0.18	0.19	0.20	0.20	0.18	0.21	0.15	0.21	0.23	0.17	0.25	0.27	0.33	0.35	0.60
Sulfate (mg/l)	79	64	58	73	89	49	20	78	46	52	50	20	58	50	60	74	68
Fluoride (mg/l)	0.91	0.92	0.89	0.85	0.90	1.1	0	0.59	0.92	0.81	0	0.05	0.87	0.88	0.23	0.90	0.88
Chloride (mg/l)	197	172	147	222	172	262	37	322	247	137	62	97	247	147	97	272	147
Turbidity (NTU)	0.002	0.001	0.001	0	0	0	0.01	0	0.02	0.01	0.01	0	0	0	0	0	0
Arsenic (mg/l)	0.001	0.0018	0.0015	0.0016	0.0011	0.0011	0.0003	0.001	0.0015	0.002	0.001	0.000	0.0014	0.001	0.0021	0.0008	0.001
Copper (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.004	0.004	0.0037	0.003	0.003	0.003	0.0005	0.003	0.0043	0.003	0.003	0.000	0.004	0.001	0.002	0.0016	0.005
Lead (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.241	0.238	0.176	0.142	0.229	0.154	0.088	0.164	0.176	0.252	0.136	0.236	0.2	0.139	0.274	0.266	0.133
Zinc (mg/l)	0.006	0.017	0.23	0.015	0.013	0.056	0.11	0.081	0.12	0.069	0.039	0.047	0.017	0.009	0.0046	0.024	0.005
Fecal Coliform	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E. Coli (cfu)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*BDL Below Detection Limit; NTU – Nephelometric Turbidity Unit; cfu - Colony forming Units in 100 ml of the sample
 Detection Limits Pb 0.0001 mg/l, Cu 0.0001 mg/l, Cr 0.0005 mg/l, Fe 0.0001 mg/l, Cd 0.0004 mg/l, As 0.0001 mg/l, Zn 0.0005 mg/l*

TABLE 3 – VARIOUS RESIDENTIAL LOCATIONS

Parameters	T1 (249 B)	T2 (233)	T3D (3045)	T3F (3046)	T4 (448)	T5 (505)	T6 (623)	Multistory Building-A	Multistory Building-B
pH	7.4	7.6	7.3	7.7	7.6	7.4	7.4	7.3	7.3
TDS (mg/l)	625	471	387	388	409	735	359	606	685
Hardness (mg/l)	100	90	70	80	80	100	80	170	100
Alkalinity (mg/l)	300	300	320	350	300	250	450	300	200
Nitrate (mg/l)	0.17	0.19	0.13	0.20	0.16	0.15	0.18	0.59	0.28
Sulfate (mg/l)	69	58	44	49	58	68	51	35	72
Fluoride (mg/l)	0.815	0.902	0.959	0.982	0.947	0.672	0.921	0.87	0.595
Chloride (mg/l)	172	147	87	102	97	332	47	222	102
Turbidity (NTU)	0	0.001	0.001	0.001	0.001	0	0.001	0.001	0.002
Arsenic (mg/l)	0.0017	0.0021	0.0027	0.0028	0.0023	0.001	0.002	0.0013	0.0018
Copper (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.0026	0.0022	0.0017	0.0025	0.0018	0.004	0.001	0.0042	0.0033
Lead (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.178	0.135	0.261	0.272	0.13	0.154	0.124	0.123	0.253
Zinc (mg/l)	0.0033	0.043	0.049	0.024	0.048	0.032	0.013	0.010	BDL
Fecal Coliform (cfu)	0	0	0	0	0	0	0	0	0
E. Coli (cfu)	0	0	0	0	0	0	0	0	0

Sampling locations: T1 to T6 Residences with corresponding House Numbers.

Multistory Building A &B- New faculty buildings with corresponding House Numbers.

BDL Below Detection Limit; NTU – Nephelometric Turbidity Unit; cfu - Colony forming Units in 100 ml of the sample

Detection Limits Pb 0.0001 mg/l, Cu 0.0001 mg/l, Cr 0.0005 mg/l, Fe 0.0001 mg/l, Cd 0.0004 mg/l, As 0.0001 mg/l, Zn 0.0005 mg/l