

RESULTS OF THE WATER QUALITY PARAMETERS OF THE INSTITUTE
(SAMPLING DATE 21/10/17)
TABLE 1- PUMPS

Parameters	Permissible Limit	Maximum Limit	P1	P2	P7	P8	P9	P11	P12
pH	6.5 to 8.5	No relaxation	7.89	7.60	7.76	7.68	7.38	7.71	7.95
TDS (mg/l)	500	2000	467	358	644	750	621	663	405
Hardness (as CaCO ₃) (mg/l)	300	600	90	190	130	180	350	160	100
Alkalinity (as CaCO ₃) (mg/l)	200	600	300	390	240	270	500	100	300
Nitrate (mg/l)	50	No relaxation	0.04	0.28	0.02	0.01	0.28	0.03	0.01
Sulfate (mg/l)	200	400	43	39	44	59	77	61	75
Fluoride (mg/l)	1	1.5	0.850	0.871	0.661	0.590	1.050	0.615	0.841
Chloride (mg/l)	250	1000	165	50	290	325	195	290	130
Turbidity (NTU)	5	10	0.001	0.001	0.002	0.001	0.001	0.001	0.002
Arsenic (mg/l)	0.01	No relaxation	0.0011	0.0020	0.0011	0.0025	0.0041	0.001	0.0013
Copper (mg/l)	0.05	1.5	BDL	BDL	BDL	0.402	0.011	BDL	BDL
Cadmium (mg/l)	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.05	No relaxation	0.0032	0.009	0.006	0.0070	0.0107	0.006	0.0075
Lead (mg/l)	0.05	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.3	No relaxation	0.121	0.172	0.125	0.098	0.132	0.114	0.106
Zinc (mg/l)	5	15	0.0110	0.025	0.007	0.0659	0.0041	0.012	0.0134
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: P1 – Opp. Type 2 shop-C near water tank, P2- End of lane 37 near house 4098, P7 - Near water tank and main entrance of VH-Extension , type-1, P-8 Near Health Centre, P-9 Near front parking area of Hall-9, P-10- Near water tank at right side of Hall-3, P-11 - Behind mess and inside of Hall-10, P-12 - Near about 150 Mtr. of P-2 (end of lane-36) at same lane

TABLE 2 - HOSTELS

Parameters	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5	Hall 7	Hall 8	Hall 9	Hall 10	Hall 11	Hall 12*	Hall 13*
pH	7.82	7.81	7.58	7.91	7.68	7.52	7.76	8.01	8.13	8.22	7.96	8.01
TDS (mg/l)	569	590	586	631	558	628	636	206	666	755	545	525
Hardness (as CaCO ₃) (mg/l)	180	150	190	250	210	310	290	100	190	180	150	130
Alkalinity (as CaCO ₃) (mg/l)	300	310	290	450	290	390	310	120	290	270	270	270
Nitrate (mg/l)	0.15	0.02	0.02	0.02	0.01	0.08	0.07	0.01	0.03	0.10	0.08	0.09
Sulfate (mg/l)	42	50	47	43	33	39	48	20	41	78	44.7	40.6
Fluoride (mg/l)	0.742	0.605	0.724	0.787	0.983	1.25	1.13	0.299	0.917	0.590	0.722	0.556
Chloride (mg/l)	215	225	205	205	190	195	220	130	265	310	215	200
Turbidity (NTU)	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.002	0.001	0.001
Arsenic (mg/l)	0.0014	0.0015	0.0015	0.0011	0.0019	0.0017	0.0032	0.0018	0.0032	0.0015	0.0012	0.0010
Copper (mg/l)	0.0011	0.0004	0.0003	0.0015	0.0005	0.0050	0.0069	BDL	0.0003	0.0007	BDL	BDL
Cadmium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.0096	0.0070	0.0088	0.0085	0.0076	0.0079	0.0092	0.0029	0.0065	0.0069	0.0032	0.0005
Lead (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.095	0.112	0.125	0.069	0.095	0.113	0.089	0.095	0.110	0.156	0.112	0.160
Zinc (mg/l)	0.0020	0.0017	0.0086	0.0011	0.0049	0.0027	0.0032	0.0048	0.0062	0.0152	BDL	BDL
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

* Sampling was carried out on 13/09/17

TABLE 3 – VARIOUS RESIDENTIAL LOCATIONS

Parameters	T1 (1033)	T2 Multistorey (106)	T3 (319)	T3 (369)	T4 (4082)	T5 (509)	T6 (624)	Block A (101)	Block B (101)	Block C (101)
pH	7.71	8.31	7.81	7.83	7.43	7.65	7.52	8.14	8.07	7.84
TDS (mg/l)	649	499	405	496	391	785	396	729	728	628
Hardness (as CaCO ₃) (mg/l)	130	120	190	100	210	190	190	180	210	210
Alkalinity (as CaCO ₃) (mg/l)	230	320	360	320	400	270	410	290	220	320
Nitrate (mg/l)	0.04	0.01	0.03	0.06	0.39	0.02	0.08	0.02	0.08	0.03
Sulfate (mg/l)	47	41	32	53	39	51	32	57	54	89
Fluoride (mg/l)	0.608	0.724	0.884	0.742	0.758	0.466	0.686	0.598	0.571	0.780
Chloride (mg/l)	250	170	80	165	85	310	50	280	300	255
Turbidity (NTU)	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001
Arsenic (mg/l)	0.0020	0.0017	0.0013	0.0020	0.0011	0.001	0.0011	0.0038	0.0017	0.0052
Copper (mg/l)	0.0007	BDL	0.0001	0.0001	BDL	BDL	0.0018	0.0022	0.0009	0.0006
Cadmium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.0054	0.0047	0.0081	0.006	0.0100	0.005	0.0010	0.0072	0.0060	0.0073
Lead (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.113	0.108	0.127	0.125	0.091	0.121	0.191	0.142	0.136	0.103
Zinc (mg/l)	0.0013	0.0010	BDL	0.0052	0.0016	0.001	0.0033	0.0684	0.0017	0.0052
Fecal Coliform (cfu)	0	0	0	0	0	0	0	0	0	0
E. Coli (cfu)	0	0	0	0	0	0	0	0	0	0

Sampling locations: H1 to RA2 various hostels; VH- Visitors Hostel; HC- Health Centre; T1 to T6 Residences with corresponding House Numbers, Block A, B and C - New Multi storey 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*