

**RESULTS OF THE WATER QUALITY PARAMETERS OF THE INSTITUTE
(SAMPLING DATE - 29/08/2024)**

TABLE 1- PUMPS

Parameters	Permissible Limit	Maximum Limit	P3	P7	P8	P11	P12	P13	P14	P16
pH	6.5 to 8.5	No relaxation	8.39	8.27	8.30	8.18	8.38	8.29	8.37	8.41
TDS (mg/l)	500	2000	469	652	735	684	419	670	581	432
Hardness (as CaCO ₃) (mg/l)	200	600	100	130	160	140	100	110	120	100
Alkalinity(as CaCO ₃) (mg/l)	200	600	300	270	290	250	270	250	240	280
Nitrate (mg/l)	45	No relaxation	0.07	0.09	0.08	0.07	0.08	0.10	0.06	0.07
Sulfate (mg/l)	200	400	39.27	44.32	52.71	35.92	41.83	37.46	48.59	32.87
Fluoride (mg/l)	1	1.5	0.745	0.667	0.692	0.676	0.811	0.652	0.765	0.869
Chloride (mg/l)	250	1000	140	240	270	290	100	285	185	120
Turbidity (NTU)	5	10	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001
Arsenic (mg/l)	0.01	0.05	0.0024	0.0022	0.0019	0.0018	0.0032	0.0016	0.0018	0.0020
Copper (mg/l)	0.05	1.5	0.0015	0.0012	0.0018	0.0017	0.0012	0.0014	0.0019	0.0013
Cadmium (mg/l)	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.05	No relaxation	0.0010	0.0007	0.0008	0.0007	0.0009	0.0006	0.0008	0.0009
Lead (mg/l)	0.01	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.3	No relaxation	0.18	0.21	0.17	0.20	0.16	0.15	0.18	0.19
Zinc (mg/l)	5	15	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
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:

*P3 - Behind Helicopter building,
P7 - Near water tank and main entrance of VH-Extension, type-1,
P8 - Near Health Centre,
P11 - Hall 10 back side,
P12 - Near about 150 M of P-2 (end of lane-36),
P13 - Near Visiting Faculty Apartment,
P14 - Near Hall 12,
P16 - Near duplex type-3*

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 (117)	T2 (2015)	T3D (326)	T3F (365)	T4 (4081)	T5 (503)	T6 (642)	Multistory Building-A (502)	Multistory Building-B (403)	Multistory Building-C (203)	Multistory Building-D (303)
pH	8.13	8.45	8.39	8.44	8.46	8.36	8.42	8.26	8.28	8.39	8.31
TDS (mg/l)	683	440	443	426	419	589	454	716	701	706	702
Hardness (as CaCO ₃) (mg/l)	120	110	100	110	100	140	110	140	130	160	150
Alkalinity(as CaCO ₃) (mg/l)	260	270	290	300	280	240	290	240	250	280	270
Nitrate (mg/l)	0.13	0.09	0.20	0.11	0.22	0.14	0.21	0.08	0.09	0.10	0.09
Sulfate (mg/l)	31.57	36.31	23.36	36.15	34.10	49.21	26.11	45.72	49.21	47.35	46.55
Fluoride (mg/l)	0.547	0.746	0.774	0.815	0.792	0.659	0.786	0.545	0.538	0.562	0.556
Chloride (mg/l)	255	105	120	105	185	290	125	305	295	300	305
Turbidity (NTU)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001
Arsenic (mg/l)	0.0039	0.0019	0.0022	0.0029	0.0033	0.0021	0.0030	0.0021	0.0017	0.0022	0.0024
Copper (mg/l)	0.0012	0.0026	0.0015	0.0014	0.0017	0.0012	0.0015	0.0026	0.0022	0.0023	0.0022
Cadmium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Lead (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.1293	0.1046	0.1187	0.0988	0.1038	0.1152	0.1286	0.1322	0.1258	0.1379	0.1365
Zinc (mg/l)	0.0475	0.0162	0.0256	0.0534	0.0115	0.0198	0.0144	0.0124	0.0173	0.0535	0.0561
Fecal Coliform (cfu)	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

*Sampling locations: H1 to RA2 various hostels;
 VH- Visitors Hostel;
 HC- Health Centre;
 T1 to T6 Residences with corresponding House Numbers.
 Multistory Building A to D- 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.*