

**RESULTS OF THE WATER QUALITY PARAMETERS OF THE INSTITUTE
(SAMPLING DATE - 23/03/2023)**

TABLE 1- PUMPS

Parameters	Permissible Limit	Maximum Limit	P3	P7	P8	P11	P12	P13	P14	P15	P16
pH	6.5 to 8.5	No relaxation	8.01	7.79	7.95	8.11	7.88	7.91	8.19	7.99	8.22
TDS (mg/l)	500	2000	448	587	776	654	400	548	642	711	418
Hardness (as CaCO ₃) (mg/l)	200	600	100	110	160	120	90	120	130	140	100
Alkalinity(as CaCO ₃) (mg/l)	200	600	360	290	320	280	320	300	280	310	300
Nitrate (mg/l)	45	No relaxation	0.08	0.11	0.07	0.09	0.07	0.06	0.09	0.10	0.07
Sulfate (mg/l)	200	400	31.82	45.69	42.98	39.27	36.38	24.88	38.49	41.32	29.83
Fluoride (mg/l)	1	1.5	0.892	0.679	0.584	0.698	0.985	0.911	0.695	0.677	0.975
Chloride (mg/l)	250	1000	120	255	300	280	90	190	285	325	100
Turbidity (NTU)	5	10	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Arsenic (mg/l)	0.01	0.05	0.0024	0.0021	0.0028	0.0025	0.0038	0.0025	0.0027	0.0026	0.0028
Copper (mg/l)	0.05	1.5	0.0013	0.0017	0.0016	0.0014	0.0019	0.0016	0.0011	0.0018	0.0015
Cadmium (mg/l)	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.05	No relaxation	0.0006	0.0008	0.0012	0.0011	0.0010	0.0008	0.0009	0.0011	0.0007
Lead (mg/l)	0.01	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.3	No relaxation	0.14	0.21	0.11	0.17	0.15	0.13	0.17	0.12	0.14
Zinc (mg/l)	5	15	0.0012	0.0009	BDL	0.0015	0.0007	BDL	BDL	BDL	BDL
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:

*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,
P15 - Behind New Sac,
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 (1065)	T2 (223)	T3D (365)	T3F (327)	T4 (465)	T5 (501)	T6 (622)	Multistory Building-A (104)	Multistory Building-B (403)	Multistory Building-C (603)	Multistory Building-D (303)
pH	7.75	8.35	8.19	8.39	8.31	8.38	8.12	8.02	7.85	8.38	8.06
TDS (mg/l)	625	459	555	436	534	639	528	751	768	764	759
Hardness (as CaCO ₃) (mg/l)	100	90	100	90	100	130	100	140	160	160	150
Alkalinity(as CaCO ₃) (mg/l)	270	280	290	270	310	320	310	250	270	270	260
Nitrate (mg/l)	0.14	0.11	0.19	0.09	0.22	0.16	0.27	0.09	0.07	0.09	0.08
Sulfate (mg/l)	47.26	34.63	28.10	26.73	30.21	40.63	22.21	46.94	46.01	23.26	21.01
Fluoride (mg/l)	0.611	0.798	0.714	0.805	0.711	0.648	0.697	0.508	0.527	0.544	0.527
Chloride (mg/l)	255	125	185	115	175	225	165	295	305	300	300
Turbidity (NTU)	0.001	0	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001
Arsenic (mg/l)	0.0015	0.0013	0.0012	0.0009	0.0009	0.0011	0.0010	0.0014	0.0013	0.0015	0.0014
Copper (mg/l)	0.0005	0.0002	0.0004	0.0003	0.0002	0.0003	0.0002	0.0007	0.0009	0.0008	0.0008
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)	0.1357	0.1187	0.1277	0.0928	0.1257	0.1418	0.1224	0.1355	0.1269	0.1263	0.1387
Zinc (mg/l)	0.0098	0.0061	0.0072	0.0031	0.0041	0.0544	0.0015	0.0006	0.0047	0.0203	0.0001
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.*