

**RESULTS OF THE WATER QUALITY PARAMETERS OF THE INSTITUTE
(SAMPLING DATE - 28/02/2024)**

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	8.41	8.28	8.16	8.31	8.17	8.01	8.34	8.05	8.31
TDS (mg/l)	500	2000	465	610	697	677	421	654	629	711	414
Hardness (as CaCO ₃) (mg/l)	200	600	110	140	160	150	100	120	130	170	100
Alkalinity(as CaCO ₃) (mg/l)	200	600	310	290	300	260	280	260	280	310	270
Nitrate (mg/l)	45	No relaxation	0.08	0.10	0.06	0.07	0.06	0.11	0.07	0.06	0.08
Sulfate (mg/l)	200	400	34.89	49.28	42.52	37.62	31.42	46.95	39.89	40.88	33.79
Fluoride (mg/l)	1	1.5	0.796	0.675	0.762	0.651	0.855	0.774	0.782	0.643	0.879
Chloride (mg/l)	250	1000	130	240	295	300	105	175	285	310	100
Turbidity (NTU)	5	10	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Arsenic (mg/l)	0.01	0.05	0.0021	0.0026	0.0031	0.0024	0.0030	0.0022	0.0025	0.0021	0.0023
Copper (mg/l)	0.05	1.5	0.0016	0.0018	0.0020	0.0017	0.0016	0.0021	0.0019	0.0015	0.0017
Cadmium (mg/l)	0.003	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium (mg/l)	0.05	No relaxation	0.0007	0.0008	0.0011	0.0010	0.0009	0.0007	0.0013	0.0010	0.0009
Lead (mg/l)	0.01	No relaxation	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (mg/l)	0.3	No relaxation	0.16	0.21	0.15	0.19	0.15	0.16	0.14	0.17	0.18
Zinc (mg/l)	5	15	BDL	BDL	0.0046	BDL	BDL	0.0011	BDL	BDL	0.0012
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 (169)	T2 (223)	T3D (365)	T3F (319)	T4 (434)	T5 (503)	T6 (635)	Multistory Building-A (204)	Multistory Building-B (301)	Multistory Building-C (104)	Multistory Building-D (403)
pH	8.29	8.44	8.49	8.39	8.43	8.39	8.43	8.28	8.09	8.25	8.15
TDS (mg/l)	612	423	429	431	536	595	421	783	781	785	782
Hardness (as CaCO ₃) (mg/l)	130	100	110	100	120	150	120	150	140	160	140
Alkalinity(as CaCO ₃) (mg/l)	270	280	300	310	270	280	300	250	260	280	240
Nitrate (mg/l)	0.11	0.10	0.21	0.13	0.20	0.12	0.23	0.09	0.08	0.10	0.08
Sulfate (mg/l)	34.37	30.46	28.64	35.24	33.81	47.68	25.96	48.68	44.53	43.46	41.23
Fluoride (mg/l)	0.591	0.828	0.821	0.825	0.667	0.681	0.819	0.510	0.491	0.514	0.492
Chloride (mg/l)	260	110	105	115	180	280	120	300	310	305	300
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)	0.0019	0.0021	0.0022	0.0021	0.0019	0.0022	0.0028	0.0033	0.0031	0.0033	0.0032
Copper (mg/l)	0.0010	0.0024	0.0018	0.0015	0.0013	0.0017	0.0019	0.0027	0.0021	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)	0.1325	0.1131	0.1072	0.0983	0.1145	0.1179	0.1236	0.1412	0.1346	0.1398	0.1426
Zinc (mg/l)	0.0168	0.0132	0.0447	0.0352	0.0365	0.0277	0.0176	0.0283	0.0734	0.0293	0.0473
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.*