

WATER QUALITY CHARACTERISTICS OF KALYANI RIVER AT U/S PANTNAGAR IND. AREA, US NAGAR

Month	pH	BOD mg/L	COD mg/L	Conductivity μ mhos/cm	Temp $^{\circ}$ C	DO mg/L	TDS mg/L
2024							
Jan	7.40	2.1	10.0	312	15	6.9	203
Feb	7.96	2.4	16.0	442	17	6.5	294
Mar	7.84	2.2	14.0	551	19	7.1	353
Apr	7.67	2.6	20.0	573	23	6.2	335
May	6.78	2.9	20.0	575	26	5.6	384
June	River Dry						
July	7.41	2.8	20	476	29	5.4	292
Aug	7.41	3	24	384	28	5.2	235
Sep	7.27	2.8	20	338	26	6.2	205
Oct	7.48	3	21.6	530	26	5.5	321
2023							
Jan	7.40	3.0	16.0	386	13	7.2	281
Feb	7.60	3.0	20.0	467	15	6.8	311
Mar	7.50	2.8	16.0	482	20	6.9	321
Apr	7.50	2.9	16.0	469	20	6.2	315
May	7.30	2.6	16.0	428	29	6.4	296
June	7.70	3.0	20.0	451	29	5.2	306
July	7.40	2.8	16.0	322	30	5.4	211
Aug	7.10	3.0	20.0	412	28	5.0	215
Sept	7.40	2.8	20.0	339	28	5.2	213
Oct	7.30	2.9	20.0	364	23	5.1	247
Nov	7.80	2.7	16.0	404	20	5.4	276
2022							
Jan	7.6	7	24	440	10	4.6	310
Feb	7.50	8.0	20	430	22	4.5	288
Mar	7.60	7.0	20	480	25	4.3	325
Apr	7.60	8.0	24	490	28	4.0	328
May	7.30	10	32	445	28	3.0	300
June	7.0	8.0	30	508	30	3.0	340
July	7.60	6.0	24	540	28	3.6	360
Aug	7.40	8.0	26.4	352	28	3.5	232
Sept	7.90	7.6	24.08	319	28	5.2	210
Oct	7.60	7.2	22	340	24	5.6	224
Nov	8.0	6.2	16	370	24	3.8	245
Dec	7.80	4.0	20.0	363	15	5.6	241
2021							
Jan	8.1	5.8	30	590	14	3.4	377
Feb	7.0	4.0	20	625	24	7.6	418
Mar	7.20	8.0	32	675	24	5.60	452
Apr	7.0	8.40	35	698	25	5.30	472
May	7.80	8.20	33	688	22	5.10	482
June	7.70	8.0	32	680	22	6.0	456
July	7.80	6.50	30	550	28	3.90	380
Aug	7.60	6.0	27.10	521	31	4.0	349
Sep	7.9	6.4	32	534		3.8	357
Oct	7.7	10	32	520		3.50	352

Nov	7.3	12.8	34.1	533		3.7	357.11
Dec	7.20	10	32	556	28	4.0	372.5
202							
Jan	7.2	5.2	10	486	10	6.8	257
Feb	7.54	8.0	25	540	30	4.4	248
Mar	8.5	6	30	490	31	6	288
Apr	7.4	3	18	450	33	8	311
May	7.6	4.6	28	460	39	6.2	460
June	7.2	6.4	36	470	37	3.1	319
July	7.8	10	50	270	32	2.8	179
Aug	7.38	3.90	14	260	33	5.7	178
Sep	7.85	4.50	12.6	270	34	3.9	175
Oct	7.3	5.40	19	300	33	4.80	192
Nov	7.38	5.20	20	310	19	4.4	238
Dec	7.10	5.7	21	340	19	4.1	258
Average	7.52	5.66	23.63	387.17	29.17	5.02	258.58
Min-Max	(7.1-8.5)	(3-10)	(10-50)	(260-540)	(10-39)	(2.8-8)	(175-460)
2019							
Jan	7.1	4	11	280	12	6.2	188
Feb	7.7	4	14	381	16	6	208
Mar	7.3	4.6	18	510	26	5.2	267
Apr	7.5	5.2	28	460	32	6.0	272
May	7.4	4.6	24	480	38	5.8	267
June	7.7	4.2	28	520	37	6.4	264
July	7.4	6	30	284	30	3.6	185
Aug	7.2	6.2	30	430	31	4.0	234
Sep	7.2	6.0	20.0	440	32	4.0	286
Oct	7.8	6.2	20	412	30	5.2	268
Nov	7.5	6.0	40	340	22	4.2	228
Dec	7.4	10	20	392	11	3.2	263
Average	7.43	5.58	23.58	410.75	26.42	4.98	244.17
Min-Max	(7.1-7.8)	(4-10)	(11-40)	(280-520)	(11-38)	(3.2-6.4)	(185-286)
2018							
Jan	7.2	3.2	18	390	17	8.2	248
Feb	7.2	2.2	16	450	27	8	298
Mar	River Dry						
Apr	River Dry						
May	River Dry						
June	7.2	3.2	8	440	30	7.2	284
July	7.6	2.6	16	510	28	7.2	328
Aug	7.6	1.8	18	460	27	7.8	288
Sep	7.5	4	14	390	27	7.2	248
Oct	7.3	8	28	410	25	6.2	268
Nov	7.2	4.2	18	320	22	6.8	210
Dec	7.4	3.2	10	370	18	6.4	234
Average	7.35	3.6	16.22	415.55	24.55	7.22	267.33
Min-Max	7.2-7.6)	(1.8-8)	(8-28)	(320-460)	(17-30)	(6.2-8.2)	(210-328)

**WATER QUALITY CHARACTERISTICS OF KALYANI RIVER AT D/S PANTNAGAR
INDUSTRIAL AREA, US NAGAR**

Month	pH	BOD mg/L	COD mg/L	Conductivity µmhos/cm	Temp °C	DO mg/L	TDS mg/L
2024							
Jan	7.20	26.0	176	456	17	2.2	294
Feb	6.93	28.0	192	628	19	1.8	418
Mar	7.13	30.0	208	702	22	1.6	462
Apr	6.34	32.0	240	729	24	0.8	432
May	7.53	36.0	272	754	27	Nil	505
June	6.75	42.0	304	916	33	Nil	554
July	6.81	30	160	714	30	3.1	424
Aug	6.81	34	192	690	29	2.4	416
Sep	7.08	28	152	494	28	2.9	304
Oct	7.1	32	176	668	27	2.2	404
2023							
Jan	7.20	16.0	128.0	399	12	3.5	292
Feb	7.30	25.0	160.0	529	19	2.9	352
Mar	7.10	23.0	144.0	625	22	3.0	408
Apr	7.40	24.0	136.0	597	20	2.8	392
May	7.50	28.0	140.0	564	29	2.4	382
June	7.20	26.0	132.0	456	33	2.4	315
July	7.40	12.0	84.0	396	28	1.0	710
Aug	7.00	14.0	92.0	420	28	4.0	326
Sept	6.80	15.0	92.0	408	29	4.0	285
Oct	7.40	20.0	136.0	484	25	2.8	334
Nov	7.20	24.0	160.0	498	22	2.4	338
2022							
Jan	7.4	19	140	730	10	2.9	492
Feb	7.30	20	144	750	22	2.5	502
Mar	7.50	22.5	160	710	25	2.0	518
Apr	7.70	24	168	720	28	1.8	524
May	7.0	28	190	660	28	1.5	440
June	6.80	34	220	1100	30	1.0	737
July	7.10	32	216	1060	28	1.0	710
Aug	7.30	28.0	211	368	31	1.4	244
Sept	7.0	26	204	331	28	0.8	219
Oct	7.30	28	200	399	26	3.0	265
Nov	7.20	26	180	447	24	2.3	297
Dec	7.10	22	140	374	16	2.4	248
2021							
Jan	7.30	22	80	630	14	1.20	425
Feb	8.20	28	152	1200	23	0.20	828
Mar	8.0	30	156	1210	23	0.10	840
Apr	8.20	28	150	1237	24	0.40	877
May	8.50	23	132	1203	23	0.50	821
June	8.30	22	121	1200	22	0.80	804
July	6.90	26	200	1200	28	1.0	918
Aug	7.40	18	190	1108	31	2.10	742
Sep	7.6	21.30	220	1123		1.9	752

Oct	6.5	26.0	210	1250		1.50	938
Nov	6.9	29	201	1233		1.8	826.11
Dec	7.50	26	195	1176	28	2.2	787
2020							
Jan	7.3	16	40	562	10	1.4	298
Feb	7.16	20	40	580	30	1.6	304
Mar	7.9	6.8	60	540	31	2.8	317
Apr	7.5	5.2	36	410	33	3.7	269
May	7.0	6.4	44	456	39	3.1	310
June	7.8	8.2	44	420	37	2.9	282
July	7.4	15	80	760	31	2.5	502
Aug	7.48	4.10	14	566	32	7.30	286
Sep	7.34	8.0	44	730	32	2.3	287
Oct	7.60	14	48	550	33	2.2	372
Nov	7.2	15	70	560	18	2.3	386
Dec	6.9	13.5	79	580	10	2.0	396
Average	7.38	11.02	49.92	559.50	28.00	2.84	334.08
Min-Max	(6.9-7.9)	(4.1-20)	(14-80)	(410-760)	(10-39)	(1.4-7.3)	(269-502)
2019							
Jan	6.7	24	68	590	14	3.20	389
Feb	6	20	56	530	15	2.8	356
Mar	7.6	14	28	490	25	4.8	304
Apr	7.2	12	24	510	30	2.0	362
May	6.8	10	26	520	36	2.4	292
June	7.4	6	32	560	38	2	297
July	7.4	12	28	389	31	1.8	407
Aug	7.2	6.0	30	520	30	6.4	286
Sep	6.5	4.0	40	520	30	1.4	286
Oct	7.2	6.4	60	484	29	1.8	315
Nov	7.0	9.0	10	423	21	2.2	284
Dec	7.3	22	60	425	11	1.8	285
2018							
Jan	7.9	8.2	38	620	17	5.20	412
Feb	7.4	6	36	580	22	5.20	377
Mar	6.98	20	84	230	27	1.80	339
Apr	6.86	80	304	470	28	0.60	300
May	7.1	52	200	480	30	1.20	317
June	6.4	48	190	580	32	1.20	376
July	7.3	44	152	570	28	1.80	374
Aug	7.8	30	118	550	28	3.20	352
Sep	6.9	34	138	580	28	2.80	376
Oct	7.3	36	130	540	27	2.00	352
Nov	7.6	26	88	520	23	2.60	336
Dec	6.8	30	80	580	18	2.80	378
Average	7.19	34.51	129.83	525	25.66	2.53	357.41
Min-Max	(6.4-7.9)	(6-80)	(36-304)	(230-620)	(17-32)	(0.60-5.20)	(300-412)