

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

Month	pH	BOD mg/L	COD mg/L	Conductivity $\mu$ mhos/cm	Temp $^{\circ}$ C	DO mg/L	TDS mg/L
<b>2023</b>							
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
<b>2022</b>							
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
<b>2021</b>							
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
<b>202</b>							
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

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

**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
<b>2023</b>							
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
<b>2022</b>							
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
<b>2021</b>							
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
<b>2020</b>							
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

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