														River Alak	nanda at Badrinath										
1	Jun-23	13.5°C	7.30	26	43	11.2	2.0	13	10	03	15	1.0	4.0	1.8	1.8	ND	0.09	0.003	14.87	0.11	0.15	4.2	4.9	0.50	A
									<u> </u>				River A	L Alaknanda B/C Riv	er Dhauli Ganga at	Vishnuprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
2	Jan-23	05°C	7.22	37	57	11.4	4.0	40	26	14	34	1.0	4.0	1.8	1.8	ND	0.06	0.02	27.85	0.15	0.23	2.9	1.3	0.19	A
	Feb-23	08°C	7.10	95	150	11.2	4.0	96	74	22	88	1.0	4.0	1.8	1.8	ND	0.09	0.03	18.36	0.15	0.12	10.4	3.5	0.46	A
	Mar-23 Apr-23	04°C 15°C	8.01 7.60	33 84	53 127	11.4	3.0 5.0	37 90	28 70	9 20	35 80	1.0	4.0	1.8	1.8	ND ND	0.02	0.01	25.10 48.30	0.15	0.16	6.3	2.0	0.19	A A
	May-23	12°C	8.20	32	48	11.4	6.0	96	81	15	78	1.0	4.0	1.8	1.8	ND	0.11	0.03	46.22	0.14	0.14	4.5	2.0	0.19	A
	Jun-23	14°C	7.90	30	48	11.0	4.0	16	13	03	20	1.0	4.0	1.8	1.8	ND	0.07	0.002	17.33	0.12	0.13	3.9	4.3	0.42	A
	Jul-23	12°C	7.98	22	35	10.8	3.0	20	15	05	23	1.0	4.0	1.8	1.8	ND	0.08	0.03	18.10	0.10	0.17	3.7	3.4	0.36	A
	Aug-23	10°C	8.40	27	45	11.0	4.0	33	21	12	24	1.0	4.0	2.0	<1.8	ND	0.04	0.01	19.28	0.13	0.24	1.3	1.6	0.10	A
	Sep-23	15°C	7.14	18	30	11.2	5.0	24	20	04	28	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.02	15.63	0.11	0.20	1.1	1.3	0.09	A
	Oct-23	14°C	7.35	22	36	11.4	4.0	28	22	06	31	1.0	4.0	<1.8	<1.8	<1.8	0.05	0.01	14.33	0.09	0.17	1.5	1.1	0.12	A
	Nov-23	10°C	7.44	20	32	11.6	3.0	24	20	04	28	1.0	4.0	<1.8	<1.8	<1.8	0.03	0.01	13.34	0.07	0.14	1.8	1.3	0.16	A
	Dec-23	04°C	7.21	17	28	11.8	2.0	21	15	06	23	1.0	4.0	<1.8	<1.8	<1.8	0.05	0.02	12.63	0.09	0.13	1.6	1.1	0.15	A
													River	Dhauli Ganga B/C	River Alaknanda at	Vishnuprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
3	Jan-23	06°C	7.68	120	184	10.8	5.0	72	50	22	85	1.0	4.0	1.8	1.8	ND	0.07	0.02	58.63	0.20	0.30	3.7	1.9	0.18	A
	Feb-23																								
-	100 23	09°C	7.52	193	295	10.6	5.0	144	109	35	111	1.0	4.0	1.8	1.8	ND	0.07	0.02	17.15	0.13	0.14	10.2	3.1	0.36	A
	Mar-23	09°C 05°C	7.52 7.90	193 88	295 134	10.6 11.0	5.0	144	109 93	35 10	111 73	1.0	4.0	1.8 1.8	1.8	ND ND	0.07 0.08	0.02	17.15 60.25	0.13 0.13	0.14 0.19	10.2	3.1	0.36 0.10	A A
		- ''		<del></del>	<del>-                                    </del>			+	-	<b>-</b>		<del>                                     </del>	-				+	<del>                                     </del>				+			
	Mar-23	05°C	7.90	88	134	11.0	4.0	103	93	10	73	1.0	4.0	1.8	1.8	ND	0.08	0.03	60.25	0.13	0.19	2.5	2.2	0.10	A
	Mar-23 Apr-23	05°C 16°C	7.90 7.80	88 90	134 138	11.0	4.0 6.0	103 140	93	10 40	73 102	1.0	4.0	1.8	1.8	ND ND	0.08	0.03 0.05	60.25 51.38	0.13 0.15	0.19 0.16	2.5	2.2	0.10	A A
	Mar-23 Apr-23 May-23	05°C 16°C 13°C	7.90 7.80 8.10	88 90 34	134 138 53	11.0 10.8 11.0	4.0 6.0 5.0	103 140 88	93 100 73	10 40 15	73 102 62	1.0 1.0 1.0	4.0 4.0 4.0	1.8 1.8 1.8	1.8 1.8 1.8	ND ND ND	0.08 0.10 0.11	0.03 0.05 0.02	60.25 51.38 45.14	0.13 0.15 0.16	0.19 0.16 0.13	2.5 2.6 2.2	2.2 2.1 1.7	0.10 0.09 0.10	A A A
	Mar-23 Apr-23 May-23 Jun-23	05°C 16°C 13°C 13.8°C	7.90 7.80 8.10 8.03	88 90 34 93	134 138 53 145	11.0 10.8 11.0 10.6	4.0 6.0 5.0 3.0	103 140 88 85	93 100 73 70	10 40 15 15	73 102 62 46	1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0	1.8 1.8 1.8	1.8 1.8 1.8	ND ND ND	0.08 0.10 0.11 0.05	0.03 0.05 0.02 0.002	60.25 51.38 45.14 32.43	0.13 0.15 0.16 0.08	0.19 0.16 0.13 0.16	2.5 2.6 2.2 3.1	2.2 2.1 1.7 3.4	0.10 0.09 0.10 0.14	A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23	05°C 16°C 13°C 13.8°C	7.90 7.80 8.10 8.03 8.21	88 90 34 93 81	134 138 53 145 124	11.0 10.8 11.0 10.6 10.2	4.0 6.0 5.0 3.0 4.0	103 140 88 85 71	93 100 73 70 58	10 40 15 15 13	73 102 62 46 51	1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8	1.8 1.8 1.8 1.8	ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03	0.03 0.05 0.02 0.002 0.002	60.25 51.38 45.14 32.43 35.11	0.13 0.15 0.16 0.08 0.09	0.19 0.16 0.13 0.16 0.20	2.5 2.6 2.2 3.1 3.5	2.2 2.1 1.7 3.4 3.2	0.10 0.09 0.10 0.14 0.18	A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	05°C 16°C 13°C 13.8°C 13°C	7.90 7.80 8.10 8.03 8.21 8.25	88 90 34 93 81 79	134 138 53 145 124 118	11.0 10.8 11.0 10.6 10.2	4.0 6.0 5.0 3.0 4.0 2.0	103 140 88 85 71 98	93 100 73 70 58 55	10 40 15 15 13 43	73 102 62 46 51 53	1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0	1.8 1.8 1.8 1.8 1.8 <1.8	ND ND ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02	0.03 0.05 0.02 0.002 0.002 0.01	60.25 51.38 45.14 32.43 35.11 29.20	0.13 0.15 0.16 0.08 0.09 0.10	0.19 0.16 0.13 0.16 0.20 0.18	2.5 2.6 2.2 3.1 3.5 2.0	2.2 2.1 1.7 3.4 3.2 2.4	0.10 0.09 0.10 0.14 0.18	A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23	05°C 16°C 13°C 13.8°C 13°C 09°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99	88 90 34 93 81 79 66	134 138 53 145 124 118	11.0 10.8 11.0 10.6 10.2 10.4	4.0 6.0 5.0 3.0 4.0 2.0 6.0	103 140 88 85 71 98	93 100 73 70 58 55 75	10 40 15 15 13 43 26	73 102 62 46 51 53 60	1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0	1.8 1.8 1.8 1.8 1.8 1.8 -1.8 -1.8 -1.8	ND ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05	0.03 0.05 0.02 0.002 0.002 0.01 0.03	60.25 51.38 45.14 32.43 35.11 29.20 22.10	0.13 0.15 0.16 0.08 0.09 0.10 0.09	0.19 0.16 0.13 0.16 0.20 0.18 0.15	2.5 2.6 2.2 3.1 3.5 2.0	2.2 2.1 1.7 3.4 3.2 2.4 2.1	0.10 0.09 0.10 0.14 0.18 0.09	A A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99	88 90 34 93 81 79 66 75	134 138 53 145 124 118 101	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0	103 140 88 85 71 98 101	93 100 73 70 58 55 75 65	10 40 15 15 13 43 26 32	73 102 62 46 51 53 60 70	1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0 2.0	1.8 1.8 1.8 1.8 1.8 1.8 1.8 <1.8 <1.8 <1	ND ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07	0.03 0.05 0.02 0.002 0.02 0.01 0.03 0.01	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09	A A A A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C 11°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99 7.81 7.70	88 90 34 93 81 79 66 75 69	134 138 53 145 124 118 101 115	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8 11.0	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0	103 140 88 85 71 98 101 97	93 100 73 70 58 55 75 65	10 40 15 15 13 43 26 32 28	73 102 62 46 51 53 60 70	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0 2.0 <1.8 <1.8	1.8 1.8 1.8 1.8 1.8 1.8 -1.8 -1.8 -1.8 -	ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07	0.03 0.05 0.02 0.002 0.02 0.01 0.03 0.01 0.03	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52 15.33	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11 0.08	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1 2.5	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5 2.0	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09 0.11	A A A A A A A A A A
S.No.	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C 11°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99 7.81 7.70	88 90 34 93 81 79 66 75 69	134 138 53 145 124 118 101 115 105	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8 11.0	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0	103 140 88 85 71 98 101 97	93 100 73 70 58 55 75 65	10 40 15 15 13 43 26 32 28	73 102 62 46 51 53 60 70	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0 2.0 <1.8 <1.8	1.8 1.8 1.8 1.8 1.8 -1.8 -1.8 -1.8 -1.8	ND ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07	0.03 0.05 0.02 0.002 0.02 0.01 0.03 0.01 0.03	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52 15.33	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11 0.08	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1 2.5	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5 2.0	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09 0.11	A A A A A A A A A A
S.No. 4	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C 13°C 11°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99 7.81 7.70 7.61	88 90 34 93 81 79 66 75 69 60	134 138 53 145 124 118 101 115 105	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8 11.0	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0 4.0 3.0	103 140 88 85 71 98 101 97 89 71	93 100 73 70 58 55 75 65 61 50	10 40 15 15 13 43 26 32 28 21	73 102 62 46 51 53 60 70 65 62	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 8iver J	1.8 1.8 1.8 1.8 2.0 2.0 2.0 41.8 <1.8 Alaknanda A/C Riv	1.8 1.8 1.8 1.8 1.8 -1.8 -1.8 -1.8 -1.8	ND   ND   ND   ND   ND   ND   ND   ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07 0.07 0.03	0.03 0.05 0.02 0.002 0.02 0.01 0.03 0.01 0.03	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52 15.33 14.42	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11 0.08 0.11	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13 0.15	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1 2.5 2.0	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5 2.0	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09 0.11 0.10	A A A A A A A A A A C A A A A C C C C C
$\vdash$	Mar-23 Apr-23 Jun-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C 11°C 05°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99 7.81 7.70 7.61	88 90 34 93 81 79 66 75 69 60 TDS (mg/l) 70 82	134 138 53 145 124 118 101 115 105 91	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8 11.0	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0 4.0 5.0 4.0 Chloride (mg/l)	103 140 88 85 71 98 101 97 89 71	93 100 73 70 58 55 75 65 61 50  Calcium (mg/l)	10 40 15 15 13 43 26 32 28 21	73 102 62 46 51 53 60 70 65 62	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0 2.0 41.8 <1.8 Alaknanda A/C Riv TC (MPN/100 ml) 1.8 1.8	1.8 1.8 1.8 1.8 1.8 1.8 <1.8 <1.8 <1.8 <	ND <1.8 <1.8 <1.8 <1.8 <1.8 <1.8 NS NS NS NS NS NS ND ND ND ND ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07 0.07 0.03	0.03 0.05 0.02 0.002 0.01 0.03 0.01 0.03 0.01	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52 15.33 14.42 Sulphate (mg/l)	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11 0.08 0.11	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13 0.15 0.12	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1 2.5 2.0 Sodium (mg/l) 3.2 10.1	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5 2.0 1.7	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09 0.11 0.10	A A A A A A A A A A C A A A C C C C C C
	Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	05°C 16°C 13°C 13.8°C 13°C 09°C 14°C 13°C 11°C 05°C	7.90 7.80 8.10 8.03 8.21 8.25 7.99 7.81 7.70 7.61	88 90 34 93 81 79 66 75 69 60 TDS (mg/l)	134 138 53 145 124 118 101 115 105 91 EC (µS/cm) 108	11.0 10.8 11.0 10.6 10.2 10.4 10.6 10.8 11.0 11.2	4.0 6.0 5.0 3.0 4.0 2.0 6.0 5.0 4.0 3.0 Chloride (mg/l) 6.0	103 140 88 85 71 98 101 97 89 71	93 100 73 70 58 55 75 65 61 50  Caldum (mg/l) 31	10 40 15 15 13 43 26 32 28 21	73 102 62 46 51 53 60 70 65 62  Alkalinity (mg/l) 58	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 2.0 2.0 2.0 2.0 41.8 <1.8  Alaknanda A/C Riv TC (MPN/100 ml) 1.8	1.8 1.8 1.8 1.8 1.8 -1.8 -1.8 -1.8 -1.8	ND   ND   ND   ND   ND   ND   ND   ND	0.08 0.10 0.11 0.05 0.03 0.02 0.05 0.07 0.07 0.03	0.03 0.05 0.02 0.002 0.01 0.03 0.01 0.03 0.01	60.25 51.38 45.14 32.43 35.11 29.20 22.10 17.52 15.33 14.42  Sulphate (mg/l) 50.23	0.13 0.15 0.16 0.08 0.09 0.10 0.09 0.11 0.08 0.11	0.19 0.16 0.13 0.16 0.20 0.18 0.15 0.13 0.15 0.12	2.5 2.6 2.2 3.1 3.5 2.0 1.7 2.1 2.5 2.0 Sodium (mg/l) 3.2	2.2 2.1 1.7 3.4 3.2 2.4 2.1 2.5 2.0 1.7	0.10 0.09 0.10 0.14 0.18 0.09 0.07 0.09 0.11 0.10	A A A A A A A A A A A C A A A A A A A A

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	May-23	12°C	8.32	30	50	11.2	4.0	102	89	13	60	1.0	4.0	1.8	1.8	ND	0.15	0.03	52.31	0.16	0.17	3.2	1.9	0.13	A
	Jun-23	14°C	7.80	83	128	10.8	3.0	71	59	12	56	1.0	4.0	1.8	1.8	ND	0.08	0.003	19.82	0.13	0.15	3.7	3.9	0.19	A
	Jul-23	12°C	7.92	70	108	10.6	3.0	63	52	11	49	1.0	4.0	1.8	1.8	ND	0.06	0.01	17.33	0.15	0.22	3.4	3.0	0.19	A
	Aug-23	10°C	8.30	46	69	10.8	3.0	55	38	17	30	1.0	4.0	2.0	<1.8	ND	0.08	0.03	20.20	0.16	0.22	1.4	1.9	0.08	A
	Sep-23	14°C	8.10	56	85	11.0	5.0	85	67	18	50	1.0	4.0	2.0	<1.8	<1.8	0.09	0.02	18.63	0.11	0.20	1.2	1.5	0.06	A
	Oct-23	14°C	7.62	62	95	11.2	4.0	89	68	21	61	1.0	4.0	2.0	<1.8	<1.8	0.08	0.02	16.85	0.08	0.18	1.6	1.9	0.07	A
	Nov-23	10°C	7.56	53	81	11.4	3.0	77	59	18	57	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.04	15.42	0.11	0.18	2.0	1.7	0.10	A
	Dec-23	04°C	7.45	48	74	11.6	2.0	60	44	16	48	1.0	4.0	<1.8	<1.8	<1.8	0.07	0.03	13.61	0.09	0.13	1.7	1.5	0.10	A
				ı		<u> </u>		1					Rive	er Alaknanda B/C F	River Nandakini at N	landprayag	ı		<u> </u>	1		1	· · ·		
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
5	Jan-23	06°C	7.08	80	123	10.8	4.0	58	47	11	70	1.0	4.0	1.8	1.8	ND	0.10	0.05	19.37	0.18	0.23	3.1	2.0	0.17	A
	Feb-23	11°C	7.19	84	128	10.6	4.0	120	96	24	102	1.0	4.0	1.8	1.8	ND	0.09	0.02	16.83	0.16	0.17	8.7	3.8	0.34	A
	Mar-23	06°C	8.03	86	131	10.8	4.0	76	57	19	62	1.0	4.0	1.8	1.8	ND	0.02	0.02	19.23	0.15	0.22	3.1	2.1	0.15	A
	Apr-23	15°C	7.50	90	137	10.8	5.0	124	94	30	98	1.0	4.0	1.8	1.8	ND	0.11	0.03	20.62	0.19	0.15	4.3	2.3	0.16	A
	May-23	15°C	7.80	76	116	10.8	5.0	78	64	14	64	1.0	4.0	1.8	1.8	ND	0.09	0.03	18.10	0.14	0.15	3.9	2.1	0.19	A
	Jun-23	18°C	7.90	78	118	10.4	5.0	65	52	13	61	1.0	4.0	1.8	1.8	ND	0.04	0.006	18.69	0.12	0.15	4.3	4.6	0.23	A
	Jul-23	13°C	8.03	67	103	10.2	4.0	60	50	10	54	1.0	4.0	1.8	1.8	ND	0.09	0.03	17.25	0.14	0.11	3.9	3.7	0.22	A
	Aug-23	12°C	8.38	55	85	10.4	3.0	64	44	20	46	1.0	4.0	2.0	<1.8	ND	0.06	0.01	19.24	0.18	0.24	1.6	3.1	0.09	A
	Sep-23	16°C	8.26	68	102	10.6	5.0	78	63	15	56	1.0	4.0	2.0	<1.8	<1.8	0.04	0.01	17.33	0.15	0.18	1.4	2.7	0.07	A
	Oct-23	12°C	7.90	76	116	10.8	3.0	84	60	24	68	1.0	4.0	2.0	<1.8	<1.8	0.05	0.02	15.76	0.13	0.16	1.8	2.4	0.09	A
	Nov-23	14°C	7.77	67	102	11.0	3.0	71	51	20	62	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.04	14.32	0.09	0.15	2.1	2.3	0.11	A
	Dec-23	14°C	7.64	59	89	11.2	2.0	57	39	18	51	1.0	4.0	<1.8	<1.8	<1.8	0.05	0.02	12.76	0.13	0.16	1.9	1.7	0.11	A
				<u> </u>	<u> </u>							<u> </u>	Rive	er Nandakini B/C R	liver Alaknanda at N	landprayag		•							•
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
6	Jan-23	07°C	7.26	86	130	10.6	5.0	62	44	18	89	1.0	4.0	40	24	ND	0.05	0.02	25.11	0.13	0.19	2.9	2.4	0.15	A
	Feb-23	09°C	7.34	77	118	10.4	6.0	92	71	21	86	1.0	4.0	43	21	ND	0.08	0.03	15.80	0.18	0.19	7.9	3.0	0.35	A
	Mar-23	07°C	8.10	83	127	10.6	3.0	81	72	9	80	1.0	4.0	39	33	ND	0.07	0.02	23.25	0.12	0.20	2.7	2.6	0.13	A
	Apr-23	16°C	8.17	96	146	10.4	4.0	100	74	26	80	1.0	4.0	33	31	ND	0.10	0.03	20.10	0.15	0.15	3.0	2.6	0.13	A
	May-23	14°C	7.90	71	108	10.6	4.0	73	62	11	60	1.0	4.0	47	39	ND	0.13	0.02	23.11	0.16	0.16	2.8	2.3	0.14	A
	Jun-23	17°C	7.60	69	106	10.2	2.0	50	44	06	50	1.0	4.0	41	39	ND	0.09	0.001	7.09	0.16	0.11	3.4	3.2	0.20	A
	Jul-23	14°C	7.76	56	86	9.8	3.0	47	42	05	45	1.0	4.0	47	40	ND	0.11	0.01	13.20	0.20	0.15	3.0	2.6	0.19	A
	Aug-23	11°C	8.27	50	80	10.0	2.0	60	43	17	51	1.0	4.0	39	22	ND	0.07	0.03	16.33	0.11	0.14	2.0	3.0	0.11	A
	Sep-23	17°C	8.08	46	70	10.2	6.0	56	42	14	52	1.0	4.0	26	22	<1.8	0.08	0.02	13.42	0.13	0.17	1.8	2.6	0.10	A
	Oct-23	13°C	8.19	50	76	10.4	5.0	61	44	17	56	1.0	4.0	25	21	<1.8	0.07	0.03	14.53	0.11	0.19	2.1	2.8	0.12	A
	Nov-23	15°C	8.05	45	69	10.6	4.0	53	39	14	50	1.0	4.0	21	17	<1.8	0.09	0.05	13.42	0.09	0.16	2.4	2.7	0.14	A
	Dec-23	15°C	7.90	40	62	10.8	3.0	48	36	12	45	1.0	4.0	32	21	<1.8	0.07	0.06	11.93	0.12	0.12	2.0	1.8	0.13	A
													Rive	er Alaknanda A/C F	River Nandakini at N	landprayag									

S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
7	Jan-23	06°C	7.30	89	136	10.8	5.0	52	35	17	81	1.0	4.0	1.8	1.8	ND	0.09	0.03	16.20	0.20	0.22	3.1	2.0	0.18	A
	Feb-23	10°C	7.43	86	131	10.6	4.0	111	90	21	107	1.0	4.0	1.8	1.8	ND	0.10	0.02	16.96	0.18	0.17	8.5	3.6	0.35	A
	Mar-23	07°C	7.90	88	136	10.8	3.0	85	66	19	56	1.0	4.0	1.8	1.8	ND	0.05	0.01	16.25	0.12	0.18	2.8	2.4	0.13	A
	Apr-23	16°C	8.30	92	140	10.6	5.0	106	86	20	114	1.0	4.0	1.8	1.8	ND	0.08	0.02	15.95	0.16	0.18	4.0	2.5	0.16	A
	May-23	14°C	8.10	83	126	10.8	4.0	82	73	9	72	1.0	4.0	1.8	1.8	ND	0.09	0.03	14.26	0.14	0.15	3.6	2.0	0.17	A
	Jun-23	18°C	7.70	70	110	10.4	5.0	41	34	07	52	1.0	4.0	1.8	1.8	ND	0.08	0.03	13.39	0.13	0.19	3.9	4.1	0.26	A
	Jul-23	13°C	7.85	64	98	10.2	4.0	49	40	09	54	1.0	4.0	1.8	1.8	ND	0.08	0.02	15.11	0.13	0.13	3.5	3.1	0.22	Α
	Aug-23	12°C	8.30	54	84	10.4	3.0	60	50	10	49	1.0	4.0	2.0	<1.8	ND	0.06	0.01	18.39	0.17	0.13	1.7	3.0	0.10	A
	Sep-23	16°C	8.14	52	80	10.6	5.0	59	43	16	54	1.0	4.0	4.0	<1.8	<1.8	0.08	0.02	16.72	0.12	0.15	1.4	2.5	0.08	A
	Oct-23	12°C	8.05	61	94	10.8	4.0	70	49	21	63	1.0	4.0	2.0	<1.8	<1.8	0.05	0.02	15.93	0.14	0.19	1.7	2.7	0.09	A
	Nov-23	13°C	7.92	56	86	10.8	3.0	64	46	18	58	1.0	4.0	4.0	<1.8	<1.8	0.06	0.03	13.82	0.10	0.13	2.0	1.8	0.11	A
	Dec-23	14°C	7.80	51	78	11.0	2.0	55	40	15	53	1.0	4.0	<1.8	<1.8	<1.8	0.05	0.02	12.43	0.09	0.10	1.8	1.5	0.11	A
													Riv	ver Alaknanda B/C	River Pindar at Kar	anprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
8	Jan-23	08°C	7.42	92	141	10.6	4.0	70	44	26	74	1.0	4.0	1.8	1.8	ND	0.07	0.03	20.33	0.17	0.19	3.6	2.1	0.18	A
	Feb-23	10°C	7.50	95	144	10.4	6.0	100	69	31	74	1.0	4.0	1.8	1.8	ND	0.11	0.03	17.36	0.20	0.18	8.9	3.4	0.38	A
	Mar-23	11°C	8.11	82	124	10.6	4.0	73	65	8	53	1.0	4.0	1.8	1.8	ND	0.09	0.03	22.11	0.11	0.22	2.6	2.1	0.13	A
	Apr-23	16°C	8.39	98	150	10.6	5.0	134	90	44	110	1.0	4.0	1.8	1.8	ND	0.08	0.06	19.39	0.09	0.13	3.8	2.3	0.14	A
	May-23	18°C	8.01	69	106	10.6	5.0	89	76	13	60	1.0	4.0	1.8	1.8	ND	0.07	0.03	17.36	0.11	0.16	3.4	2.1	0.15	A
	Jun-23	18.7°C	7.10	80	123	10.2	5.0	63	51	12	55	1.0	4.0	1.8	1.8	ND	0.06	0.003	15.26	0.12	0.17	3.7	3.9	0.20	A
	Jul-23	15°C	7.67	71	108	10.0	5.0	60	50	10	57	1.0	4.0	1.8	1.8	ND	0.04	0.02	13.37	0.13	0.14	3.2	2.9	0.18	A
	Aug-23	12°C	8.23	56	85	10.2	3.0	61	46	15	48	1.0	4.0	6.1	4.0	ND	0.05	0.02	18.48	0.11	0.17	1.7	2.6	0.09	A
	Sep-23	13°C	7.61	46	71	10.4	5.0	68	54	14	53	1.0	4.0	2.0	<1.8	<1.8	0.07	0.01	15.30	0.13	0.15	1.2	2.2	0.06	A
	Oct-23	14°C	7.80	57	87	10.6	5.0	81	63	18	60	1.0	4.0	2.0	<1.8	<1.8	0.09	0.01	14.20	0.15	0.13	1.5	2.4	0.07	A
	Nov-23	11°C	7.85	60	92	10.8	4.0	76	60	16	56	1.0	4.0	<1.8	<1.8	<1.8	0.08	0.03	13.15	0.13	0.10	1.8	1.5	0.09	A
	Dec-23	08°C	7.70	57	88	11.0	3.0	63	50	13	51	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.01	13.88	0.10	0.14	1.5	1.2	0.08	A
													Riv	ver Pindar B/C Riv	er Alaknanda at Kar	anprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/I)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
9	Jan-23	09°C	7.59	85	130	10.4	5.0	68	41	27	87	1.0	4.0	43	32	ND	0.09	0.02	23.25	0.19	0.23	2.6	2.0	0.13	A
	Feb-23	09°C	7.67	97	147	10.2	7.0	119	85	34	104	1.0	4.0	39	27	ND	0.12	0.03	19.84	0.19	0.11	6.6	3.0	0.26	A
	Mar-23	12°C	8.20	86	131	10.4	3.0	85	68	17	81	1.0	4.0	43	38	ND	0.06	0.01	25.13	0.14	0.18	2.3	2.1	0.10	A
	Apr-23	15°C	8.44	95	144	10.2	6.0	96	60	36	70	1.0	4.0	41	39	ND	0.08	0.03	22.16	0.11	0.16	2.3	2.2	0.10	A
	May-23	17°C	8.12	79	120	10.4	4.0	78	62	16	63	1.0	4.0	48	43	ND	0.11	0.02	20.33	0.14	0.13	2.1	1.8	0.10	A
	Jun-23	18.5°C	8.06	82	125	10.0	3.0	58	48	10	60	1.0	4.0	46	43	ND	0.07	0.02	8.90	0.11	0.16	3.0	2.7	0.17	A

	Jul-23	16°C	8.19	76	117	9.6	4.0	52	40	12	55	1.0	4.0	49	33	ND	0.03	0.03	16.85	0.09	0.13	2.8	2.3	0.17	A
	Aug-23	11°C	8.34	71	105	9.8	5.0	80	52	28	70	1.0	4.0	40	34	ND	0.06	0.02	20.13	0.13	0.15	2.1	2.9	0.10	A
	Sep-23	14°C	8.12	49	74	9.8	4.0	75	60	15	80	1.0	4.0	33	27	<1.8	0.08	0.01	17.15	0.12	0.14	1.8	2.4	0.09	A
	Oct-23	15°C	8.25	62	96	9.6	6.0	90	70	20	98	1.0	4.0	31	26	<1.8	0.07	0.01	16.42	0.13	0.18	2.0	2.7	0.09	A
	Nov-23	12°C	8.12	69	106	9.8	5.0	95	73	22	91	1.0	4.0	32	26	<1.8	0.05	0.02	14.23	0.11	0.15	2.4	2.2	0.11	A
	Dec-23	07°C	7.98	63	96	10.0	4.0	86	66	20	79	1.0	4.0	26	22	<1.8	0.06	0.03	12.70	0.09	0.13	2.1	2.0	0.10	A
													Ri	ver Alaknanda A/C	River Pindar at Kar	ranprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
10	Jan-23	08°C	7.94	94	141	10.6	4.0	62	42	20	81	1.0	4.0	1.8	1.8	ND	0.08	0.01	15.26	0.13	0.20	3.1	2.0	0.17	A
	Feb-23	09°C	7.85	98	149	10.4	5.0	114	71	43	89	1.0	4.0	1.8	1.8	ND	0.11	0.03	17.75	0.22	0.16	9.4	3.1	0.38	A
	Mar-23	12°C	8.24	83	126	10.6	3.0	75	67	8	71	1.0	4.0	1.8	1.8	ND	0.03	0.01	14.11	0.09	0.15	2.4	2.1	0.12	A
	Apr-23	15°C	8.10	93	142	10.6	6.0	120	90	30	94	1.0	4.0	1.8	1.8	ND	0.06	0.04	15.38	0.12	0.19	2.4	2.0	0.09	A
	May-23	17°C	8.04	81	124	10.6	5.0	98	81	17	69	1.0	4.0	1.8	1.8	ND	0.07	0.03	13.49	0.13	0.22	2.0	1.7	0.08	A
	Jun-23	19°C	7.80	79	121	10.4	3.0	60	56	04	59	1.0	4.0	1.8	1.8	ND	0.05	0.001	13.63	0.18	0.11	2.8	2.5	0.16	A
	Jul-23	15°C	7.94	73	113	10.0	4.0	57	49	08	59	1.0	4.0	1.8	1.8	ND	0.05	0.02	15.69	0.07	0.10	2.5	2.1	0.14	A
	Aug-23	12°C	8.19	64	93	10.2	3.0	76	51	25	62	1.0	4.0	4.5	2.0	ND	0.05	0.03	18.30	0.10	0.18	1.8	3.1	0.09	A
	Sep-23	13°C	8.22	48	72	10.4	5.0	72	65	07	58	1.0	4.0	4.0	2.0	<1.8	0.09	0.02	15.43	0.11	0.15	1.5	2.6	0.08	A
	Oct-23	15°C	8.10	64	99	10.4	5.0	83	68	15	74	1.0	4.0	4.0	2.0	<1.8	0.08	0.03	15.11	0.12	0.19	1.8	2.9	0.09	A
	Nov-23	12°C	8.02	67	103	10.6	4.0	88	70	18	77	1.0	4.0	4.5	2.0	<1.8	0.03	0.02	14.72	0.09	0.15	2.2	2.0	0.10	A
	Dec-23	07°C	7.89	61	93	10.8	3.0	77	61	16	70	1.0	4.0	4.5	<1.8	<1.8	0.05	0.01	11.64	0.12	0.12	1.9	1.7	0.09	A
													<u> </u>	River Man	dakini at Kedarnath	<u> </u>			ı				1		
11	Jun-23	10°C	8.01	32	50	11.4	3.0	30	16	14	18	1.0	4.0	1.8	1.8	ND	0.04	ND	18.19	0.07	0.13	3.8	3.7	0.30	A
			ı		ı		ı	l				ı	Rive	er Mandakini B/C R	iver Alaknanda at R	I	l	ı	Π			Г	l		Designated Best use
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)			FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)		SAR	(DBU) Water Quality Criteria
12	Jan-23	14°C	7.63	50	75	10.8	3.0	88	53	35	73	1.0	4.0	1.8	1.8	ND	0.06	0.02	13.63	0.07	0.13	4.0	3.4	0.18	A
	Feb-23	12°C	7.73	49	75	10.6	2.0	59	45	14	49	1.0	4.0	1.8	1.8	ND	0.08	0.03	11.83	0.09	0.15	11.0	3.1	0.62	A
	Mar-23	13°C 16°C	7.91 7.60	67 53	102 80	10.8	6.0	56	45 38	11	60 58	1.0	4.0	1.8	1.8	ND ND	0.03	0.02	12.35	0.11	0.13	4.1	2.2 1.9	0.23	A
-	Apr-23	16°C	7.40	65	99	10.6	8.0 6.0	56 62	48	14	60	1.0	4.0	1.8	1.8	ND ND	0.05	0.03	13.24	0.10	0.11	4.4	3.1	0.25	A
	May-23 Jun-23	16°C	7.40	48	73	10.4	4.0	50	36	14	46	1.0	4.0	1.8	1.8	ND ND	0.11	0.04	20.26	0.11	0.13	4.9	4.8	0.26	A A
	Jul-23	16°C	7.80	39	61	9.8	3.0	30	21	09	24	1.0	4.0	1.8	1.8	ND ND	0.09	0.000	20.24	0.17	0.21	3.9	3.6	0.28	A
	Aug-23	16°C	8.30	49	75	10.2	3.0	58	49	09	56	1.0	4.0	4.0	2.0	ND	0.07	0.02	30.21	0.15	0.16	3.5	3.2	0.20	A
	Sep-23	18°C	8.10	58	88	10.4	5.0	73	61	12	67	1.0	4.0	6.1	4.0	<1.8	0.08	0.03	27.85	0.13	0.14	3.1	2.9	0.16	A
	Oct-23	17°C	7.81	50	77	10.6	4.0	65	55	10	60	1.0	4.0	4.0	2.0	<1.8	0.10	0.02	25.42	0.14	0.16	2.8	3.1	0.15	A
	Nov-23	14°C	7.69	44	68	10.8	3.0	56	48	08	51	1.0	4.0	<1.8	<1.8	<1.8	0.07	0.02	23.4	0.09	0.13	3.0	2.7	0.17	A
						- 3.0	~								1.0	1.0	,			2.07				/	

	Dec-23	09°C	7.53	40	61	11.0	2.0	50	40	10	44	1.0	4.0	<1.8	<1.8	<1.8	0.09	0.03	22.46	0.10	0.16	2.8	2.4	0.17	A
				<u> </u>		<u> </u>		<u> </u>					Rive	r Alaknanda B/C R	ver Mandakini at R	udraprayag	•								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
13	Jan-23	15°C	8.02	67	102	10.6	4.0	90	60	30	68	1.0	4.0	1.8	1.8	ND	0.04	0.02	14.38	0.09	0.18	3.6	2.7	0.16	A
	Feb-23	13°C	7.93	86	130	10.4	6.0	78	68	10	67	1.0	4.0	1.8	1.8	ND	0.09	0.02	12.63	0.11	0.13	10.3	3.3	0.50	A
	Mar-23	14°C	8.33	92	140	10.6	7.0	90	65	25	85	1.0	4.0	1.8	1.8	ND	0.05	0.02	11.85	0.09	0.16	3.0	2.2	0.13	А
	Apr-23	15°C	7.80	91	137	10.4	7.0	92	64	28	94	1.0	4.0	1.8	1.8	ND	0.06	0.01	10.85	0.08	0.15	3.2	2.0	0.14	A
	May-23	17°C	7.85	94	144	10.4	4.0	91	66	25	79	1.0	4.0	1.8	1.8	ND	0.07	0.01	11.36	0.15	0.18	3.0	2.1	0.13	A
	Jun-23	15°C	7.60	55	84	10.2	3.0	60	44	16	52	1.0	4.0	1.8	1.8	ND	0.06	0.001	29.03	0.19	0.17	3.5	3.8	0.20	A
	Jul-23	17°C	8.20	30	47	10.0	2.0	34	19	15	26	1.0	4.0	1.8	1.8	ND	0.08	0.05	23.06	0.13	0.18	3.1	2.9	0.23	A
Ш	Aug-23	15°C	8.40	58	89	10.2	3.0	66	48	18	54	1.0	4.0	6.8	4.5	ND	0.08	0.04	33.15	0.13	0.17	2.6	3.0	0.14	A
Ш	Sep-23	17°C	8.22	54	82	10.2	4.0	64	54	10	55	1.0	4.0	4.0	<1.8	<1.8	0.10	0.03	29.47	0.11	0.13	2.3	2.6	0.12	A
Ш	Oct-23	17°C	8.28	60	92	10.4	5.0	72	59	13	65	1.0	4.0	4.0	<1.8	<1.8	0.08	0.01	22.31	0.13	0.14	2.6	2.8	0.13	A
Ш	Nov-23	15°C	8.15	76	115	10.6	4.0	91	75	16	80	1.0	4.0	<1.8	<1.8	<1.8	0.09	0.03	23.42	0.11	0.11	2.4	2.1	0.11	A
	Dec-23	10°C	7.97	69	106	10.6	3.0	84	65	19	74	1.0	4.0	4.0	<1.8	<1.8	0.07	0.02	20.93	0.13	0.14	2.2	1.9	0.10	A
						ı					ı		Rive	r Alaknanda A/C R	ver Mandakini at R	udraprayag	,		ı				1		Designated Best use
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria
14	Jan-23	14°C	7.44	57	86	10.8	4.0	77	59	18	55	1.0	4.0	1.8	1.8	ND	0.03	0.01	15.26	0.06	0.12	4.3	2.4	0.21	A
Ш	Feb-23																								
	100 23	12°C	7.61	73	112	10.6	4.0	70	55	15	51	1.0	4.0	1.8	1.8	ND	0.07	0.02	12.15	0.08	0.16	10.5	3.2	0.54	A
Ш	Mar-23	12°C 14°C	7.61 8.06	73 89	112	10.6	7.0	70 93	55	15 37	51 72	1.0	4.0	1.8	1.8	ND ND	0.07	0.02	12.15	0.08	0.16	3.2	3.2 2.2	0.54	A A
			H	<u> </u>			<u> </u>	-				<del></del>	-									<del></del>			<b>+</b>
	Mar-23	14°C	8.06	89	135	10.8	7.0	93	56	37	72	1.0	4.0	1.8	1.8	ND	0.05	0.03	13.14	0.11	0.11	3.2	2.2	0.14	А
	Mar-23 Apr-23	14°C 15°C	8.06 7.65	89	135 122	10.8 10.6	7.0 7.0	93 96	56 57	37 39	72 74	1.0	4.0	1.8	1.8	ND ND	0.05	0.03	13.14 13.37	0.11	0.11	3.2	2.2	0.14	A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23	14°C 15°C 16°C 16°C	8.06 7.65 7.78 7.40 8.10	89 80 88 50 36	135 122 135 77 58	10.8 10.6 10.6 10.4 10.2	7.0 7.0 5.0 4.0 2.0	93 96 89 56 30	56 57 60 30 20	37 39 29 26 10	72 74 77 40 28	1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8	1.8 1.8 1.8 1.8	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08	0.03 0.03 0.05 0.002 0.03	13.14 13.37 14.33 39.11 18.15	0.11 0.13 0.14 0.17 0.19	0.11 0.18 0.16 0.14 0.20	3.2 3.5 3.2 3.8 3.3	2.2 2.2 1.8 4.1 3.0	0.14 0.15 0.14 0.22 0.26	A A A A
	Mar-23 Apr-23 May-23 Jun-23	14°C 15°C 16°C 16°C 17°C	8.06 7.65 7.78 7.40	89 80 88 50 36 54	135 122 135 77 58 83	10.8 10.6 10.6 10.4	7.0 7.0 5.0 4.0 2.0 3.0	93 96 89 56 30 55	56 57 60 30 20 45	37 39 29 26 10	72 74 77 40	1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8	1.8 1.8 1.8 1.8 1.8 2.0	ND ND ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08	0.03 0.03 0.05 0.002	13.14 13.37 14.33 39.11 18.15 35.29	0.11 0.13 0.14 0.17 0.19 0.13	0.11 0.18 0.16 0.14 0.20 0.13	3.2 3.5 3.2 3.8 3.3 2.7	2.2 2.2 1.8 4.1 3.0 2.9	0.14 0.15 0.14 0.22 0.26 0.16	A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23	14°C 15°C 16°C 16°C 17°C 14°C	8.06 7.65 7.78 7.40 8.10	89 80 88 50 36 54	135 122 135 77 58 83 86	10.8 10.6 10.6 10.4 10.2	7.0 7.0 5.0 4.0 2.0 3.0 5.0	93 96 89 56 30 55 69	56 57 60 30 20 45 56	37 39 29 26 10	72 74 77 40 28	1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0	1.8 1.8 1.8 1.8 1.8 2.0 4.0	ND ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09	0.03 0.03 0.05 0.002 0.03 0.03 0.02	13.14 13.37 14.33 39.11 18.15	0.11 0.13 0.14 0.17 0.19 0.13 0.12	0.11 0.18 0.16 0.14 0.20 0.13 0.11	3.2 3.5 3.2 3.8 3.3 2.7 2.5	2.2 2.2 1.8 4.1 3.0 2.9 2.8	0.14 0.15 0.14 0.22 0.26 0.16 0.13	A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 16°C	8.06 7.65 7.78 7.40 8.10 8.20	89 80 88 50 36 54 57 62	135 122 135 77 58 83 86 95	10.8 10.6 10.6 10.4 10.2	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0	93 96 89 56 30 55 69	56 57 60 30 20 45 56 64	37 39 29 26 10 10 13	72 74 77 40 28 51 62 66	1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0	1.8 1.8 1.8 1.8 1.8 2.0 4.0	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03	13.14 13.37 14.33 39.11 18.15 35.29	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15	A A A A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96	89 80 88 50 36 54 57 62 68	135 122 135 77 58 83 86 95	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0	93 96 89 56 30 55 69 75 83	56 57 60 30 20 45 56 64 70	37 39 29 26 10 10 13 11	72 74 77 40 28 51 62 66 72	1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <<1.8	1.8 1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.12	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12	A A A A A A A A A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 16°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08	89 80 88 50 36 54 57 62	135 122 135 77 58 83 86 95	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0	93 96 89 56 30 55 69	56 57 60 30 20 45 56 64	37 39 29 26 10 10 13	72 74 77 40 28 51 62 66	1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8	1.8 1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8 <1.8	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15	A A A A A A A A
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96	89 80 88 50 36 54 57 62 68	135 122 135 77 58 83 86 95	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0 3.0	93 96 89 56 30 55 69 75 83	56 57 60 30 20 45 56 64 70 57	37 39 29 26 10 10 13 11 13	72 74 77 40 28 51 62 66 72 64	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8	1.8 1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01 23.85	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.12	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12	A A A A A A A A A A A A A
S.No.	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 14°C 17°C 16°C 14°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96	89 80 88 50 36 54 57 62 68 59	135 122 135 77 58 83 86 95	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0	93 96 89 56 30 55 69 75 83 73	56 57 60 30 20 45 56 64 70 57	37 39 29 26 10 10 13 11 13 16	72 74 77 40 28 51 62 66 72	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8	1.8 1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8 <1.8	ND ND ND ND ND ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.12	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9 2.6 2.4	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12 0.12	A A A A A A A A A A A A A
S.No. 15	Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 14°C 17°C 16°C 14°C 15°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96 7.80	89 80 88 50 36 54 57 62 68 59	135 122 135 77 58 83 86 95 104 91 EC(µS/cm) 92	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6 10.8	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0 Chloride	93 96 89 56 30 55 69 75 83 73	56 57 60 30 20 45 56 64 70 57	37 39 29 26 10 10 13 11 13 16	72 74 77 40 28 51 62 66 72 64  Alkalinity (mg/l) 53	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8 ver Mandakini D/3 TC (MPN/100 ml) 1.8	1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8 <1.8 at Agustmuni, Rud fc (MPN/100 ml) 1.8	ND   ND   ND   ND   ND   ND   ND   ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08 0.07	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03 0.01	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01 23.85  Sulphate (mg/l) 15.10	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.15	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12 0.16	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9 2.6 2.4  Sodium(mg/l) 4.2	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3 2.1 Potassium (mg/l) 2.6	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12 0.12	A A A A A A A C A A C C Designated Best use (OBU) Water Quality
$\vdash$	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 14°C 10°C 14°C 11°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96 7.80 pH 8.11	89 80 88 50 36 54 57 62 68 59	135 122 135 77 58 83 86 95 104 91 EC (µS/cm) 92	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6 10.8	7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0 3.0 Chloride (mg/l)	93 96 89 56 30 55 69 75 83 73	56 57 60 30 20 45 56 64 70 57  Calcium (mg/l) 53 40	37 39 29 26 10 10 13 11 13 16  Magnesium (mg/l) 22 10	72 74 77 40 28 51 62 66 72 64  Alkalinity (mg/l) 53	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8 ver Mandakini D/9 1.8 1.8	1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8 <1.8 at Agustmuni, Rud fc (MPN/100 ml) 1.8 1.8	ND   ND   ND   ND   ND   ND   ND   ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08 0.07	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03 0.01	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01 23.85  Sulphate (mg/l) 15.10 13.85	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.15	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12 0.16 Fluoride (mg/l) 0.16 0.14	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9 2.6 2.4 Sodium (mg/l) 4.2	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3 2.1  Potassium (mg/l) 2.6 2.9	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12 0.12 0.12	A A A A A A A A A A A A A A A A A A A
$\vdash$	Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	14°C 15°C 16°C 16°C 17°C 14°C 17°C 14°C 17°C 16°C 14°C 15°C	8.06 7.65 7.78 7.40 8.10 8.20 8.08 8.15 7.96 7.80	89 80 88 50 36 54 57 62 68 59	135 122 135 77 58 83 86 95 104 91 EC(µS/cm) 92	10.8 10.6 10.6 10.4 10.2 10.4 10.4 10.6 10.8 10.8	7.0 7.0 7.0 5.0 4.0 2.0 3.0 5.0 4.0 3.0 3.0 3.0 Chloride (mg/l) 3.0	93 96 89 56 30 55 69 75 83 73	56 57 60 30 20 45 56 64 70 57	37 39 29 26 10 10 13 11 13 16	72 74 77 40 28 51 62 66 72 64  Alkalinity (mg/l) 53	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.8 1.8 1.8 1.8 1.8 6.0 6.1 4.0 <1.8 <1.8 ver Mandakini D/3 TC (MPN/100 ml) 1.8	1.8 1.8 1.8 1.8 2.0 4.0 2.0 <1.8 <1.8 at Agustmuni, Rud fc (MPN/100 ml) 1.8	ND   ND   ND   ND   ND   ND   ND   ND	0.05 0.09 0.08 0.03 0.08 0.08 0.09 0.07 0.08 0.07	0.03 0.03 0.05 0.002 0.03 0.03 0.02 0.03 0.03 0.01	13.14 13.37 14.33 39.11 18.15 35.29 31.95 26.14 26.01 23.85  Sulphate (mg/l) 15.10	0.11 0.13 0.14 0.17 0.19 0.13 0.12 0.14 0.15	0.11 0.18 0.16 0.14 0.20 0.13 0.11 0.13 0.12 0.16	3.2 3.5 3.2 3.8 3.3 2.7 2.5 2.9 2.6 2.4  Sodium(mg/l) 4.2	2.2 2.2 1.8 4.1 3.0 2.9 2.8 3.2 2.3 2.1 Potassium (mg/l) 2.6	0.14 0.15 0.14 0.22 0.26 0.16 0.13 0.15 0.12 0.12	A A A A A A A A A A A A A A A A A A A

	May-23	15°C	7.60	56	86	10.6	5.0	60	43	17	49	1.0	4.0	1.8	1.8	ND	0.09	0.02	16.11	0.15	0.13	4.6	2.8	0.25	A
	Jun-23	13°C	7.30	40	63	10.4	3.0	40	22	18	28	1.0	4.0	1.8	1.8	ND	0.11	0.005	70.99	0.25	0.19	4.3	4.6	0.29	A
	Jul-23	16°C	8.20	28	44	10.0	2.0	37	30	07	24	1.0	4.0	1.8	1.8	ND	0.06	0.03	15.37	0.10	0.18	3.4	3.1	0.24	A
	Aug-23	15°C	7.90	40	62	10.4	2.0	52	41	11	49	1.0	4.0	2.0	<1.8	ND	0.05	0.02	25.37	0.11	0.15	3.1	2.9	0.19	A
	Sep-23	17°C	7.83	48	74	10.6	4.0	66	52	14	59	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.03	23.12	0.11	0.13	2.9	2.6	0.15	A
	Oct-23	16°C	7.65	42	66	11.0	3.0	60	48	12	55	1.0	4.0	<1.8	<1.8	<1.8	0.09	0.02	22.72	0.15	0.15	2.5	2.9	0.14	A
	Nov-23	13°C	7.58	38	58	11.2	2.0	52	42	10	48	1.0	4.0	<1.8	<1.8	<1.8	0.07	0.03	23.82	0.11	0.11	2.8	2.4	0.17	A
	Dec-23	08°C	7.40	33	51	11.4	2.0	46	34	12	40	1.0	4.0	<1.8	<1.8	<1.8	0.08	0.05	20.37	0.13	0.13	2.5	2.2	0.16	A
													Rive	er Bhagirathi U/S a	t Gangotri, Uttarka	shi District									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
16	Jun-23	07°C	8.40	56	84	11.0	3.0	45	33	12	13	1.0	4.0	1.8	1.8	ND	0.01	0.0007	71.92	0.06	0.08	3.6	5.8	0.23	A
													Riv	er Yamuna U/S at	Yamunotri, Uttarka	shi District									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
17	Jun-23	04°C	7.80	18	31	11.2	3.0	25	18	07	19	1.0	4.0	1.8	1.8	ND	0.07	0.02	17.33	0.10	0.13	2.5	2.4	0.22	A
													Rive	Yamuna D/S at Sa	yana-Chatti ,Uttark	ashi District									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
-				T													t -	<del>                                     </del>				t			
18	Jun-23	10°C	7.60	34	56	10.8	4.0	33	28	05	29	1.0	4.0	1.8	1.8	ND	0.08	0.03	19.20	0.12	0.15	3.5	3.7	0.26	A
18	Jun-23	10°C	7.60	34	56	10.8	4.0	33	28	05	29	1.0			1.8 t Uttarkashi, Uttarl		0.08	0.03	19.20	0.12	0.15	3.5	3.7	0.26	A
18 S.No.	Jun-23	10°C	7.60	TDS (mg/l)	56 EC (μS/cm)	10.8 DO (mg/l)	4.0 Chloride (mg/l)	Hardness (mg/l)	28  Calcium (mg/l)	Magnesium (mg/I)	Alkalinity (mg/l)	1.0		r Bhagirathi D/S a			0.08  Nitrate-N (mg/l)	0.03 Nitrite-N (mg/l)	19.20 Sulphate (mg/l)	0.12  Phosphate (mg/l)	0.15 Fluoride (mg/l)	3.5 Sodium (mg/l)		0.26 SAR	Designated Best use (DBU) Water Quality Criteria
							Chloride		Calcium	Magnesium	Alkalinity	 	Rive	r Bhagirathi D/S a	t Uttarkashi, Uttarl	casi District  Fecal Steptococcss	 		Sulphate						Designated Best use (DBU) Water Quality
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/I)	Alkalinity (mg/l)	BOD (mg/l)	Rive	r Bhagirathi D/S a	t Uttarkashi, Uttarl	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
S.No.	Month Jan-23	Temp	рн 7.06	TDS (mg/l)	EC (μS/cm)	DO (mg/I)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	Rive	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l) 0.10	Nitrite-N (mg/l) 0.03	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)  0.25	Sodium (mg/l)	Potassium (mg/l)	sar 0.17	Designated Best use (DBU) Water Quality Criteria
S.No.	Month Jan-23 Feb-23	Temp 10°C 08°C	рн 7.06 7.20	TDS (mg/l) 70 88	EC (μS/cm) 104 134	DO (mg/l) 10.6 10.4	Chloride (mg/l) 3.0 5.0	Hardness (mg/l) 65	Calcium (mg/I) 47	Magnesium (mg/l)  18	Alkalinity (mg/l) 41 65	BOD (mg/l) 1.0 1.0	COD (mg/l) 4.0 4.0	TC (MPN/100 ml) 46 49	FC (MPN/100 ml)  31  38	Fecal Steptococcss (MPN/100 ml)  ND  ND	Nitrate-N (mg/l) 0.10 0.08	Nitrite-N (mg/l) 0.03 0.05	Sulphate (mg/l) 28.33 25.33	Phosphate (mg/l) 0.13 0.20	Fluoride (mg/l)  0.25  0.28	3.3 12.4	Potassium (mg/l)  2.5  3.5	SAR 0.17 0.51	Designated Best use (DBU) Water Quality Criteria A
S.No.	Month Jan-23 Feb-23 Mar-23	Temp  10°C  08°C  19°C	рн 7.06 7.20 7.90	TDS (mg/l) 70 88 70	EC (μs/cm) 104 134 106	DO (mg/l) 10.6 10.4 10.6	Chloride (mg/l) 3.0 5.0 4.0	Hardness (mg/l) 65 110 68	Calcium (mg/l) 47 70 52	Magnesium (mg/l)  18  40	Alkalinity (mg/l) 41 65 36	BOD (mg/l)  1.0  1.0  1.0	Rive  COD (mg/l)  4.0  4.0  4.0	r Bhagirathi D/S a  TC (MPN/100 ml)  46  49  41	EC (MPN/100 ml)  31  38  34	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND	Nitrate-N (mg/l) 0.10 0.08 0.07	Nitrite-N (mg/l)  0.03  0.05  0.02	Sulphate (mg/l) 28.33 25.33 18.37	Phosphate (mg/l)  0.13  0.20  0.17	Fluoride (mg/l)  0.25  0.28  0.25	3.3 12.4 4.7	Potassium (mg/l)  2.5  3.5  2.6	0.17 0.51 0.24	Designated Best use (DBU) Water Quality Criteria  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23	Temp  10°C  08°C  19°C  18°C	рн 7.06 7.20 7.90 8.40	TDS (mg/l) 70 88 70 56	EC (μS/cm) 104 134 106 86	DO (mg/l)  10.6  10.4  10.6	Chloride (mg/l) 3.0 5.0 4.0 3.0	Hardness (mg/l) 65 110 68 61	Calcium (mg/l) 47 70 52 37	Magnesium (mg/l)  18  40  16  24	Alkalinity (mg/l) 41 65 36 37	BOD (mg/l)  1.0  1.0  1.0  1.0	Rive  COD (mg/l)  4.0  4.0  4.0  4.0	r Bhagirathi D/S a  TC (MPN/100 ml)  46  49  41  47	FC (MPN/100 ml)  31  38  34  38	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08	Nitrite-N (mg/l) 0.03 0.05 0.02 0.03	Sulphate (mg/l) 28.33 25.33 18.37 20.36	Phosphate (mg/l)  0.13  0.20  0.17  0.15	Fluoride (mg/l)  0.25  0.28  0.25  0.26	3.3 12.4 4.7 5.4	Potassium (mg/l)  2.5  3.5  2.6  2.4	SAR 0.17 0.51 0.24 0.29	Designated Best use (DBU) Water Quality Criteria  A  A  A
S.No.	Month Jan-23 Feb-23 Mar-23 Apr-23 May-23	Temp  10°C  08°C  19°C  18°C  20°C	7.06 7.20 7.90 8.40 7.50	TDS (mg/l) 70 88 70 56 79	EC (μS/cm) 104 134 106 86 120	DO (mg/l)  10.6  10.4  10.6  10.4  10.2	Chloride (mg/l) 3.0 5.0 4.0 3.0	Hardness (mg/l) 65 110 68 61 76	Calcium (mg/l) 47 70 52 37 60	Magnesium (mg/l)  18  40  16  24	Alkalinity (mg/l) 41 65 36 37 68	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0	COD (mg/l) 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  46  49  41  47	FC (MPN/100 ml)  31  38  34  38  34	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19	5odium (mg/l)  3.3  12.4  4.7  5.4  5.0	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2	SAR 0.17 0.51 0.24 0.29 0.24	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  May-23  Jun-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C	7.06 7.20 7.90 8.40 7.50 8.30	TDS (mg/l) 70 88 70 56 79 45	EC (μs/cm) 104 134 106 86 120 67	DO (mg/l) 10.6 10.4 10.6 10.4 10.6 10.4	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0	Hardness (mg/l) 65 110 68 61 76 49	Calcium (mg/l) 47 70 52 37 60 41	Magnesium (mg/l)  18  40  16  24  16  08	Alkalinity (mg/l) 41 65 36 37 68	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0	TC (MPN/100 ml)  46 49 41 47 41 39	FC (MPN/100 ml)  31  38  34  38  34  27	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11 28.94	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11	3.3 12.4 4.7 5.4 5.0	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1	0.17 0.51 0.24 0.29 0.24 0.33	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  May-23  Jun-23  Jul-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80	TDS (mg/l)  70  88  70  56  79  45  43	EC (μs/cm) 104 134 106 86 120 67 66	DO (mg/l) 10.6 10.4 10.6 10.4 10.2 10.0 9.6	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 8.0	Hardness (mg/l) 65 110 68 61 76 49 56	Calcium (mg/l) 47 70 52 37 60 41	Magnesium (mg/l)  18  40  16  24  16  08  26	Alkalinity (mg/l) 41 65 36 37 68 15	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0  1.0	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TC (MPN/100 ml)  46  49  41  47  41  39  47	t Uttarkashi, Uttarl FC (MPN/100 ml)  31  38  34  38  34  27  40	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11 28.94 27.33	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26	Sodium (mg/l) 3.3 12.4 4.7 5.4 5.0 5.4 4.7	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2	0.17 0.51 0.24 0.29 0.24 0.33	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  Jun-23  Jul-23  Aug-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80	TDS (mg/l) 70 88 70 56 79 45 43	104 134 106 86 120 67 66 72	DO (mg/l) 10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 5.0 5.0	Hardness (mg/l) 65 110 68 61 76 49 56 35	Calcium (mg/l) 47 70 52 37 60 41 30 26	Magnesium (mg/t)  18  40  16  24  16  08  26  09	Alkalinity (mg/l) 41 65 36 37 68 15 31	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TC (MPN/100 ml)  46  49  41  47  41  39  47	FC (MPN/100 ml)  31  38  34  38  34  27  40  34	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02	Sulphate (mg/f) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30	Sodium (mg/l) 3.3 12.4 4.7 5.4 5.0 5.4 4.7 3.3	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0	SAR  0.17  0.51  0.24  0.29  0.24  0.33  0.27  0.24	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  Jun-23  Jul-23  Aug-23  Sep-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C  15°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80 7.43	TDS (mg/l) 70 88 70 56 79 45 43 48 70	104 134 106 86 120 67 66 72 107	10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8 10.0	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 5.0 4.0 8.0 5.0	Hardness (mg/l) 65 110 68 61 76 49 56 35	Caldum (mg/l) 47 70 52 37 60 41 30 26 45	Magnesium (mg/l)  18  40  16  24  16  08  26  09  15	Alkalinity (mg/l) 41 65 36 37 68 15 31 26	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TC (MPN/100 ml)  46  49  41  47  41  39  47  40  39	FC (MPN/100 ml)  31  38  34  38  34  27  40  34  33	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09  0.07	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02  0.03	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21 20.11	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21  0.14	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30  0.25	Sodium (mg/l) 3.3 12.4 4.7 5.4 5.0 5.4 4.7 3.3 3.0	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0  4.1	0.17 0.51 0.24 0.29 0.24 0.33 0.27 0.24 0.17	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
S.No.	Month  Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C  14°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80 7.50 7.43	TDS (mg/l)  70  888  70  56  79  45  43  48  70  58	104 134 106 86 120 67 66 72 107	10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8 10.0	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 5.0 4.0 5.0 5.0 6.0 5.0	Hardness (mg/l) 65 110 68 61 76 49 56 35 60 66	Calclum (mg/1) 47 70 52 37 60 41 30 26 45 51	Magnesium (mg/l)  18  40  16  24  16  08  26  09  15	Alkalinity (mg/l) 41 65 36 37 68 15 31 26 50	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TE (MPN/100 ml) 46 49 41 47 41 39 47 40 39 34	EC (MPN/100 ml)  31  38  34  38  34  27  40  34  33  27	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09  0.07  0.08	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02  0.03  0.06	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21 20.11 18.63	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21  0.14  0.16	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30  0.25  0.20	\$sodium (mg/l)  3.3  12.4  4.7  5.4  5.0  5.4  4.7  3.3  3.0  3.4	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0  4.1	0.17 0.51 0.24 0.29 0.24 0.33 0.27 0.24 0.17	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  Jun-23  Jul-23  Aug-23  Sep-23  Oct-23  Nov-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C  14°C  14°C  18°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80 7.50 7.43 7.57	TDS (mg/l) 70 88 70 56 79 45 43 48 70 58 52	EC (μs/cm) 104 134 106 86 120 67 66 72 107 89 80	DO (mg/l) 10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8 10.0 10.2 10.4	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 8.0 5.0 4.0 4.0	Hardness (mg/l) 65 110 68 61 76 49 56 35 60 66 59	Calcium (mg/l) 47 70 52 37 60 41 30 26 45 51 46	Magnesium (mg/l)  18  40  16  24  16  08  26  09  15  13	Alkalinity (mg/l) 41 65 36 37 68 15 31 26 50 53 49	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TC (MPN/100 ml)  46  49  41  47  41  39  47  40  39  34  32	EC (MPN/100 ml)  31  38  34  38  34  27  40  34  33  27  26	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09  0.07  0.08  0.06  0.04	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02  0.03  0.02  0.03	Sulphate (mg/f) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21 20.11 18.63 19.24	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21  0.14  0.16  0.13	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30  0.25  0.20  0.15	Sodium (mg/l)  3.3  12.4  4.7  5.4  5.0  5.4  4.7  3.3  3.0  3.4  3.6	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0  4.1  4.4  3.0	0.17 0.51 0.24 0.29 0.24 0.33 0.27 0.24 0.17 0.18	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
S.No.	Month  Jan-23  Feb-23  Mar-23  Apr-23  Jun-23  Jul-23  Aug-23  Sep-23  Oct-23  Nov-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C  14°C  14°C  18°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80 7.50 7.43 7.57	TDS (mg/l) 70 88 70 56 79 45 43 48 70 58 52	EC (μs/cm) 104 134 106 86 120 67 66 72 107 89 80	DO (mg/l) 10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8 10.0 10.2 10.4	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 8.0 5.0 4.0 4.0	Hardness (mg/l) 65 110 68 61 76 49 56 35 60 66 59	Calcium (mg/l) 47 70 52 37 60 41 30 26 45 51 46	Magnesium (mg/l)  18  40  16  24  16  08  26  09  15  13	Alkalinity (mg/l) 41 65 36 37 68 15 31 26 50 53 49	BOD (mg/l)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TC (MPN/100 ml)  46  49  41  47  41  39  47  40  39  34  32	FC (MPN/100 ml)  31  38  34  38  34  27  40  34  33  27  26  33	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09  0.07  0.08  0.06  0.04	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02  0.03  0.02  0.03	Sulphate (mg/f) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21 20.11 18.63 19.24	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21  0.14  0.16  0.13	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30  0.25  0.20  0.15	Sodium (mg/l)  3.3  12.4  4.7  5.4  5.0  5.4  4.7  3.3  3.0  3.4  3.6	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0  4.1  4.4  3.0	0.17 0.51 0.24 0.29 0.24 0.33 0.27 0.24 0.17 0.18	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
S.No. 19	Month  Jan-23  Feb-23  Mar-23  Apr-23  Jun-23  Jun-23  Aug-23  Sep-23  Oct-23  Nov-23	Temp  10°C  08°C  19°C  18°C  20°C  13°C  14°C  15°C  14°C  18°C  18°C	7.06 7.20 7.90 8.40 7.50 8.30 7.80 7.50 7.43 7.57 7.29	TDS (mg/l) 70 888 70 56 79 45 43 48 70 58 52	EC (µS/cm)  104  134  106  86  120  67  66  72  107  89  80  72	10.6 10.4 10.6 10.4 10.2 10.0 9.6 9.8 10.0 10.2 10.4 10.6	Chloride (mg/l) 3.0 5.0 4.0 3.0 5.0 4.0 5.0 4.0 8.0 5.0 4.0 3.0 5.0 3.0	Hardness (mg/l) 65 110 68 61 76 49 56 35 60 66 59 52	Calclum (mg/1) 47 70 52 37 60 41 30 26 45 51 46 40	Magnesium (mg/l)  18  40  16  24  16  08  26  09  15  13  12	Alkalinity (mg/l) 41 65 36 37 68 15 31 26 50 49 43	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Rive  COD (mg/l)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.	TE (MPN/100 ml)  46  49  41  47  41  39  47  40  39  34  32  40  River Y:	EC (MPN/100 ml)  31  38  34  38  34  27  40  34  33  27  26  33  amuna at Barkot	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)  0.10  0.08  0.07  0.08  0.11  0.07  0.09  0.07  0.08  0.01  0.05	Nitrite-N (mg/l)  0.03  0.05  0.02  0.03  0.04  0.003  0.06  0.02  0.03  0.02  0.03  0.02	Sulphate (mg/l) 28.33 25.33 18.37 20.36 23.11 28.94 27.33 23.21 20.11 18.63 19.24 22.41	Phosphate (mg/l)  0.13  0.20  0.17  0.15  0.18  0.11  0.19  0.21  0.14  0.16  0.13  0.11	Fluoride (mg/l)  0.25  0.28  0.25  0.26  0.19  0.11  0.26  0.30  0.25  0.20  0.15  0.18	\$sodium (mg/l)  3.3  12.4  4.7  5.4  5.0  5.4  4.7  3.3  3.0  3.4  3.6  3.1	Potassium (mg/l)  2.5  3.5  2.6  2.4  2.2  5.1  4.2  5.0  4.1  4.4  3.0  2.7	0.17 0.51 0.24 0.29 0.24 0.33 0.27 0.24 0.17 0.18 0.20 0.19	Designated Best use (DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A

	Mar-23	16°C	8.10	117	177	10.8	6.0	93	82	11	85	1.0	4.0	1.8	1.8	ND	0.09	0.03	15.11	0.16	0.22	5.4	2.0	0.24	A
	Apr-23	18°C	7.80	115	175	10.6	6.0	49	36	13	51	1.0	4.0	1.8	1.8	ND	0.06	0.02	14.85	0.11	0.19	5.1	1.8	0.31	A
	May-23	18°C	7.40	98	149	10.4	5.0	80	66	14	76	1.0	4.0	1.8	1.8	ND	0.04	0.01	10.82	0.09	0.13	4.7	1.6	0.22	A
	Jun-23	14°C	7.50	68	107	10.0	7.0	35	25	10	38	1.0	4.0	1.8	1.8	ND	0.09	0.03	19.26	0.15	0.19	6.0	4.6	0.44	A
	Jul-23	14°C	7.10	65	99	9.6	5.0	77	59	18	68	1.0	4.0	1.8	1.8	ND	0.07	0.02	21.85	0.13	0.16	5.5	4.0	0.27	A
	Aug-23	21°C	7.90	40	62	9.8	5.0	47	41	06	44	1.0	4.0	2.0	<1.8	ND	0.07	0.01	17.33	0.18	0.24	2.7	2.4	0.17	A
	Sep-23	18°C	8.07	60	92	10.0	7.0	58	55	03	50	1.0	4.0	<1.8	<1.8	<1.8	0.04	0.01	15.63	0.14	0.20	2.4	2.2	0.14	A
	Oct-23	20°C	8.13	76	115	10.2	4.0	61	56	05	52	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.03	16.72	0.13	0.15	2.9	3.1	0.16	A
	Nov-23	15°C	7.95	65	99	10.4	3.0	56	49	07	50	1.0	4.0	<1.8	<1.8	<1.8	0.08	0.05	20.11	0.11	0.19	2.4	2.1	0.14	A
	Dec-23	17°C	7.80	59	91	10.6	2.0	51	43	08	47	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.03	19.43	0.13	0.24	2.1	1.9	0.13	A
													Riv	er Alaknanda B/C	River Bhagirathi at	Devprayag									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
21	Jan-23	16°C	7.96	85	128	10.6	5.0	70	45	25	59	1.0	4.0	1.8	1.8	ND	0.03	0.02	14.30	0.01	0.13	3.6	2.5	0.18	A
	Feb-23	13°C	7.88	83	125	10.4	6.0	75	68	07	67	1.0	4.0	1.8	1.8	ND	0.08	0.03	15.28	0.11	0.13	10.9	3.4	0.54	A
	Mar-23	14°C	8.20	91	139	10.6	9.0	103	60	43	75	1.0	4.0	1.8	1.8	ND	0.07	0.01	15.38	0.08	0.18	3.4	2.3	0.14	А
	Apr-23	16°C	7.80	65	98	10.4	8.0	78	61	17	65	1.0	4.0	1.8	1.8	ND	0.05	0.01	14.37	0.10	0.13	3.4	1.9	0.16	A
	May-23	16°C	7.50	93	141	10.2	5.0	99	62	37	81	1.0	4.0	1.8	1.8	ND	0.08	0.02	13.33	0.14	0.14	3.4	2.1	0.15	A
	Jun-23	15°C	7.85	60	92	10.0	5.0	68	44	24	50	1.0	4.0	1.8	1.8	ND	0.05	0.003	19.36	0.09	0.11	4.1	4.5	0.22	A
	Jul-23	19°C	8.30	58	89	10.0	3.0	46	36	10	50	1.0	4.0	1.8	1.8	ND	0.06	0.03	15.39	0.18	0.17	3.5	3.2	0.22	A
	Aug-23	15°C	8.10	61	94	10.2	4.0	67	49	18	62	1.0	4.0	6.1	2.0	ND	0.07	0.02	17.26	0.12	0.19	2.2	3.6	0.12	A
	Sep-23	19°C	7.82	69	105	10.2	6.0	80	59	21	70	1.0	4.0	6.1	4.0	<1.8	0.08	0.01	15.85	0.11	0.17	2.0	2.9	0.10	A
	Oct-23	17°C	7.98	75	115	10.4	5.0	88	70	18	77	1.0	4.0	4.0	2.0	<1.8	0.07	0.03	15.03	0.09	0.15	2.4	3.1	0.11	A
	Nov-23	16°C	7.84	79	120	10.6	4.0	92	76	16	80	1.0	4.0	<1.8	<1.8	<1.8	0.07	0.03	16.43	0.11	0.14	3.0	2.7	0.14	A
	Dec-23	09°C	7.69	70	107	10.8	3.0	81	62	19	72	1.0	4.0	<1.8	<1.8	<1.8	0.05	0.01	13.73	0.13	0.13	2.7	2.5	0.13	A
	ı				ı			ı					Riv	er Bhagirathi B/C I	River Alaknanda at		ı						ı		Designated Best use
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria
22	Jan-23	16°C	7.82	75	114	10.8	4.0	80	60	20	68	1.0	4.0	1.8	1.8	ND	0.03	0.03	15.80	0.08	0.14	2.2	1.7	0.10	A
	Feb-23	14°C	7.71	44	67	10.6	3.0	51	45	06	46	1.0	4.0	1.8	1.8	ND	0.11	0.03	16.15	0.10	0.18	9.2	2.3	0.55	A
	Mar-23	14°C	7.60	54	82	10.8	6.0	53	36	17	45	1.0	4.0	1.8	1.8	ND	0.08	0.01	16.14	0.09	0.13	2.4	1.6	0.14	А
	Apr-23	16°C	7.90	76	115	10.6	6.0	68	42	26	52	1.0	4.0	1.8	1.8	ND	0.05	0.02	16.33	0.15	0.11	3.5	1.8	0.18	A
	May-23	15°C	7.30	80	123	10.4	6.0	63	41	22	60	1.0	4.0	1.8	1.8	ND	0.10	0.04	15.84	0.17	0.11	2.6	1.8	0.14	A
	Jun-23	16°C	7.80	73	113	10.2	3.0	66	46	20	52	1.0	4.0	1.8	1.8	ND	0.08	0.002	13.32	0.11	0.17	4.6	3.9	0.25	A
	Jul-23	20°C	8.10	55	84	9.8	2.0	43	28	15	35	1.0	4.0	1.8	1.8	ND	0.10	0.06	18.26	0.18	0.13	4.0	3.7	0.26	A
	Aug-23	15°C	8.20	46	72	10.0	3.0	54	38	16	50	1.0	4.0	4.0	<1.8	ND	0.08	0.05	19.31	0.10	0.13	2.9	2.7	0.17	A
	Sep-23	18°C	8.05	52	79	9.8	5.0	60	42	18	54	1.0	4.0	4.0	2.0	<1.8	0.09	0.03	17.12	0.09	0.11	2.5	2.2	0.14	A

	Oct-23	17°C	7.86	49	76	10.0	4.0	53	43	10	48	1.0	4.0	2.0	<1.8	<1.8	0.08	0.02	16.12	0.11	0.12	2.9	3.3	0.17	A
	Nov-23	15°C	7.75	40	62	10.2	3.0	47	38	09	44	1.0	4.0	<1.8	<1.8	<1.8	0.08	0.02	14.63	0.08	0.13	3.4	3.1	0.22	A
	Dec-23	08°C	7.58	36	56	10.4	2.0	41	30	11	39	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.01	14.21	0.09	0.10	3.0	2.9	0.20	A
												Riv	er Alakna	anda A/C River Bha	girathi (River Gang	a D/S) at Devprayag									
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
23	Jan-23	15°C	7.89	72	110	10.8	5.0	77	58	19	55	1.0	4.0	1.8	1.8	ND	0.03	0.01	16.10	0.11	0.15	2.6	1.9	0.12	A
	Feb-23	13°C	7.82	68	104	10.6	6.0	76	60	16	54	1.0	4.0	1.8	1.8	ND	0.12	0.05	16.83	0.09	0.15	10.0	3.1	0.49	A
	Mar-23	15°C	7.98	78	119	10.8	8.0	75	51	24	62	1.0	4.0	1.8	1.8	ND	0.08	0.07	15.95	0.13	0.15	3.0	2.0	0.15	А
	Apr-23	15°C	7.84	69	103	10.6	9.0	78	52	26	69	1.0	4.0	1.8	1.8	ND	0.07	0.03	15.29	0.14	0.08	3.7	2.1	0.18	A
	May-23	17°C	7.68	79	121	10.4	6.0	81	58	23	75	1.0	4.0	1.8	1.8	ND	0.08	0.04	14.11	0.16	0.13	3.1	2.0	0.15	A
	Jun-23	15°C	7.50	65	102	10.2	4.0	62	50	12	56	1.0	4.0	1.8	1.8	ND	0.06	0.001	15.26	0.13	0.19	4.4	4.0	0.24	A
	Jul-23	20°C	8.18	57	87	10.0	3.0	48	37	11	45	1.0	4.0	1.8	1.8	ND	0.09	0.03	16.84	0.14	0.15	3.8	3.5	0.24	A
	Aug-23	14°C	8.17	59	89	10.2	4.0	62	47	15	59	1.0	4.0	2.0	<1.8	ND	0.07	0.03	17.33	0.14	0.17	2.7	3.1	0.15	A
	Sep-23	19°C	7.90	63	96	10.2	6.0	71	54	17	64	1.0	4.0	6.1	4.0	<1.8	0.08	0.02	16.34	0.12	0.14	2.3	2.7	0.12	A
	Oct-23	16°C	7.95	66	102	10.2	5.0	74	59	15	68	1.0	4.0	4.0	2.0	<1.8	0.06	0.03	14.32	0.08	0.15	2.7	2.9	0.14	A
	Nov-23	15°C	7.80	60	92	10.4	4.0	67	54	13	64	1.0	4.0	<1.8	<1.8	<1.8	0.06	0.03	13.74	0.09	0.11	3.2	2.9	0.17	A
	Dec-23	10°C	7.61	55	85	10.6	3.0	59	44	15	57	1.0	4.0	<1.8	<1.8	<1.8	0.07	0.03	16.42	0.11	0.12	2.8	2.6	0.16	A
														i enri iake i	at Koti colony, Tehr										
		1	Ι	ı	Ι	l	Ι	l	<u> </u>	l	ı	l		I			l	ı	Ι			1			Designated Destaura
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)		FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
S.No.	Month Jan-23	Temp	рн 7.27	TDS (mg/I)	EC (µS/cm)	DO (mg/l)		Hardness (mg/l)				BOD (mg/l)	COD (mg/l)			Fecal Steptococcss	Nitrate-N (mg/l)	Nitrite-N (mg/l)		Phosphate (mg/I)	Fluoride (mg/l) 0.37	Sodium (mg/l)	Potassium (mg/l)	sar 0.13	(DBU) Water Quality
							(mg/l)		(mg/l)	(mg/l)	(mg/l)			TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)			(mg/l)			<u> </u>			(DBU) Water Quality Criteria
	Jan-23	18°C	7.27	41	63	10.4	(mg/l) 4.0	52	(mg/l) 37	(mg/l)	(mg/l) 36	1.0	4.0	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	0.09	0.02	(mg/l) 22.83	0.17	0.37	2.2	1.7	0.13	(DBU) Water Quality Criteria
	Jan-23 Feb-23	18°C 10°C	7.27 7.39	41 80	63 122	10.4	(mg/l) 4.0 6.0	52 85	(mg/l) 37 60	(mg/l) 15 25	(mg/l) 36 80	1.0	4.0	TC (MPN/100 ml) 49 40	FC (MPN/100 ml)  26  27	Fecal Steptococcss (MPN/100 ml) ND	0.09	0.02	(mg/l) 22.83 20.82	0.17 0.22	0.37 0.36	2.2	1.7 3.4	0.13 0.55	(DBU) Water Quality Criteria  A  A
	Jan-23 Feb-23 Mar-23	18°C 10°C 14°C 21°C 20°C	7.27 7.39 7.32 8.05 7.70	41 80 105 59 62	63 122 159	10.4 10.2 10.4	(mg/l) 4.0 6.0 5.0	52 85 48	(mg/l) 37 60 30 40 52	(mg/l) 15 25 18 20 14	(mg/l)  36  80  28  35  55	1.0 1.0 1.0	4.0	TC (MPN/100 ml) 49 40 47	FC (MPN/100 ml)  26  27  41	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND	0.09 0.09 0.09	0.02 0.03 0.03	(mg/l) 22.83 20.82 15.62	0.17 0.22 0.19 0.11 0.15	0.37 0.36 0.31 0.49 0.36	2.2 11.9 2.1 2.6 2.3	1.7 3.4 1.5	0.13 0.55 0.13 0.14 0.12	(DBU) Water Quality Criteria  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23	18°C 10°C 14°C 21°C 20°C	7.27 7.39 7.32 8.05 7.70 8.30	41 80 105 59 62 67	63 122 159 92 94 101	10.4 10.2 10.4 10.2 10.0 9.6	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0	52 85 48 60 66 62	(mg/l) 37 60 30 40 52 45	(mg/l)  15  25  18  20  14	(mg/l)  36  80  28  35  55  45	1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml) 49 40 47 41 49 46	FC (MPN/100 ml)  26  27  41  40  47	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	0.09 0.09 0.09 0.13 0.12	0.02 0.03 0.03 0.08 0.11 0.09	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26	0.17 0.22 0.19 0.11 0.15	0.37 0.36 0.31 0.49 0.36 0.42	2.2 11.9 2.1 2.6 2.3 5.0	1.7 3.4 1.5 1.2 1.1 4.2	0.13 0.55 0.13 0.14 0.12 0.28	(DBU) Water Quality Criteria  A  A  A  A  A  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23	18°C 10°C 14°C 21°C 20°C 19°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38	41 80 105 59 62 67 54	63 122 159 92 94 101 83	10.4 10.2 10.4 10.2 10.0 9.6 9.2	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0	52 85 48 60 66 62 40	(mg/l) 37 60 30 40 52 45 33	(mg/l)  15  25  18  20  14  17  07	(mg/l)  36  80  28  35  55  45  35	1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml) 49 40 47 41 49 46	FC (MPN/100 ml)  26  27  41  40  47  41  31	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	0.09 0.09 0.09 0.13 0.12 0.12	0.02 0.03 0.03 0.08 0.11 0.09 0.07	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33	0.17 0.22 0.19 0.11 0.15 0.18 0.15	0.37 0.36 0.31 0.49 0.36 0.42 0.37	2.2 11.9 2.1 2.6 2.3 5.0 4.2	1.7 3.4 1.5 1.2 1.1 4.2 3.3	0.13 0.55 0.13 0.14 0.12 0.28 0.29	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42	41 80 105 59 62 67 54 32	63 122 159 92 94 101 83 52	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0	52 85 48 60 66 62 40 34	(mg/l)  37  60  30  40  52  45  33  26	(mg/l)  15  25  18  20  14  17  07  08	(mg/l)  36  80  28  35  55  45  35  29	1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  46  48	EC (MPN/100 ml)  26  27  41  40  47  41  31	Fecal Steptococcss (MPN/100 mt)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10	0.02 0.03 0.03 0.08 0.11 0.09 0.07	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24	0.17 0.22 0.19 0.11 0.15 0.18 0.15	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4	1.7 3.4 1.5 1.2 1.1 4.2 3.3	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 19°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83	41 80 105 59 62 67 54 32 40	63 122 159 92 94 101 83 52 61	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0	52 85 48 60 66 62 40 34 45	(mg/l)  37  60  30  40  52  45  33  26  34	(mg/l)  15  25  18  20  14  17  07  08  11	(mg/h)  36  80  28  35  55  45  35  29  41	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40	EC (MPN/100 ml)  26  27  41  40  47  41  31  41  34	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24 28.42	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 19°C 21°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83	41 80 105 59 62 67 54 32 40	63 122 159 92 94 101 83 52 61	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.6	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 6.0	52 85 48 60 66 62 40 34 45 43	(mg/l)  37  60  30  40  52  45  33  26  34  35	(mg/l)  15  25  18  20  14  17  07  08  11  08	(mg/h)  36  80  28  35  55  45  35  29  41  36	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40  38	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34	Fecal Steptococcss (MPN/100 ml)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24 28.42 27.14	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 19°C 21°C 23°C 21°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83 8.17	41 80 105 59 62 67 54 32 40 43	63 122 159 92 94 101 83 52 61 67	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.8	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 5.0 5.0 5.0	52 85 48 60 66 62 40 34 45 43 53	(mg/l)  37  60  30  40  52  45  33  26  34  35  43	(mg/l)  15  25  18  20  14  17  07  08  11  08  10	(mg/h)  36  80  28  35  55  45  35  29  41  36  40	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40  38  47	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34  32  40	Fecal Steptococcss (MPN/100 ml)   ND   ND   ND   ND   ND   ND   ND   N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09 0.08	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24 28.42 27.14 25.85	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6 2.8	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8 2.5	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14 0.17	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 19°C 21°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83	41 80 105 59 62 67 54 32 40	63 122 159 92 94 101 83 52 61	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.6	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 6.0	52 85 48 60 66 62 40 34 45 43	(mg/l)  37  60  30  40  52  45  33  26  34  35	(mg/l)  15  25  18  20  14  17  07  08  11  08	(mg/h)  36  80  28  35  55  45  35  29  41  36	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40  38  47	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34	Fecal Steptococcss (MPN/100 ml)   ND   ND   ND   ND   ND   ND   ND   N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24 28.42 27.14	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
24	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 19°C 21°C 23°C 21°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83 8.17 8.05 7.90	41 80 105 59 62 67 54 32 40 43 45 49	63 122 159 92 94 101 83 52 61 67 69 75	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.6 9.8	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 4.0 5.0 4.0	52 85 48 60 66 62 40 34 45 43 53	(mg/l)  37  60  30  40  52  45  33  26  34  35  43	(mg/l)  15  25  18  20  14  17  07  08  11  08  10  12	(mg/h)  36  80  28  35  55  45  35  29  41  36  40  43	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40  38  47  47  River Ganga U/S a	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34  32  40  34  Lakshmanjhula, Ri	Fecal Steptococcss (MPN/100 ml)   ND   ND   ND   ND   ND   ND   ND   N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09 0.08	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04 0.03 0.03	(mg/l) 22.83 20.82 15.62 24.26 29.31 33.26 27.33 30.24 28.42 27.14 25.85 22.19	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14 0.16 0.15	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24 0.22 0.20	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6 2.8	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8 2.5	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14 0.17 0.17	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 21°C 21°C 21°C 21°C 21°C 19°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83 8.17	41 80 105 59 62 67 54 32 40 43 45 49	63 122 159 92 94 101 83 52 61 67 69 75	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.8	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 5.0 5.0 5.0	52 85 48 60 66 62 40 34 45 43 53	(mg/l)  37  60  30  40  52  45  33  26  34  35  43	(mg/l)  15  25  18  20  14  17  07  08  11  08  10	(mg/h)  36  80  28  35  55  45  35  29  41  36  40  43	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  46  48  40  38  47  47  River Ganga U/S a	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34  32  40  34  **Lakshmanjhula, Ri	Fecal Steptococcss (MPN/100 ml)   ND   ND   ND   ND   ND   ND   ND   N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09 0.08	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04	(mg/l)  22.83  20.82  15.62  24.26  29.31  33.26  27.33  30.24  28.42  27.14  25.85  22.19	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6 2.8	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8 2.5 2.2	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14 0.17 0.15	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A
24	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	18°C 10°C 14°C 21°C 20°C 19°C 17°C 21°C 21°C 21°C 21°C 19°C	7.27 7.39 7.32 8.05 7.70 8.30 8.38 8.42 7.83 8.17 8.05 7.90	41 80 105 59 62 67 54 32 40 43 45 49	63 122 159 92 94 101 83 52 61 67 69 75	10.4 10.2 10.4 10.2 10.0 9.6 9.2 9.6 9.8 9.6 9.8	(mg/l) 4.0 6.0 5.0 7.0 8.0 6.0 5.0 4.0 5.0 4.0 Chloride	52 85 48 60 66 62 40 34 45 43 53 51	(mg/l)  37  60  30  40  52  45  33  26  34  35  43  39	(mg/l)  15  25  18  20  14  17  07  08  11  08  10  12	(mg/h)  36  80  28  35  55  45  36  40  43	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	TC (MPN/100 ml)  49  40  47  41  49  46  48  40  38  47  47  River Ganga U/S a	FC (MPN/100 ml)  26  27  41  40  47  41  31  41  34  32  40  34  Lakshmanjhula, Ri	Fecal Steptococcss (MPN/100 ml)   ND   ND   ND   ND   ND   ND   ND   N	0.09 0.09 0.09 0.13 0.12 0.12 0.11 0.10 0.09 0.08	0.02 0.03 0.03 0.08 0.11 0.09 0.07 0.07 0.05 0.04 0.03 0.03	(mg/l)  22.83  20.82  15.62  24.26  29.31  33.26  27.33  30.24  28.42  27.14  25.85  22.19	0.17 0.22 0.19 0.11 0.15 0.18 0.15 0.18 0.16 0.14 0.16 0.15	0.37 0.36 0.31 0.49 0.36 0.42 0.37 0.30 0.27 0.24 0.22 0.20	2.2 11.9 2.1 2.6 2.3 5.0 4.2 2.4 2.1 2.6 2.8 2.4	1.7 3.4 1.5 1.2 1.1 4.2 3.3 1.5 1.3 2.8 2.5 2.2	0.13 0.55 0.13 0.14 0.12 0.28 0.29 0.18 0.14 0.17 0.17	(DBU) Water Quality Criteria  A  A  A  A  A  A  A  A  A  A  A  A  A

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	Mar-23	16°C	8.25	101	154	10.8	6.0	115	90	25	72	1.0	4.0	39	33	ND	0.08	0.02	32.21	0.23	0.37	2.7	1.5	0.10	А
	Apr-23	20°C	7.90	89	137	10.6	8.0	76	68	08	55	1.0	4.0	33	31	ND	0.09	0.04	15.97	0.11	0.30	4.8	2.2	0.23	A
	May-23	19°C	7.79	86	130	10.2	7.0	97	81	16	80	1.0	4.0	48	43	ND	0.08	0.06	17.35	0.13	0.25	4.5	2.0	0.19	A
	Jun-23	17°C	7.60	65	102	9.8	4.0	69	48	21	54	1.0	4.0	41	39	ND	0.12	0.003	37.53	0.17	0.23	8.0	2.4	0.42	A
	Jul-23	21°C	7.90	45	70	9.6	3.0	51	43	08	57	1.0	4.0	46	33	ND	0.10	0.01	45.36	0.21	0.29	6.6	3.0	0.40	A
	Aug-23	16°C	7.80	55	85	9.8	5.0	69	57	12	73	1.0	4.0	38	32	ND	0.10	0.03	55.24	0.26	0.23	3.9	4.3	0.20	A
	Sep-23	23°C	8.10	70	106	10.0	4.0	75	60	15	73	1.0	4.0	39	33	<1.8	0.08	0.03	49.33	0.16	0.28	3.5	3.1	0.18	A
	Oct-23	19°C	7.68	59	90	10.2	4.0	66	53	13	62	1.0	4.0	34	27	<1.8	0.09	0.02	35.41	0.20	0.27	3.9	4.2	0.21	A
	Nov-23	16°C	7.74	66	100	10.4	3.0	71	56	15	65	1.0	4.0	26	21	<1.8	0.07	0.03	37.89	0.18	0.22	3.6	3.2	0.19	A
	Dec-23	18°C	7.56	61	93	10.6	2.0	65	47	18	63	1.0	4.0	32	26	<1.8	0.06	0.02	40.71	0.15	0.26	3.2	2.9	0.17	A
														River Ganga D/S	Swargashram-1, Ris	hikesh									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
26	Jan-23	14°C	7.62	100	151	10.4	5.0	108	89	19	100	1.0	4.0	46	34	ND	0.09	0.06	66.21	0.11	0.26	3.6	3.1	0.15	A
	Feb-23	20°C	7.75	96	151	10.0	5.0	87	63	24	108	1.0	4.0	48	47	ND	0.18	0.13	68.37	0.21	0.45	13.3	5.0	0.61	A
	Mar-23	17°C	8.36	125	189	10.2	7.0	128	90	38	98	1.0	4.0	49	47	ND	0.13	0.03	50.32	0.21	0.29	5.1	3.1	0.19	A
	Apr-23	19°C	8.20	121	184	10.0	6.0	115	96	19	85	1.0	4.0	47	43	ND	0.16	0.04	62.33	0.15	0.30	6.3	2.8	0.25	A
	May-23	20°C	7.88	106	161	9.8	8.0	135	115	20	108	1.0	4.0	49	46	ND	0.13	0.06	67.24	0.17	0.25	5.9	2.4	0.22	A
	Jun-23	19°C	7.65	68	106	9.4	3.0	67	45	22	59	1.0	4.0	47	43	ND	0.16	0.06	68.11	0.13	0.27	8.0	1.9	0.42	A
	Jul-23	22°C	8.02	54	84	9.0	4.0	55	45	10	47	1.0	4.0	49	46	ND	0.09	0.02	72.25	0.15	0.22	6.2	2.7	0.36	A
	Aug-23	15°C	7.92	67	101	9.4	6.0	76	61	15	78	1.0	4.0	47	34	ND	0.07	0.02	68.54	0.20	0.30	3.3	3.9	0.16	A
	Sep-23	23°C	8.20	79	120	9.6	6.0	81	64	17	84	1.0	4.0	47	40	<1.8	0.09	0.01	62.13	0.20	0.31	3.1	2.9	0.15	A
	Oct-23	20°C	7.80	70	106	9.8	5.0	74	58	16	72	1.0	4.0	43	31	<1.8	0.09	0.01	50.42	0.17	0.22	3.5	3.7	0.18	A
	Nov-23	17°C	7.90	75	115	10.0	4.0	78	60	18	73	1.0	4.0	40	34	<1.8	0.08	0.02	48.96	0.15	0.20	3.9	3.6	0.19	A
	Dec-23	19°C	7.69	68	103	10.2	4.0	72	50	22	70	1.0	4.0	39	33	<1.8	0.07	0.03	43.15	0.20	0.22	3.6	3.1	0.18	A
									_					River Ganga D	S at Bairaaj, Rishiko	esh,									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
27	Jan-23	14°C	7.14	86	130	10.6	4.0	90	73	17	97	1.0	4.0	39	21	ND	0.04	0.03	49.64	0.09	0.18	2.1	1.7	0.09	A
	Feb-23	18°C	7.29	83	129	10.4	6.0	76	66	10	69	1.0	4.0	47	39	ND	0.11	0.02	52.36	0.21	0.28	10.5	2.7	0.52	A
	Mar-23	17°C	8.20	93	141	10.6	7.0	98	68	30	90	1.0	4.0	46	38	ND	0.11	0.01	38.31	0.26	0.42	3.6	2.1	0.15	А
	Apr-23	18°C	8.10	86	130	10.4	7.0	90	82	08	83	1.0	4.0	39	38	ND	0.14	0.08	35.22	0.19	0.25	6.2	1.9	0.28	A
	May-23	19°C	7.97	78	120	10.0	6.0	104	86	18	91	1.0	4.0	43	39	ND	0.15	0.07	38.15	0.22	0.36	5.8	1.7	0.24	A
	Jun-23	18°C	7.40	70	109	9.6	5.0	75	53	22	66	1.1	4.0	39	33	ND	0.13	0.03	51.38	0.11	0.25	7.2	2.0	0.36	A
	Jul-23	21°C	8.10	43	67	9.2	3.0	45	40	05	31	1.2	4.0	46	43	ND	0.10	0.02	60.22	0.11	0.19	5.6	2.3	0.36	A
	Aug-23	16°C	8.03	64	97	9.6	5.0	72	62	10	65	1.1	4.0	40	34	ND	0.09	0.03	57.94	0.15	0.36	2.9	3.7	0.15	A
	Sep-23	22°C	8.35	75	114	9.8	4.0	64	50	14	79	1.0	4.0	32	26	<1.8	0.09	0.03	58.11	0.19	0.25	2.6	2.4	0.14	A
$\vdash$																									

	Nov-23	16°C	7.98	69	105	10.2	4.0	73	58	15	69	1.0	4.0	26	22	<1.8	0.08	0.05	55.32	0.19	0.30	3.2	3.0	0.16	A
	Dec-23	19°C	7.81	60	92	10.4	3.0	62	45	17	58	1.0	4.0	47	32	<1.8	0.06	0.01	51.11	0.17	0.25	2.8	2.5	0.15	A
														River Ganga D/S L	akkarghat O.P, Del	ıradun									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
28	Jan-23	14°C	7.93	188	286	9.4	6.0	116	90	26	104	1.2	5.2	84	43	21	0.11	0.05	77.30	0.23	0.29	2.8	1.6	0.11	В
	Feb-23	24°C	7.80	202	304	9.2	9.0	191	168	23	161	1.4	5.6	79	46	12	0.15	0.10	75.38	0.26	0.39	17.6	1.9	0.55	В
	Mar-23	16°C	7.88	128	195	9.4	8.0	125	98	27	115	1.3	5.2	70	49	10	0.11	0.04	63.25	0.25	0.40	5.7	3.3	0.22	В
	Apr-23	21°C	7.90	204	308	9.2	11.0	195	172	23	165	1.4	5.2	79	47	9.2	0.15	0.03	67.16	0.18	0.22	9.8	2.6	0.30	В
	May-23	19°C	7.82	145	220	9.0	10.0	140	120	20	125	1.5	5.2	84	49	11	0.14	0.05	64.28	0.15	0.28	9.1	2.2	0.33	В
	Jun-23	19°C	7.20	72	112	8.6	7.0	90	63	27	80	1.6	5.2	58	49	13	0.14	0.03	66.36	0.16	0.22	10.1	2.1	0.46	В
	Jul-23	21°C	8.20	58	90	8.2	6.0	98	81	17	102	1.7	5.2	63	46	6.8	0.13	0.03	81.31	0.21	0.36	7.6	2.8	0.33	В
			1				ı				I	Ri	ver Ganga	A/C River Song (R	River Ganga D/S) at	Raiwala, Dehradun									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (µS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
29	Jan-23	13°C	7.09	139	216	9.6	6.0	155	121	34	149	1.2	4.8	63	40	ND	0.18	0.02	49.52	0.19	0.19	11.0	1.8	0.38	В
	Feb-23	25°C	7.34	205	310	9.4	7.0	205	193	12	195	1.3	4.8	63	58	ND	0.10	0.03	37.23	0.25	0.31	22.8	3.2	0.69	В
	Mar-23	17°C	8.13	190	286	9.6	8.0	175	146	29	160	1.2	4.8	70	58	ND	0.09	0.03	36.17	0.19	0.30	6.2	2.4	0.20	В
	Apr-23	19°C	8.40	189	287	9.6	11.0	230	213	17	177	1.0	4.0	70	48	ND	0.12	0.03	60.87	0.10	0.31	15.7	2.1	0.44	В
	May-23	21°C	8.45	215	325	9.4	9.0	242	226	16	193	1.2	4.8	58	43	ND	0.11	0.05	48.26	0.15	0.28	12.4	2.1	0.34	В
	Jun-23	22°C	7.80	200	305	8.8	6.0	201	170	31	184	1.5	5.2	63	46	ND	0.13	0.08	62.22	0.13	0.25	14.0	2.3	0.43	В
	Jul-23	20°C	8.09	185	281	8.4	5.0	104	91	13	118	1.6	5.6	58	43	ND	0.07	0.01	59.10	0.15	0.20	9.7	3.0	0.41	В
	Aug-23	15°C	8.26	154	232	8.2	8.0	131	104	27	115	1.7	5.6	63	46	2.0	0.15	0.08	62.15	0.21	0.27	6.2	6.9	0.23	В
	Sep-23	21°C	7.95	163	246	8.4	9.0	142	119	23	123	1.5	5.2	70	49	4.0	0.08	0.07	68.38	0.25	0.38	5.9	5.4	0.21	В
	Oct-23	22°C	7.70	131	198	8.6	8.0	120	103	17	110	1.4	5.0	63	46	4.0	0.11	0.06	57.43	0.19	0.24	6.4	6.7	0.25	В
	Nov-23	16°C	7.85	123	185	8.8	7.0	113	98	15	102	1.3	5.0	79	49	4.5	0.07	0.03	49.63	0.18	0.20	6.0	4.5	0.24	В
	Dec-23	17°C	7.77	115	174	9.0	6.0	102	82	20	95	1.2	5.0	94	46	4.5	0.09	0.01	44.74	0.20	0.25	5.1	4.0	0.22	В
												River Gang	a A/C Riv	er Song (River Gan	nga D/S) Near Birla	guest house, Dist-De	ehradun								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
30	Jan-23	12°C	7.40	146	225	9.8	5.0	110	83	27	101	1.0	4.0	94	47	ND	0.10	0.04	45.24	0.17	0.20	10.1	1.6	0.41	В
	Feb-23	25°C	7.56	177	268	9.6	8.0	235	219	16	163	1.0	4.0	79	58	ND	0.13	0.06	59.84	0.20	0.36	16.8	3.0	0.47	В
	Mar-23	18°C	7.95	179	270	9.8	9.0	200	168	32	149	1.0	4.0	63	49	ND	0.11	0.05	42.10	0.20	0.45	6.0	2.7	0.18	В
	Apr-23	19°C	8.40	189	287	9.6	11.0	230	213	17	177	1.0	4.0	70	48	ND	0.12	0.03	60.87	0.10	0.31	15.7	2.1	0.44	В
	May-23	19°C	8.01	162	246	9.4	10.0	180	156	24	168	1.1	4.4	58	48	ND	0.13	0.02	58.26	0.13	0.25	14.9	1.7	0.48	В
	Jun-23	21°C	7.90	152	237	9.0	6.0	183	155	28	169	1.3	4.8	79	63	ND	0.11	0.05	67.25	0.15	0.16	12.6	2.0	0.40	В
	Jul-23	20°C	8.01	140	214	8.6	4.0	107	94	13	119	1.4	5.2	84	58	ND	0.09	0.08	73.15	0.20	0.21	8.9	2.6	0.37	В

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	Aug-23	16°C	8.20	135	206	8.4	7.0	122	99	23	112	1.5	5.2	84	63	ND	0.13	0.07	78.30	0.22	0.30	6.5	6.7	0.26	В
	Sep-23	23°C	8.03	148	224	8.6	8.0	130	104	26	119	1.4	5.2	94	70	ND	0.09	0.03	71.11	0.18	0.27	6.2	5.8	0.24	В
	Oct-23	22°C	7.80	120	182	8.8	7.0	112	93	19	104	1.3	5.0	84	63	ND	0.10	0.06	75.42	0.19	0.24	6.7	6.9	0.27	В
	Nov-23	15°C	7.82	114	172	9.0	6.0	103	86	17	99	1.2	5.0	94	70	<1.8	0.09	0.05	68.40	0.23	0.21	6.2	4.8	0.27	В
	Dec-23	18°C	7.69	103	155	9.2	5.0	95	77	18	90	1.1	5.0	94	63	<1.8	0.08	0.02	59.63	0.21	0.26	5.4	4.2	0.24	В
														River Suswa D/S a	t Mathurawala, Del	nradun									
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
31	Jan-23	15°C	6.85	300	447	4.0	27.0	412	346	66	346	20.0	82.0	6300	4100	1600	0.21	0.03	139.25	0.29	0.33	28.9	13.8	0.61	D Criteria
	Feb-23	20°C	6.76	390	588	3.0	40.0	445	310	135	315	24.0	94.0	7000	6300	1600	0.30	0.12	141.32	0.29	0.96	40.8	15.2	0.83	Е
	Mar-23	17°C	7.83	319	484	2.6	45.0	515	322	193	335	26.0	98.0	17000	14000	1600	0.25	0.10	128.22	0.26	0.42	20.0	7.9	0.38	E
	Apr-23	19°C	7.40	295	445	2.4	47.0	355	260	95	349	28.0	102.0	>1600	>1600	1600	0.29	0.13	100.83	0.24	0.53	30.1	7.5	0.69	Е
	May-23	24°C	7.12	399	601	1.6	44.0	368	280	88	353	32.0	108.0	>1600	>1600	1600	0.31	0.11	143.36	0.28	0.56	28.65	6.9	0.64	Е
	Jun-23	21°C	7.50	382	586	1.4	46.0	380	310	70	360	34.0	112.0	>1600	>1600	920	0.42	0.11	130.16	0.23	0.39	30.84	7.8	0.69	Е
	Jul-23	20°C	7.60	212	321	2.0	41.0	349	232	117	240	32.0	108.0	160000	28000	540	0.33	0.10	110.36	0.20	0.47	28.90	7.1	0.67	Е
	Aug-23	17°C	7.40	256	396	2.2	38.0	298	250	48	256	30.0	96.0	16000	5400	920	0.30	0.13	123.24	0.26	0.50	36.1	8.0	0.91	Е
	Sep-23	20°C	7.29	240	362	2.4	36.0	272	232	40	234	28.0	92.0	16000	1700	540	0.36	0.12	138.43	0.28	0.43	35.3	7.6	0.93	Е
	Oct-23	20°C	7.43	231	348	2.2	38.0	283	241	42	220	30.0	100.0	16000	9200	920	0.27	0.10	133.15	0.21	0.30	37.5	8.3	0.97	Е
	Nov-23	16°C	7.19	355	535	2.4	36.0	326	267	59	305	28.0	90.0	28×10 <sup>2</sup>	17×10 <sup>2</sup>	920	0.22	0.06	125.42	0.13	0.20	36.2	7.8	0.87	Е
	Dec-23	19°C	7.10	298	449	2.6	34.0	280	228	52	262	27.0	90.0	35×10 <sup>2</sup>	14×10 <sup>2</sup>	920	0.32	0.11	138.42	0.26	0.31	32.3	6.9	0.84	Е
													Ri	ver Suswa U/S at E	arafutta, Doiwala,	Dehradun									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
32	Jan-23	16°C	7.28	260	392	7.4	11.0	396	267	129	363	1.5	5.2	94	49	21	0.24	0.13	101.55	0.30	0.41	25.3	7.0	0.55	В
	Feb-23	17°C	7.11	357	538	6.8	16.0	409	290	119	303	1.7	6.0	130	110	39	0.29	0.09	135.77	0.21	0.68	42.8	12.9	0.91	В
	Mar-23	18°C	7.60	298	449	6.6	17.0	383	259	124	298	1.8	6.4	170	130	34	0.20	0.09	125.36	0.32	0.36	21.6	9.6	0.47	В
	Apr-23	20°C	7.70	332	499	6.4	20.0	397	284	113	356	2.0	6.8	130	110	38	0.25	0.15	110.38	0.35	0.42	36.5	10.1	0.79	В
	May-23	23°C	7.60	363	546	5.8	26.0	362	204	158	350	2.6	8.0	150	120	41	0.36	0.16	97.24	0.22	0.30	34.70	9.4	0.79	В
	Jun-23														River was D	ry									
	Jul-23	23°C	7.50	209	316	6.2	17.0	320	211	109	228	2.4	7.6	240	220	63	0.18	0.23	73.98	0.13	0.51	24.18	8.8	0.59	В
	Aug-23	18°C	7.80	225	308	5.8	19.0	290	254	36	274	2.6	7.2	210	170	70	0.28	0.11	88.63	0.20	0.43	40.0	10.3	1.02	В
	Sep-23	24°C	7.50	215	324	5.6	20.0	258	228	30	240	2.8	7.6	280	220	94	0.32	0.14	95.63	0.24	0.40	37.8	9.5	1.02	В
	Oct-23	22°C	7.08	198	300	5.4	22.0	248	220	28	209	2.9	8.0	350	280	110	0.23	0.06	110.43	0.19	0.25	38.9	9.9	1.07	В
	Nov-23	17°C	7.36	293	441	5.6	20.0	271	231	40	251	2.8	8.0	350	220	110	0.20	0.08	125.41	0.20	0.23	37.4	8.9	0.99	В
	Dec-23	19°C	7.25	248	373	5.8	18.0	235	201	34	220	2.6	8.0	430	220	140	0.23	0.09	129.73	0.23	0.29	30.7	6.0	0.87	В
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												River So	ng D/S be	fore confluence in	to River Ganga Nea	ar Nepali Farm, Rish	ikesh								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
33	Jan-23	13°C	7.81	120	181	9.4	7.0	174	100	74	150	1.0	4.0	79	47	21	0.12	0.03	56.84	0.20	0.28	4.1	2.3	0.13	В
	Feb-23	21°C	7.68	245	369	9.0	10.0	285	261	24	208	1.0	4.0	94	84	26	0.21	0.11	88.25	0.28	0.52	16.9	3.4	0.43	В
	Mar-23	17°C	8.22	183	277	9.2	9.0	197	156	41	183	1.0	4.0	84	70	22	0.09	0.06	79.64	0.18	0.39	6.8	2.2	0.21	В
	Apr-23	19°C	8.20	259	391	9.0	11.0	260	232	28	220	1.0	4.0	94	84	21	0.13	0.05	86.43	0.12	0.44	9.2	1.6	0.24	В
	May-23	20°C	7.75	220	334	8.6	11.0	200	160	40	190	1.2	4.4	79	63	20	0.14	0.05	90.23	0.15	0.38	8.8	1.4	0.26	В
	Jun-23	20°C	8.10	190	297	8.4	7.0	178	131	47	140	1.3	4.8	63	58	17	0.16	0.03	78.33	0.19	0.38	13.3	2.0	0.43	В
	Jul-23	21°C	8.18	178	270	7.8	6.0	129	114	15	124	1.5	5.2	79	58	11	0.07	0.05	68.25	0.23	0.28	11.7	2.9	0.45	В
	Aug-23	16°C	8.30	189	286	7.4	8.0	140	118	22	130	1.7	5.6	84	63	7.8	0.08	0.05	71.20	0.23	0.37	16.8	4.1	0.62	В
	Sep-23	22°C	8.04	197	297	7.6	9.0	158	130	28	143	1.6	5.6	94	70	6.1	0.13	0.04	65.10	0.23	0.33	15.9	3.7	0.55	В
	Oct-23	21°C	7.89	152	231	7.8	8.0	126	105	21	118	1.5	5.0	110	79	6.8	0.10	0.06	65.43	0.20	0.33	16.8	4.0	0.65	В
	Nov-23	15°C	7.72	140	212	8.0	7.0	120	102	18	111	1.4	5.0	140	70	4.5	0.08	0.07	52.63	0.18	0.25	15.9	3.7	0.63	В
	Dec-23	18°C	7.54	128	194	8.2	6.0	113	92	21	106	1.3	5.0	110	94	6.1	0.09	0.03	55.73	0.20	0.22	14.1	3.2	0.58	В
													ı	River Ganga near \	isthaphit Colony, R	ishikesh									
	Aug-23	15°C	8.10	69	105	9.2	6.0	80	67	13	83	1.2	4.0	47	40	ND	0.08	0.04	60.24	0.16	0.30	3.5	3.9	0.17	A
	Sep-23	22°C	8.17	83	125	9.4	6.0	70	54	16	86	1.1	4.0	40	34	<1.8	0.11	0.05	63.25	0.19	0.26	3.1	2.7	0.16	A
	Oct-23	21°C	7.85	76	116	9.6	5.0	80	64	16	85	1.0	4.0	38	31	<1.8	0.09	0.03	55.41	0.18	0.25	3.4	3.7	0.16	A
	Nov-23	17°C	7.79	81	123	9.8	6.0	83	65	18	86	1.0	4.0	48	40	<1.8	0.09	0.04	60.23	0.22	0.28	3.5	3.2	0.17	A
	Dec-23	18°C	7.66	69	104	10.0	5.0	70	51	19	66	1.0	4.0	48	41	<1.8	0.07	0.03	55.74	0.19	0.22	3.0	2.8	0.16	A
													1	River Yamuna D/S	at Vikash Nagar, De	ehradun									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
34	Jan-23	08°C	8.26	172	260	10.4	7.0	159	124	35	152	1.0	4.0	79	43	14	0.10	0.03	39.22	0.25	0.25	9.1	2.0	0.31	В
	Feb-23	21°C	8.17	106	162	10.2	8.0	112	93	19	68	1.0	4.0	94	84	17	0.11	0.02	33.11	0.16	0.35	14.0	4.8	0.57	В
	Mar-23	20°C	8.01	160	243	10.4	7.0	152	134	18	125	1.0	4.0	84	70	15	0.15	0.02	28.53	0.19	0.30	9.4	2.3	0.33	В
	Apr-23	19°C	8.15	168	255	10.0	5.0	133	120	13	172	1.0	4.0	94	84	17	0.09	0.02	35.26	0.15	0.26	9.0	2.1	0.33	В
<u> </u>	May-23	19°C	8.23	173	262	9.8	7.0	165	142	23	129	1.0	4.0	79	63	14	0.06	0.03	39.36	0.11	0.19	8.5	1.9	0.28	В
	Jun-23	20°C	7.50	123	187	9.4	6.0	124	111	13	102	1.1	4.0	84	79	17	0.11	0.04	33.15	0.13	0.23	6.4	2.3	0.25	В
	Jul-23	18°C	8.09	129	197	9.0	4.0	112	98	14	75	1.2	4.0	94	84	13	0.10	0.07	41.09	0.15	0.21	5.5	3.0	0.23	В
	Aug-23	18°C	7.95	82	124	9.2	3.0	72	62	10	68	1.1	4.0	94	70	11	0.08	0.03	39.15	0.20	0.28	3.9	2.2	0.20	В
	Sep-23	22°C	7.30	90	137	9.2	4.0	81	69	12	70	1.2	4.0	84	63	9.2	0.07	0.01	46.25	0.20	0.30	3.6	2.0	0.17	В
	Oct-23	22°C	7.51	82	125	9.4	4.0	70	61	09	57	1.1	4.0	79	58	8.2	0.09	0.06	35.42	0.16	0.24	3.9	2.4	0.20	В
	Nov-23	21°C	7.83	90	136	9.6	6.0	99	84	15	89	1.1	4.0	94	70	6.1	0.11	0.06	40.42	0.16	0.20	4.7	3.5	0.20	В
	Dec-23	18°C	7.74	85	128	9.8	5.0	89	77	12	80	1.1	4.0	84	58	4.5	0.08	0.03	35.46	0.18	0.22	3.6	3.1	0.17	В

														Yamuna C	anal at Dakpathar										
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
35	Jan-23	10°C	7.99	95	144	10.4	4.0	72	63	09	59	1.0	4.0	79	43	21	0.12	0.03	33.41	0.19	0.25	4.3	1.9	0.21	В
	Feb-23	18°C	7.91	132	199	10.2	5.0	127	108	19	77	1.0	4.0	70	63	17	0.11	0.03	38.45	0.25	0.20	13.0	2.9	0.50	В
	Mar-23	18°C	8.12	126	190	10.4	6.0	112	101	11	83	1.0	4.0	84	70	13	0.12	0.04	37.11	0.23	0.19	5.9	2.3	0.24	В
	Apr-23	19°C	8.01	125	189	10.0	4.0	93	78	15	71	1.0	4.0	79	70	12	0.06	0.03	33.24	0.13	0.19	5.3	2.0	0.23	В
	May-23														Cannal Dry	7									
	Jun-23	18°C	7.10	51	78	9.4	2.0	87	79	08	74	1.0	4.0	84	79	13	0.12	0.02	37.10	0.19	0.28	5.6	2.9	0.26	В
	Jul-23	19°C	8.01	119	181	9.0	4.0	84	72	12	78	1.0	4.0	94	84	14	0.09	0.06	51.26	0.18	0.20	5.1	3.2	0.24	В
	Aug-23	20°C	8.22	78	118	9.2	6.0	75	67	08	61	1.0	4.0	84	63	7.8	0.06	0.05	34.59	0.23	0.25	3.7	2.0	0.19	В
	Sep-23	22°C	7.37	79	120	9.4	5.0	73	63	10	64	1.0	4.0	94	70	6.1	0.08	0.02	38.11	0.22	0.18	3.3	1.7	0.17	В
	Oct-23	21°C	7.40	66	100	9.6	3.0	61	55	06	50	1.0	4.0	84	63	5.6	0.09	0.03	30.76	0.17	0.22	3.7	2.0	0.21	В
	Nov-23	20°C	8.10	58	88	9.8	5.0	71	61	10	65	1.0	4.0	70	49	4.5	0.07	0.04	35.49	0.10	0.18	4.3	3.1	0.22	В
	Dec-23	18°C	7.88	61	93	10.0	4.0	68	60	08	63	1.0	4.0	94	46	4.0	0.09	0.03	42.15	0.09	0.24	3.7	2.6	0.19	В
														River Yamuna a	it Dakpathar, Dehra	idun	,								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
36	Jan-23	10°C	8.10	93	141	10.6	4.0	75	65	10	56	1.0	4.0	70	41	13	0.13	0.03	36.43	0.25	0.30	4.2	1.9	0.21	В
	Feb-23	16°C	8.02	130	196	10.4	6.0	124	102	22	75	1.0	4.0	79	63	14	0.13	0.01	29.35	0.22	0.22	14.0	2.9	0.54	В
	Mar-23	18°C	8.10	127	193	10.6	6.0	118	107	11	85	1.0	4.0	70	58	11	0.15	0.03	25.11	0.20	0.28	5.5	2.3	0.21	В
	Apr-23	20°C	7.93	123	186	10.2	5.0	109	89	20	86	1.0	4.0	79	70	10	0.07	0.03	28.16	0.17	0.28	5.1	1.9	0.21	В
	May-23	20°C	8.07	135	207	10.0	5.0	127	116	11	97	1.0	4.0	84	79	12	0.13	0.03	33.21	0.13	0.15	4.8	1.7	0.18	В
	Jun-23	18°C	7.02	46	72	9.6	3.0	84	77	07	70	1.0	4.0	94	84	14	0.14	0.03	31.25	0.16	0.36	5.7	3.1	0.27	В
	Jul-23	19°C	7.93	121	185	9.2	3.0	95	83	12	85	1.0	4.0	84	79	11	0.16	0.07	38.15	0.18	0.25	4.9	3.4	0.22	В
	Aug-23	18°C	8.28	74	114	9.4	5.0	71	64	07	58	1.0	4.0	94	70	13	0.06	0.05	34.62	0.23	0.25	4.1	2.2	0.21	В
	Sep-23	21°C	7.32	83	126	9.6	5.0	78	69	09	62	1.0	4.0	84	63	6.1	0.06	0.03	41.10	0.19	0.25	3.8	1.9	0.19	В
	Oct-23	22°C	7.46	72	109	9.8	4.0	65	58	07	53	1.0	4.0	79	58	5.5	0.07	0.02	30.42	0.20	0.21	4.0	2.2	0.22	В
$\vdash$	Nov-23	20°C	8.08	62	94	10.0	6.0	77	65	12	70	1.0	4.0	94	63	6.8	0.08	0.04	28.41	0.15	0.24	4.6	3.3	0.23	В
	Dec-23	18°C	7.96	66	100	10.2	5.0	73	63	10	69	1.0	4.0	94 Piver Vamuna	70 at Lakhwar, Dehrae	4.0	0.09	0.03	25.42	0.16	0.20	3.9	2.9	0.20	В
	I		ı			l			C-1-:		Allies 11				at Lakiiwar, Denra		I	I	enter :			T			Designated Best use
S.No.	Month	Temp	рН	TDS (mg/l)	EC (µS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)		TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria
37	Jan-23	09°C	8.36	140	214	10.8	5.0	130	120	10	94	1.0	4.0	1.8	1.8	ND	0.09	0.04	22.19	0.26	0.20	5.4	1.7	0.20	A
	Feb-23	15°C	8.24	125	190	10.4	8.0	116	88	28	75	1.0	4.0	1.8	1.8	ND	0.09	0.03	28.55	0.28	0.43	12.5	2.8	0.50	A
$\square$	Mar-23	18°C	8.30	120	182	10.6	6.0	139	115	24	73	1.0	4.0	1.8	1.8	ND	0.19	0.06	25.73	0.22	0.25	5.3	2.0	0.19	А
$\square$	Apr-23	19°C	7.90	117	180	10.4	4.0	118	95	23	87	1.0	4.0	1.8	1.8	ND	0.13	0.02	32.49	0.03	0.31	4.9	1.7	0.19	A
	May-23	18°C	8.20	119	184	10.2	6.0	142	119	23	76	1.0	4.0	1.8	1.8	ND	0.11	0.04	36.39	0.09	0.30	4.5	1.5	0.16	A

	Jun-23	18°C	8.27	74	113	10.0	4.0	72	68	04	61	1.0	4.0	1.8	1.8	ND	0.11	0.02	39.15	0.18	0.40	4.9	2.4	0.25	A
	Jul-23	17°C	8.03	119	185	9.4	2.0	109	91	18	86	1.0	4.0	1.8	1.8	ND ND	0.08	0.02	43.24	0.15	0.40	4.9	2.8	0.23	A
$\vdash$	Aug-23	18°C	8.10	77	118	9.8	3.0	60	49	11	48	1.0	4.0	2.0	<1.8	ND ND	0.08	0.03	36.38	0.13	0.29	3.7	2.4	0.17	A
$\vdash$	Sep-23	23°C	7.61	80	123	10.0	4.0	72	59	13	58	1.0	4.0	2.0	<1.8	<1.8	0.08	0.03	43.17	0.18	0.29	3.5	2.4	0.21	A
	Oct-23	21°C	7.73	69	105	10.4	3.0	59	50	09	55	1.0	4.0	2.0	<1.8	<1.8	0.07	0.02	29.43	0.18	0.25	3.9	2.5	0.18	A
	Nov-23	20°C	8.11	80	122	10.4	5.0	85	73	12	82	1.0	4.0	<1.8	<1.8	<1.8	0.08	0.03	25.40	0.14	0.20	3.0	2.6	0.14	A
	Dec-23	19°C	7.93	70	106	10.6	3.0	77	67	10	73	1.0	4.0	<1.8	<1.8	<1.8	0.09	0.04	28.11	0.17	0.20	2.7	2.4	0.13	A
								<u> </u>						River Yamuı	l na at Kalsi, Dehradu	ın .	<u> </u>	l							
38	Jan-23	10°C	8.43	136	208	10.6	4.0	127	118	09	103	1.0	4.0	43	32	9.1	0.08	0.02	33.54	0.23	0.22	7.5	1.1	0.28	A
	Feb-23	20°C	8.37	128	194	10.2	7.0	125	113	12	94	1.0	4.0	49	48	9.3	0.08	0.06	26.57	0.18	0.28	15.0	1.5	0.58	A
	Mar-23	19°C	8.20	127	191	10.4	5.0	136	121	15	82	1.0	4.0	47	40	6.1	0.10	0.07	30.11	0.19	0.25	5.8	2.0	0.21	А
	Apr-23	20°C	8.10	111	167	10.4	4.0	127	112	15	88	1.0	4.0	49	47	5.6	0.09	0.05	29.35	0.11	0.33	5.5	1.9	0.21	A
	May-23	19°C	8.28	134	205	10.0	5.0	130	121	9	91	1.0	4.0	43	41	3.7	0.14	0.07	36.11	0.17	0.25	5.2	1.8	0.19	A
	Jun-23	19°C	8.22	82	125	9.8	3.0	74	64	10	64	1.0	4.0	46	43	3.7	0.13	0.08	46.25	0.17	0.37	5.4	2.7	0.27	A
	Jul-23	19°C	7.90	105	161	9.2	3.0	108	94	14	79	1.0	4.0	49	43	4.5	0.06	0.03	40.20	0.21	0.30	4.6	2.9	0.19	A
	Aug-23	19°C	8.19	88	132	9.6	4.0	68	61	07	59	1.0	4.0	48	40	4.0	0.09	0.03	39.63	0.19	0.30	4.4	1.9	0.23	A
	Sep-23	21°C	7.92	94	143	9.8	6.0	81	71	10	78	1.0	4.0	46	33	2.0	0.08	0.02	42.33	0.17	0.27	4.0	1.6	0.19	A
	Oct-23	22°C	7.99	85	130	10.0	5.0	70	58	12	65	1.0	4.0	43	31	2.0	0.07	0.02	33.43	0.22	0.24	4.3	2.0	0.22	A
	Nov-23	20°C	8.26	77	118	10.2	7.0	98	84	14	89	1.0	4.0	48	41	4.5	0.09	0.03	39.43	0.22	0.21	3.5	3.0	0.15	A
	Dec-23	18°C	8.07	82	125	10.4	5.0	86	74	12	78	1.0	4.0	47	40	2.0	0.06	0.02	42.13	0.20	0.18	3.1	2.7	0.15	A
												R	iver Tons	Before joining to F	liver Yamuna at Da	kpathar, Dehradun									
39	Jan-23	11°C	8.40	146	220	10.8	3.0	150	130	20	78	1.0	4.0	49	27	9.3	0.13	0.03	55.38	0.31	0.38	4.5	1.8	0.15	A
	Feb-23	21°C	8.28	140	213	10.6	6.0	129	118	11	71	1.0	4.0	46	40	11	0.13	0.02	55.35	0.25	0.39	12.0	3.2	0.45	A
	Mar-23	19°C	8.45	114	172	10.4	3.0	111	101	10	56	1.0	4.0	48	41	12	0.11	0.03	53.15	0.20	0.27	4.0	2.3	0.16	А
	Apr-23	22°C	8.03	121	183	10.0	3.0	107	95	12	58	1.0	4.0	49	43	11	0.08	0.02	98.45	0.02	0.25	3.7	2.1	0.15	A
	May-23	18°C	8.30	112	171	9.8	4.0	114	104	10	60	1.0	4.0	48	41	10	0.09	0.03	115.26	0.09	0.19	3.3	1.9	0.13	A
	Jun-23	28°C	8.40	93	142	9.4	3.0	81	78	03	57	1.0	4.0	49	48	6.1	0.11	0.06	110.38	0.23	0.31	3.7	2.2	0.18	A
	Jul-23	18°C	7.95	109	168	9.0	2.0	92	83	09	54	1.0	4.0	48	41	5.6	0.09	0.02	79.08	0.11	0.40	3.2	2.5	0.14	A
	Aug-23	19°C	7.90	52	81	9.2	4.0	57	48	09	65	1.0	4.0	47	34	4.0	0.05	0.03	59.69	0.18	0.29	3.4	2.4	0.20	A
Ш	Sep-23	21°C	7.24	59	91	9.6	3.0	65	51	14	71	1.0	4.0	48	41	2.0	0.11	0.04	62.31	0.23	0.35	3.0	2.0	0.16	A
Ш	Oct-23	23°C	7.35	50	76	9.8	3.0	54	44	10	58	1.0	4.0	46	33	2.0	0.08	0.02	52.63	0.22	0.24	3.4	2.3	0.20	A
	Nov-23	20°C	8.36	75	114	10.0	5.0	88	72	16	70	1.0	4.0	47	34	<1.8	0.09	0.03	48.63	0.18	0.20	4.0	2.9	0.18	A
	Dec-23	18°C	7.90	67	102	10.2	4.0	75	62	13	68	1.0	4.0	48	40	<1.8	0.07	0.02	45.15	0.16	0.18	3.5	2.5	0.18	A
	ı		I	ae. 1		l		l	05.	0:	0.5				nt Selaqui, Dehradu	<u> </u>				0.5-	0.1-		0.5		-
40	Jan-23	08°C	7.42	274	412	7.6	18.0	243	222	21	208	2.4	9.2	150	84	32	0.37	0.02	133.25	0.22	0.49	24.6	3.6	0.68	В
	Feb-23	21°C	7.55	266	402	7.2	22.0	291	232	59	265	2.6	9.6	220	210	40	0.11	0.03	138.15	0.20	0.32	21.5	3.3	0.54	В

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	Mar-23	20°C	7.90	218	328	7.6	15.0	216	202	14	162	2.4	9.2	240	220	47	0.15	0.08	142.11	0.19	0.30	9.5	1.9	0.28	В
	Apr-23	20°C	7.80	209	317	7.2	16.0	213	182	31	205	2.5	9.6	220	170	49	0.19	0.11	75.58	0.11	0.28	9.8	1.7	0.29	В
	May-23	23°C	7.60	230	348	7.0	14.0	230	215	15	175	2.6	10.0	240	150	43	0.22	0.14	88.36	0.16	0.33	9.2	1.5	0.26	В
	Jun-23	29°C	7.50	250	380	6.6	17.0	275	266	09	201	2.8	10.8	280	240	49	0.19	0.09	88.62	0.12	0.43	10.4	2.3	0.27	В
	Jul-23	17°C	8.10	180	274	6.4	13.0	198	178	20	115	2.9	11.2	350	280	63	0.26	0.11	76.35	0.20	0.41	9.7	2.0	0.30	В
	Aug-23	22°C	7.60	183	279	6.6	11.0	225	210	15	165	2.8	11.2	430	350	70	0.18	0.10	98.60	0.18	0.31	8.0	2.2	0.23	В
	Sep-23	23°C	8.21	192	290	6.8	9.0	204	184	20	152	2.6	10.8	350	240	79	0.11	0.09	110.33	0.21	0.39	7.4	1.9	0.22	В
	Oct-23	22°C	8.10	178	268	7.0	8.0	193	177	16	135	2.4	10.0	280	220	63	0.04	0.02	122.42	0.22	0.20	7.9	2.5	0.25	В
	Nov-23	20°C	7.93	206	311	6.6	12.0	297	274	23	250	2.7	11.0	350	170	70	0.06	0.01	116.08	0.18	0.23	8.8	3.2	0.22	В
	Dec-23	17°C	7.78	194	292	6.8	11.0	260	241	19	223	2.5	9.0	430	280	79	0.09	0.03	130.42	0.14	0.23	8.1	3.0	0.22	В
														River Rispana U/S	at Shikhar Fall, De	nradun									
41	Jan-23	11°C	7.84	194	292	8.4	6.0	302	258	44	139	1.0	4.0	84	58	14	0.19	0.08	79.68	0.23	0.35	14.0	8.0	0.34	В
	Feb-23	16°C	7.72	305	460	8.8	8.0	412	288	124	202	1.0	4.0	110	94	17	0.17	0.03	122.56	0.26	0.39	12.4	1.5	0.26	В
	Mar-23	18°C	7.50	310	468	8.6	10.0	510	430	80	280	1.1	4.0	94	70	14	0.19	0.08	133.21	0.31	0.43	6.2	1.5	0.11	В
	Apr-23	20°C	8.10	286	430	8.4	8.0	432	325	107	187	1.2	4.0	84	70	11	0.22	0.11	138.99	0.17	0.39	10.7	1.2	0.22	В
	May-23	25°C	7.90	328	495	7.8	7.0	404	250	154	152	1.4	4.0	94	84	6.0	0.31	0.15	109.22	0.25	0.41	9.9	1.0	0.21	В
	Jun-23	20°C	7.70	295	443	8.0	8.0	350	280	70	140	1.3	4.0	79	63	3.6	0.17	0.09	179.15	0.23	0.50	10.6	1.8	0.24	В
	Jul-23	18°C	8.40	245	371	7.8	6.0	290	235	55	160	1.3	4.0	84	79	6.8	0.26	0.16	133.15	0.23	0.33	9.8	2.3	0.25	В
	Aug-23	15°C	7.70	260	392	7.6	7.0	300	261	39	190	1.4	4.0	84	63	2.0	0.29	0.02	198.3	0.25	0.38	11.7	2.4	0.29	В
	Sep-23	19°C	7.56	235	354	7.8	6.0	268	238	30	171	1.3	4.0	94	70	2.0	0.25	0.03	176.43	0.22	0.32	10.9	2.1	0.29	В
	Oct-23	20°C	7.80	254	382	8.0	6.0	289	261	28	195	1.2	4.0	84	63	2.0	0.20	0.04	170.42	0.19	0.27	11.7	2.6	0.30	В
	Nov-23	11°C	7.72	181	274	8.2	8.0	192	154	38	178	1.1	4.0	94	70	4.0	0.18	0.03	150.42	0.15	0.23	11.1	2.9	0.35	В
	Dec-23	19°C	7.54	164	247	8.4	7.0	170	141	29	157	1.0	4.0	63	46	<1.8	0.15	0.02	142.41	0.19	0.26	9.8	2.5	0.33	В
														River Rispana D/	S Near IT Park, Deh	radun									
42	Jan-23													River Dry											
	Feb-23													River Dry											
	Mar-23													River Dry											
	Apr-23													River Dry											
	May-23													River Dry											
	Jun-23													River Dry											
	Jul-23													River Dry											
	Aug-23	16°C	7.50	249	375	6.8	10.0	318	275	43	212	1.6	5.2	120	94	11	0.28	0.11	93.2	0.25	0.42	16.0	1.3	0.39	В
	Sep-23	18°C	7.42	219	330	7.0	9.0	283	248	35	188	1.5	5.2	150	120	6.8	0.25	0.09	90.43	0.18	0.40	14.6	1.6	0.38	В
	Oct-23	23°C	7.66	240	361	7.2	8.0	305	273	32	210	1.4	5.0	140	110	6.1	0.22	0.06	98.43	0.16	0.33	15.2	2.0	0.38	В
	Nov-23	13°C	7.11	222	334	6.8	12.0	252	205	47	197	1.5	5.0	350	280	7.8	0.18	0.03	105.13	0.19	0.29	14.3	2.4	0.39	В
$\Box$	Dec-23	20°C	7.30	200	302	7.0	11.0	224	185	39	172	1.4	5.0	280	220	9.3	0.22	0.06	110.41	0.22	0.25	12.8	2.9	0.37	В
$\vdash$																									

													Riv	er Rispana B/C to	River Bindal at Mo	thorowala									
43	Jan-23	15°C	6.67	312	470	3.2	23.0	341	281	60	350	22.0	86.0	≥1600	≥1600	920	0.24	0.15	140.18	0.31	0.37	24.1	12.0	0.56	Е
	Feb-23	18°C	6.80	330	498	4.0	25.0	440	300	140	250	20.0	78.0	≥1600	≥1600	920	0.29	0.20	142.07	0.41	0.63	21.0	3.3	0.43	D
	Mar-23	18°C	7.39	289	435	3.6	30.0	455	308	147	325	22.0	82.0	>1600	>1600	1600	0.26	0.09	130.94	0.25	0.41	42.2	3.9	0.85	E
	Apr-23	20°C	7.30	348	525	2.0	35.0	364	293	71	297	26.0	90.0	>1600	>1600	1600	0.31	0.18	149.50	0.64	0.35	33.2	10.7	0.75	Е
	May-23	26°C	7.10	421	634	NIL	47.0	360	240	120	315	36.0	118.0	>1600	>1600	1600	0.29	0.13	149.20	0.22	0.38	32.5	10.3	0.74	Е
	Jun-23	21°C	7.40	480	721	NIL	49.0	420	350	70	330	38.0	122.0	>1600	>1600	540	0.37	0.15	110.36	0.25	0.53	34.10	10.9	0.72	Е
	Jul-23	21°C	7.40	243	366	0.6	41.0	335	254	81	245	36.0	118.0	92000	17000	920	0.63	0.09	87.29	0.26	0.30	32.07	9.7	0.76	Е
	Aug-23	17°C	7.30	275	414	1.0	39.0	331	271	60	245	34.0	114.0	>1600	>1600	920	0.43	0.11	118.36	0.24	0.28	33.6	10.0	0.80	Е
	Sep-23	20°C	7.22	252	380	1.4	37.0	315	263	52	236	32.0	112.0	>1600	1600	920	0.35	0.06	120.40	0.20	0.22	31.8	9.5	0.78	Е
	Oct-23	22°C	7.52	262	395	1.8	35.0	299	253	46	221	30.0	110.0	16000	3500	920	0.29	0.03	115.43	0.15	0.25	32.0	9.9	0.80	Е
	Nov-23	15°C	7.31	290	436	1.6	37.0	305	235	70	272	32.0	120.0	22×10 <sup>2</sup>	14×10 <sup>2</sup>	540	0.25	0.04	102.72	0.19	0.31	30.4	9.0	0.76	Е
	Dec-23	19°C	7.13	263	396	2.0	34.0	275	217	58	240	30.0	110.0	21×10 <sup>2</sup>	17×10 <sup>2</sup>	920	0.31	0.09	108.42	0.21	0.25	29.1	8.4	0.76	E
														River Bindal U/S a	t Bindal Bridge, Del	nradun									
44	Jan-23	16°C	6.60	427	643	2.4	29.0	293	168	125	369	26.0	96.0	≥1600	≥1600	920	0.27	0.11	138.51	0.29	0.31	31.1	9.6	0.78	E
	Feb-23	20°C	6.69	387	582	NIL	60.0	456	319	137	320	50.0	160.0	≥1600	≥1600	920	0.37	0.09	123.72	0.28	0.35	73.9	27.3	1.50	E
	Mar-23	18°C	7.20	278	420	NIL	66.0	482	303	179	312	52.0	168.0	>1600	>1600	920	0.32	0.15	127.14	0.29	0.35	40.8	12.0	0.80	E
	Apr-23														River Dry										
	May-23	27°C	6.80	480	725	NIL	55.0	367	228	139	425	56.0	176.0	>1600	>1600	1600	0.30	0.16	122.35	0.24	0.39	47.6	11.1	1.07	E
	Jun-23	20°C	8.00	520	780	NIL	58.0	390	260	130	366	58.0	180.0	>1600	>1600	920	0.52	0.16	170.11	0.23	0.35	49.75	12.0	1.09	Е
	Jul-23	21°C	7.20	279	423	0.6	49.0	351	263	88	291	56.0	176.0	160000	92000	920	0.39	0.43	120.31	0.28	0.48	48.25	11.1	1.12	Е
	Aug-23	17°C	7.40	295	445	0.8	48.0	268	240	28	220	55.0	174.0	>1600	1600	540	0.41	0.28	157.35	0.26	0.40	50.0	18.3	1.33	Е
	Sep-23	20°C	7.17	270	406	1.0	47.0	249	225	24	205	54.0	172.0	>1600	1600	920	0.36	0.25	138.60	0.22	0.35	48.9	17.8	1.35	Е
	Oct-23	24°C	6.89	237	358	0.6	50.0	280	243	37	232	56.0	180.0	>1600	>1600	920	0.30	0.16	128.93	0.19	0.30	49.7	18.1	1.29	Е
	Nov-23	14°C	6.96	293	441	0.8	47.0	311	251	60	299	54.0	170.0	35×10 <sup>2</sup>	17×10 <sup>2</sup>	920	0.23	0.10	134.79	0.17	0.25	47.3	16.9	1.16	Е
	Dec-23	20°C	7.06	270	406	1.0	45.0	283	230	53	279	52.0	160.0	1600	920	350	0.30	0.09	140.43	0.20	0.22	45.5	15.3	1.17	Е
											1	<u> </u>			ear Kargi Chowk, De	<u> </u>					1	<u> </u>		1	
45	Jan-23	16°C	7.96	490	739	2.0	31.0	306	196	110	355	28.0	100.0	≥1600	≥1600	540	0.28	0.06	130.16	0.32	0.29	26.8	14.8	0.66	Е
	Feb-23	19°C	6.90	441	664	NIL	73.0	532	386	146	396	48.0	152.0	≥1600	≥1600	920	1.43	0.41	127.03	0.22	0.41	70.6	35.3	1.32	Е
_	Mar-23	17°C	7.28	317	480	NIL	76.0	520	378	142	348	50.0	160.0	>1600	>1600	920	0.31	0.13	141.96	0.31	0.36	41.6	25.0	0.79	E
	Apr-23	20°C	6.90	424	639	NIL	78.0	390	300	90	460	52.0	164.0	>1600	>1600	1600	0.26	0.15	129.11	0.16	0.46	56.6	21.1	1.24	Е
	May-23	26°C	7.30	495	744	NIL	45.0	368	281	87	350	54.0	170.0	>1600	>1600	1600	0.28	0.15	119.28	0.26	0.42	55.8	20.3	1.26	E
	Jun-23	21°C	7.80	533	799	NIL	48.0	350	266	84	320	56.0	174.0	>1600	>1600	920	0.38	0.18	147.25	0.20	0.46	58.10	21.2	1.34	Е
	Jul-23	19°C	7.60	267	405	0.8	38.0	380	255	125	300	52.0	168.0	16000	9200	430	0.63	0.21	108.31	0.23	0.52	56.25	19.8	1.25	E
	Aug-23	18°C	7.60	283	425	1.0	37.0	295	254	41	235	51.0	166.0	>1600	920	350	0.59	0.25	147.26	0.24	0.49	47.1	21.0	1.19	Е
	Sep-23	21°C	7.35	253	381	1.2	36.0	263	228	35	213	50.0	164.0	>1600	1600	540	0.50	0.22	165.77	0.20	0.39	46.2	20.4	1.24	Е

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	Oct-23	23°C	6.97	220	333	1.0	38.0	274	234	40	218	52.0	170.0	>1600	>1600	920	0.43	0.20	159.43	0.16	0.34	47.1	21.2	1.23	Е
	Nov-23	15°C	6.81	310	467	1.2	36.0	365	293	72	322	50.0	160.0	14×10 <sup>2</sup>	11×10 <sup>2</sup>	540	0.38	0.15	143.25	0.13	0.29	45.9	19.7	1.04	Е
	Dec-23	20°C	6.93	291	438	1.4	34.0	322	260	62	299	48.0	150.0	22×10 <sup>2</sup>	17×10 <sup>2</sup>	540	0.35	0.12	140.73	0.16	0.20	43.8	17.9	1.06	Е
													River Bir	idal B/C to River R	ispana at Mothoro	vala, Dehradun									
46	Jan-23	16°C	7.26	263	400	2.8	27.0	392	290	102	309	24.0	90.0	≥1600	≥1600	540	0.30	0.02	131.85	0.36	0.30	25.6	14.5	0.56	Е
	Feb-23	18°C	6.84	316	477	1.4	40.0	448	298	150	304	32.0	108.0	≥1600	≥1600	920	0.90	0.19	130.09	0.17	0.49	23.7	4.4	0.48	Е
	Mar-23	18°C	7.22	300	453	1.2	42.0	419	310	109	318	34.0	112.0	>1600	>1600	1600	0.23	0.12	156.25	0.28	0.31	25.6	6.9	0.54	Е
	Apr-23	20°C	7.02	316	475	1.4	37.0	236	152	84	275	32.0	110.0	>1600	>1600	1600	0.28	0.19	103.72	0.10	0.38	16.8	1.7	0.47	Е
	May-23	25°C	6.78	344	517	0.8	39.0	365	270	95	310	34.0	114.0	>1600	>1600	1600	0.28	0.14	133.11	0.20	0.38	16.0	1.5	0.36	Е
	Jun-23	21°C	6.60	326	490	0.6	41.0	384	261	123	296	36.0	120.0	>1600	>1600	920	0.63	0.12	120.36	0.19	0.48	19.83	2.4	0.43	Е
	Jul-23	20°C	7.48	265	401	1.2	38.0	360	245	115	282	34.0	114.0	160000	92000	920	0.88	0.34	84.24	0.15	0.49	18.12	3.6	0.41	Е
	Aug-23	18°C	7.35	270	408	1.4	36.0	271	244	27	216	32.0	110.0	>1600	>1600	920	0.67	0.24	123.11	0.20	0.37	20.0	7.1	0.53	Е
	Sep-23	20°C	7.20	237	357	1.6	34.0	245	222	23	196	30.0	108.0	1600	920	540	0.62	0.23	117.60	0.21	0.41	21.6	7.8	0.60	Е
	Oct-23	23°C	7.14	205	309	1.4	36.0	256	226	30	205	32.0	110.0	16000	5400	920	0.53	0.17	120.43	0.16	0.35	22.3	8.0	0.60	Е
	Nov-23	15°C	7.06	318	479	1.6	34.0	352	289	63	298	30.0	110.0	22×10 <sup>2</sup>	17×10 <sup>2</sup>	540	0.47	0.15	109.63	0.17	0.30	21.5	7.5	0.50	Е
	Dec-23	20°C	7.18	304	457	1.8	32.0	307	251	56	270	29.0	110.0	28×10 <sup>2</sup>	22×10 <sup>2</sup>	920	0.38	0.13	115.70	0.20	0.25	20.7	7.0	0.51	Е
								<u> </u>							tion Reserve, Dehra	dun									
47	May-23	29°C	8.45	152	232	9.0	5.0	114	108	06	113	1.0	4.0	2.0	2.0	ND	0.73	BDL	21.87	0.02	0.17	11.5	2.8	0.46	A
H	Jun-23	27°C	8.30	43	65	8.8	3.0	44	40	04	35	1.0	4.0	2.0	2.0	ND	0.65	ND	33.20	0.05	0.22	10.1	1.9	0.66	A
	Jul-23	19°C	8.22	56	86	8.4	5.0	52	44	08	45	1.0	4.0	2.0	2.0	ND	1.15	ND	33.15	0.06	0.21	8.9	1.5	0.54	A
	Aug-23	21°C	8.40	68	103	8.6	4.0	68	61	07	61	1.0	4.0	2.0	<1.8	ND	0.59	0.03	37.05	0.04	0.21	3.9	2.0	0.21	A
	Sep-23	23°C	7.66	47	72	8.8	5.0	50	40	10	41	1.0	4.0	2.0	<1.8	ND	0.47	0.06	47.31	0.10	0.25	3.3	1.7	0.20	A
	Oct-23	20°C	7.49	42	64	9.0	4.0	47	39	08	38	1.0	4.0	2.0	<1.8	ND	0.22	0.04	40.42	0.03	0.21	3.6	3.8	0.23	A
	Nov-23	20°C	7.97	75	113	9.2	5.0	63	51	12	55	1.0	4.0	4.0	<1.8	<1.8	0.25	0.03	35.96	0.08	0.17	3.2	3.0	0.17	A
	Dec-23	18°C	7.80	60	90	9.4	4.0	50	41	09	52	1.0	4.0	<1.8	<1.8	<1.8	0.18	0.05	42.74	0.09	0.20	2.9	2.5	0.18	A
					ı		ı	ı	•			<u> </u>	River Gan	ga canai D/S at na	ir ki Pauri, Kisnikui i	oriuge, nariuwar	1								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
48	Jan-23	15.6°C	8.11	227	355	10.0	13.0	66	36	30	58	1.6	8.0	79	22	9.1	0.26	0.00	24.02	0.16	0.49	2.4	1.8	0.13	В
	Feb-23	18.7°C	8.39	224	350	9.8	11.0	72	34	38	54	1.8	6.4	84	34	20	0.20	0.01	20.2	0.15	0.40	3.0	2.4	0.15	В
	Mar-23	22.0°C	8.21	115.5	180.5	9	8.0	79	40	39	209	2.4	8.0	110	40	25	0.46	0.22	43.89	1.22	0.54	18.8	6.3	0.92	В
	Apr-23	21.5°C	8.10	200	312.5	9.2	7.0	60	36	24	205	2.2	6.4	70	26	17	0.21	0.01	19.0	0.15	0.40	16.4	5.8	0.91	В
	May-23	25.7°C	8.11	188	294	8.8	6.0	129	79	50	138	1.2	5.0	84	33	17	0.20	0.04	28.66	0.45	0.66	11.0	3.2	0.42	В
	Jun-23	24.8°C	7.90	173	270	7.9	10.0	72	42	30	115	2.2	8.8	94	47	15	0.28	0.04	20.79	0.15	0.33	12.2	3.5	0.62	В
$\vdash$	Jul-23	24.1°C	8.20	218	342	7.8	9.0	60	35	25	64	1.4	8.0	150	63	47	0.36	0.19	31.60	0.39	0.33	7.9	5.1	0.44	В
$\vdash$	Aug-23	2	0.20	210	312	7.0			55	23	· ·	1.1	0.0	150	Canal was clo	.,	0.50	J,	21.00	0.57			J	····	
$\vdash$	Sep-23	25°C	7.56	198	310	8.6	8.0	78	40	38	89	1.6	9.0	140	32	21	0.16	0.08	28.53	0.64	0.51	1.1	1.7	0.05	В
Ш	3ep-23	23°C	7.30	198	310	8.0	8.0	/8	40	38	89	1.0	9.0	140	34	21	0.10	0.08	28.33	0.04	0.31	1.1	1./	0.03	В

	Oct-23	25°C	7.80	215	330	7.7	9.0	88	55	33	90	1.6	10.0	110	70	20	1.28	0.14	20.67	0.18	0.30	3.55	5.40	0.16	В
	Nov-23												Ca	anal was closed d	ie to cleaning purp	ose before Diwali	Festival.								
	Dec-23	21.8°C	7.64	100	156	9.2	5.0	145	35	110	84	1.2	8.0	120	94	17	0.68	0.14	21.24	0.19	0.30	3.5	5.4	0.13	В
														River Ganga at	Har Ki Pouri, Harid	war									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality
49	Jan-23	14.8°C	8.21	164	257	10.3	13.0	76	31	45	52	1.6	7.0	63	39	9.2	0.25	0.00	24.22	0.18	0.34	2.3	1.9	0.11	В
	Feb-23	18.1 °C	8.27	152	237	10.0	10.0	65	28	37	62	1.8	6.8	94	49	17	0.22	0.01	22.8	0.15	0.47	3.0	2.6	0.16	В
	Mar-23	21.0°C	7.76	106.6	166.5	9.18	6.0	37	24	13	80	1	10.0	120	70	31	0.21	0.02	30.33	0.95	0.86	4.8	2.7	0.34	В
	Apr-23	21.3°C	7.70	120	187.5	9.6	7.0	32	22	10	82	1.2	5.5	84	58	20	0.20	0.01	18.8	0.18	0.45	4.80	2.8	0.36	В
	May-23	23.8°C	8.12	180	281	9.0	6.0	119	64	55	150	1.6	6.0	70	26	9.2	0.10	0.04	21.28	0.42	0.44	10.0	3.6	0.40	В
	Jun-23	22.8°C	7.60	134	210	8.2	8.0	44	28	16	92	2.0	10.0	94	31	17	0.26	0.05	20.62	0.13	0.32	3.7	2.1	0.24	В
	Jul-23	22.6°C	8.16	215	336	8.5	6.0	68	36	32	60	1.8	10.0	120	63	43	0.29	0.13	38.70	0.41	0.38	7.8	5.1	0.41	В
	Aug-23														Canal was clo	sed									
	Sep-23	25°C	7.46	203	318	8.4	5.0	73	44	29	86	1.6	8.0	120	34	14	0.19	0.04	25.93	0.67	0.49	1.7	1.7	0.09	В
	Oct-23	24.9°C	7.50	140	219	8.0	7.0	80	68	12	88	1.7	10.0	130	79	9.3	1.47	0.18	20.62	0.14	0.37	3.13	2.21	0.15	В
	Nov-23												Са	nnal was closed di	e to cleaning purp	ose before Diwali	Festival.								
	Dec-23	19.5°C	7.96	120	188	9.2	5.0	115	35	80	98	1.2	9.0	170	79	9.3	0.47	0.15	20.32	0.17	0.48	3.1	2.2	0.13	В
							•						Rive	er Ganga D/S at Bis	anpur Kundi Village	, Haridwar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
50	Jan-23	18.2°C	7.68	366	572	9.2	19.0	134	75	59	105	2.4	14.0	79	25	1.7	0.31	0.30	32.38	0.28	0.89	11.8	5.3	0.44	В
	Feb-23														23	17	0.51								Ь
	. 25 23	20.6 °C	8.40	356	556	9.4	20.0	124	72	52	98	2.0	16.0	110	70	17	0.32	0.30	28.6	0.44	0.76	10.5	4.5	0.40	В
$\Box$	Mar-23	20.6 °C 23.3°C	8.40 7.95	356 183	556 286	9.4 8.5	20.0	124 125	72 75	52 50	98 210	2.0	16.0 14.0	110 94	-					0.44 1.25	0.76 0.38	10.5 45.0		0.40 1.75	
													<del>                                     </del>		70	17	0.32	0.30	28.6			<b>—</b>	4.5		В
	Mar-23	23.3°C	7.95	183	286	8.5	12.0	125	75	50	210	2.4	14.0	94	70 48	17 32	0.32	0.30	28.6 35.89	1.25	0.38	45.0	4.5 19.0	1.75	В
	Mar-23 Apr-23	23.3°C 22.9°C	7.95 8.15	183	286 320.3	8.5 9.6	12.0 12.0	125 122	75 74	50	210 212	2.4	14.0	94 94	70 48 58	17 32 15	0.32 1.24 0.30	0.30 0.33 0.30	28.6 35.89 28.0	1.25 0.40	0.38	45.0 43.0	4.5 19.0 17.0	1.75 1.69	В в В
	Mar-23 Apr-23 May-23	23.3°C 22.9°C 26.4°C	7.95 8.15 8.19	183 205 200	286 320.3 313	8.5 9.6 8.8	12.0 12.0 8.0	125 122 131	75 74 79	50 48 52	210 212 190	2.4 2.1 2.0	14.0 6.8 9.0	94 94 79	70 48 58 32	17 32 15 14	0.32 1.24 0.30 0.44	0.30 0.33 0.30 0.24	28.6 35.89 28.0 38.21	1.25 0.40 0.48	0.38 0.76 0.66	45.0 43.0 8.0	4.5 19.0 17.0 5.8	1.75 1.69 0.30	B B B
	Mar-23 Apr-23 May-23 Jun-23	23.3°C 22.9°C 26.4°C 23.7°C	7.95 8.15 8.19 7.20	183 205 200 220	286 320.3 313 344	8.5 9.6 8.8 8.0	12.0 12.0 8.0 10.0	125 122 131 110	75 74 79 64	50 48 52 46	210 212 190 190	2.4 2.1 2.0 2.2	14.0 6.8 9.0 9.0	94 94 79 120	70 48 58 32 48	17 32 15 14 22	0.32 1.24 0.30 0.44 0.30	0.30 0.33 0.30 0.24 0.30	28.6 35.89 28.0 38.21 28.0	1.25 0.40 0.48 0.40	0.38 0.76 0.66 0.76	45.0 43.0 8.0 38.0	4.5 19.0 17.0 5.8 14.0	1.75 1.69 0.30 1.57	B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C	7.95 8.15 8.19 7.20 7.76	183 205 200 220 235	286 320.3 313 344 368	8.5 9.6 8.8 8.0 7.6	12.0 12.0 8.0 10.0 8.0	125 122 131 110 64	75 74 79 64 40	50 48 52 46 24	210 212 190 190 61	2.4 2.1 2.0 2.2 1.4	14.0 6.8 9.0 9.0 10.0	94 94 79 120	70 48 58 32 48 63	17 32 15 14 22 43	0.32 1.24 0.30 0.44 0.30 0.27	0.30 0.33 0.30 0.24 0.30	28.6 35.89 28.0 38.21 28.0 33.60	1.25 0.40 0.48 0.40 0.32	0.38 0.76 0.66 0.76 0.29	45.0 43.0 8.0 38.0 7.9	4.5 19.0 17.0 5.8 14.0 5.0	1.75 1.69 0.30 1.57 0.43	B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C 22°C	7.95 8.15 8.19 7.20 7.76 7.20	183 205 200 220 235 160	286 320.3 313 344 368 250	8.5 9.6 8.8 8.0 7.6 8.4	12.0 12.0 8.0 10.0 8.0	125 122 131 110 64 164	75 74 79 64 40 119	50 48 52 46 24 45	210 212 190 190 61 170	2.4 2.1 2.0 2.2 1.4 2.0	14.0 6.8 9.0 9.0 10.0 9.0	94 94 79 120 130 94	70 48 58 32 48 63 40	17 32 15 14 22 43 20	0.32 1.24 0.30 0.44 0.30 0.27 0.64	0.30 0.33 0.30 0.24 0.30 0.16	28.6 35.89 28.0 38.21 28.0 33.60 23.40	1.25 0.40 0.48 0.40 0.32 0.43	0.38 0.76 0.66 0.76 0.29 0.70	45.0 43.0 8.0 38.0 7.9 3.9	4.5 19.0 17.0 5.8 14.0 5.0	1.75 1.69 0.30 1.57 0.43 0.13	B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Aug-23 Sep-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C 22°C 26°C	7.95 8.15 8.19 7.20 7.76 7.20 7.58	183 205 200 220 235 160	286 320.3 313 344 368 250 313	8.5 9.6 8.8 8.0 7.6 8.4 8.4	12.0 12.0 8.0 10.0 8.0 11 8.0	125 122 131 110 64 164 83	75 74 79 64 40 119 50	50 48 52 46 24 45 33	210 212 190 190 61 170	2.4 2.1 2.0 2.2 1.4 2.0	14.0 6.8 9.0 9.0 10.0 9.0	94 94 79 120 130 94	70 48 58 32 48 63 40 46	17 32 15 14 22 43 20 22	0.32 1.24 0.30 0.44 0.30 0.27 0.64 0.20	0.30 0.33 0.30 0.24 0.30 0.16 0.06	28.6 35.89 28.0 38.21 28.0 33.60 23.40 30.48	1.25 0.40 0.48 0.40 0.32 0.43 0.81	0.38 0.76 0.66 0.76 0.29 0.70 0.79	45.0 43.0 8.0 38.0 7.9 3.9	4.5 19.0 17.0 5.8 14.0 5.0 2.2	1.75 1.69 0.30 1.57 0.43 0.13	B B B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C 22°C 26°C 25.1°C	7.95 8.15 8.19 7.20 7.76 7.20 7.58	183 205 200 220 235 160 200	286 320.3 313 344 368 250 313 295	8.5 9.6 8.8 8.0 7.6 8.4 8.4 7.8	12.0 12.0 8.0 10.0 8.0 11 8.0	125 122 131 110 64 164 83	75 74 79 64 40 119 50	50 48 52 46 24 45 33 40	210 212 190 190 61 170 118	2.4 2.1 2.0 2.2 1.4 2.0 1.2	14.0 6.8 9.0 9.0 10.0 9.0 8.0	94 94 79 120 130 94 140	70 48 58 32 48 63 40 46	17 32 15 14 22 43 20 22 14	0.32 1.24 0.30 0.44 0.30 0.27 0.64 0.20 1.38	0.30 0.33 0.30 0.24 0.30 0.16 0.06 0.16	28.6 35.89 28.0 38.21 28.0 33.60 23.40 30.48 29.11	1.25 0.40 0.48 0.40 0.32 0.43 0.81 0.42	0.38 0.76 0.66 0.76 0.29 0.70 0.79 0.86	45.0 43.0 8.0 38.0 7.9 3.9 1.3 4.15	4.5 19.0 17.0 5.8 14.0 5.0 2.2 1.8 3.99	1.75 1.69 0.30 1.57 0.43 0.13 0.06	B B B B B B B B B B B B
	Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C 22°C 26°C 25.1°C 23.6°C	7.95 8.15 8.19 7.20 7.76 7.20 7.58 7.20 7.67	183 205 200 220 235 160 200 192	286 320.3 313 344 368 250 313 295 279	8.5 9.6 8.8 8.0 7.6 8.4 8.4 7.8	12.0 12.0 8.0 10.0 8.0 11 8.0 10.0 8.0	125 122 131 110 64 164 83 106	75 74 79 64 40 119 50 66 58	50 48 52 46 24 45 33 40 34	210 212 190 190 61 170 118 110	2.4 2.1 2.0 2.2 1.4 2.0 1.2 1.5	14.0 6.8 9.0 9.0 10.0 9.0 8.0 10.0 9.0	94 94 79 120 130 94 140 94 110	70 48 58 32 48 63 40 46 63 79	17 32 15 14 22 43 20 22 14 12	0.32 1.24 0.30 0.44 0.30 0.27 0.64 0.20 1.38 0.32	0.30 0.33 0.30 0.24 0.30 0.16 0.06 0.16 0.13	28.6 35.89 28.0 38.21 28.0 33.60 23.40 30.48 29.11	1.25 0.40 0.48 0.40 0.32 0.43 0.81 0.42 0.48	0.38 0.76 0.66 0.76 0.29 0.70 0.79 0.86 0.66	45.0 43.0 8.0 38.0 7.9 3.9 1.3 4.15	4.5 19.0 17.0 5.8 14.0 5.0 2.2 1.8 3.99 5.9	1.75 1.69 0.30 1.57 0.43 0.13 0.06 0.17 0.39	B B B B B B B B B B B B B
S.No.	Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	23.3°C 22.9°C 26.4°C 23.7°C 24.9°C 22°C 26°C 25.1°C 23.6°C	7.95 8.15 8.19 7.20 7.76 7.20 7.58 7.20 7.67	183 205 200 220 235 160 200 192	286 320.3 313 344 368 250 313 295 279	8.5 9.6 8.8 8.0 7.6 8.4 8.4 7.8	12.0 12.0 8.0 10.0 8.0 11 8.0 10.0 8.0	125 122 131 110 64 164 83 106	75 74 79 64 40 119 50 66 58	50 48 52 46 24 45 33 40 34	210 212 190 190 61 170 118 110	2.4 2.1 2.0 2.2 1.4 2.0 1.2 1.5	14.0 6.8 9.0 9.0 10.0 9.0 8.0 10.0 9.0 9.0	94 94 79 120 130 94 140 94 110 140 ver Ganga Canal a	70 48 58 32 48 63 40 46 63 79	17 32 15 14 22 43 20 22 14 12	0.32 1.24 0.30 0.44 0.30 0.27 0.64 0.20 1.38 0.32	0.30 0.33 0.30 0.24 0.30 0.16 0.06 0.16 0.13	28.6 35.89 28.0 38.21 28.0 33.60 23.40 30.48 29.11	1.25 0.40 0.48 0.40 0.32 0.43 0.81 0.42 0.48	0.38 0.76 0.66 0.76 0.29 0.70 0.79 0.86 0.66	45.0 43.0 8.0 38.0 7.9 3.9 1.3 4.15	4.5 19.0 17.0 5.8 14.0 5.0 2.2 1.8 3.99 5.9	1.75 1.69 0.30 1.57 0.43 0.13 0.06 0.17 0.39	B B B B B B B B B B B B B

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	Feb-23	17.7 °C	8.32	140	219	10.2	10.0	81	26	55	60	1.5	7.0	70	38	21	0.20	0.01	20.6	0.16	0.42	3.2	2.3	0.15	В
	Mar-23	20.4°C	7.95	115.5	180.5	9.08	7.0	29	15	14	90	2.3	9.0	63	47	33	0.03	0.09	27.30	0.20	0.82	5.8	2.9	0.47	В
	Apr-23	21.8°C	7.90	110	171.9	9.0	7.8	30	12	18	86	2.0	6.4	63	38	17	0.20	0.01	20.0	0.14	0.40	5.50	3.5	0.43	В
	May-23	22.1°C	8.02	183	286	8.6	6.0	143	79	64	169	1.8	8.0	79	24	9.1	0.20	0.08	26.46	0.40	0.44	8.0	2.1	0.29	В
	Jun-23	23.9°C	7.70	150	235	8.1	8.0	34	14	20	78	2.0	8.0	110	32	11	0.44	0.08	21.64	0.25	0.30	4.3	2.3	0.32	В
	Jul-23	24.7°C	8.20	214	335	7.8	9.0	72	40	32	63	1.8	10.0	140	79	48	0.24	0.15	36.30	0.38	0.31	7.9	5.1	0.40	В
	Aug-23									_	_				Canal was clo	sed									
	Sep-23	24°C	7.81	190	298	8.4	6.0	76	42	34	89	1.6	8.0	110	27	17	0.17	0.06	24.67	0.64	0.44	0.9	1.9	0.04	В
	Oct-23	25°C	7.60	220	344	7.8	8.0	70	55	15	90	1.6	9.0	140	79	17	1.44	0.15	20.66	0.27	0.30	3.17	2.91	0.16	В
	Nov-23							1		I	l	I		1	ı	g purpose before D	1			I I		T			
	Dec-23	19.5°C	7.80	190	297	9.1	9.0	110	45	65	86	1.4	11.0	140	94	9.2	0.50	0.13	19.56	0.31	0.45	3.2	3.1	0.13	В
			Ι		ı		Ι	<u> </u>		ı	ı	ı	ı	River Ganga Can	al at Damkothi, Hai	1	T T	ı		<u> </u>			ı		Designated Best use
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria
52	Jan-23	15.6°C	8.17	245	384	10.2	11.0	86	41	45	60	1.8	8.0	79	32	9.3	0.26	0.00	23.94	0.22	0.32	2.5	1.9	0.12	В
	Feb-23	18.1°C	8.24	220	344	10.2	10.0	80	28	52	65	1.5	6.4	70	32	14	0.29	0.02	22.0	0.17	0.44	3.2	2.6	0.15	В
	Mar-23	22.5°C	8.1	120.25	187.9	9	6.0	50	20	30	80	1	8.0	150	48	26	0.80	0.25	27.52	1.00	0.20	13.2	5.0	0.81	В
	Apr-23	21.0°C	8.00	125	195.3	9.4	8.0	46	18	28	79	1.2	6.5	70	27	13	0.25	0.02	21.0	0.16	0.42	13.5	4.6	0.86	В
	May-23	23.2°C	7.92	186	291	8.4	5.0	118	60	58	98	1.8	8.0	70	34	14	0.18	0.04	23.67	0.34	0.41	8.9	2.4	0.36	В
	Jun-23	23.2°C	7.30	166	259	8.0	8.0	42	18	24	79	1.8	7.8	84	38	21	0.36	0.10	22.4	0.13	0.40	13.2	4.7	0.88	В
	Jul-23	24.0°C	8.16	245	384	7.7	9.0	58	30	28	70	1.8	10.0	150	63	46	0.26	0.12	35.90	0.35	0.31	7.2	5.7	0.41	В
	Aug-23											<u> </u>			Canal was clo	sed	•	•							-
	Sep-23	24°C	7.79	193	302	8.1	6.0	80	49	31	102	1.4	7.0	120	33	13	0.19	0.06	24.08	0.60	0.48	1.3	1.7	0.06	В
	Oct-23	24.8°C	7.20	230	359	7.6	9.0	85	66	19	94	1.5	8.0	110	70	14	1.94	0.15	22.70	0.15	0.40	3.39	5.84	0.16	В
	Nov-23							!		<u> </u>	<u> </u>	<u> </u>	C	anal was closed d	ue to cleaning pur	pose before Diwali	Festival.					<u> </u>			
	Dec-23	21°C	7.91	200	313	9.2	10.0	102	49	53	96	1.2	9.0	94	70	6.8	0.66	0.21	21.72	0.15	0.41	3.3	5.7	0.14	В
	<u> </u>							<u> </u>		<u> </u>	<u> </u>	<u> </u>	Rive	I er Ganga U/S at Bir	l ndughat Dudhiyaba	n, Haridwar				<u> </u>		<u> </u>			
								ı				ı			Ι	l						Г			Designated Best use
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria
53	Jan-23	16.8°C	8.16	276	421	9.8	13.0	87	31	56	64	2.0	8.0	84	32	11	0.31	0.00	28.39	0.16	0.56	2.5	1.8	0.12	В
	Feb-23	18.2 °C	8.29	242	378	9.8	11.0	74	30	44	78	1.6	7.4	84	43	11	0.26	0.02	24.0	0.15	0.44	3.4	2.7	0.17	В
	Mar-23	21.7°C	7.56	140	219	8.76	8.0	33	18	15	224	1.2	6.0	84	34	6.0	0.78	0.04	18.60	0.19	0.39	5.6	2.8	0.42	В
	Apr-23	22.0°C	7.80	160	250.0	9.4	9.6	44	20	24	220	1.4	6.8	110	33	13	0.23	0.02	22.0	0.15	0.38	4.80	2.5	0.31	В
	May-23	23.7°C	7.88	192	300	8.8	8.0	122	52	70	82	1.8	7.0	79	32	10	0.12	0.04	28.21	0.40	0.22	9.0	2.1	0.35	В
	Jun-23	22.4°C	7.40	143	224	8.4	10.0	58	26	32	60	1.4	6.2	94	39	17	0.36	0.06	23.22	0.18	0.23	3.4	2.2	0.19	В
	Jul-23	25.3°C	8.14	201	315	7.9	5.0	68	38	30	57	2.2	12.0	140	70	46	0.25	0.11	40.20	0.56	0.43	7.8	5.3	0.41	В
	Aug-23	22°C	7.80	170	266	7.6	10.0	141	109	32	154	2.6	12.0	140	58	25	0.39	0.05	22.60	0.64	0.58	4.2	4.0	0.15	В
	7.005 23	22 0	7.00	1,0	200	7.0	10.0		107		151	2.0	12.0	1.0		23	0.57	0.05	22.00	0.01	0.50		1.0	0.15	

Part	В	0.06	1.6	1.3	0.55	0.78	28.06	0.09	0.22	22	31	170	10.0	1.8	94	36	42	78	8.0	8.6	320	204	7.31	Sep-23 25	
No. 10   N		0.14	7.16	3.08	0.25	0.17	22.19	0.16	1.34	20	70	110	9.0	1.6	98	18	72	90	8.0	8.2	288	190	7.32	Oct-23 24.	
Section   Sect	В	0.47	6.2	10.0	0.55	0.47	30.64	0.26	0.47	17	79	140	8.0	1.4	94	25	59	84	7.0	8.1	278	177	7.46	Nov-23 23.	
No.	В	0.12	6.1	3.1	0.22	0.16	21.65	0.15	0.45	14	94	170	10.0	1.6	90	80	45	125	5.0	8.9	340	217	8.00	Dec-23 19	
No.   Part   P								•	_	pur, Haridwar	ımari Mandir, Ajeet	Ganga D/S at Balkı	River 0		<u> </u>	•		•		<u> </u>			_	<u> </u>	
	Designated Best use (DBU) Water Quality Criteria	SAR	Potassium (mg/l)	Sodium (mg/l)	Fluoride (mg/l)	Phosphate (mg/l)		Nitrite-N (mg/l)	Nitrate-N (mg/l)		FC (MPN/100 ml)	TC (MPN/100 ml)	COD (mg/l)	BOD (mg/l)				Hardness (mg/l)		DO (mg/l)	EC (μS/cm )	TDS (mg/l)	рН	nth Te	S.No.
March   Marc	В	0.39	4.8	10.5	0.88	0.28	30.29	0.33	0.39	20	38	84	16.0	2.4	112	60	75	135	21.0	9.3	648	414	7.76	Jan-23 17.	54
Agr-23   23 or   8,10   190   296,9   9,8   11.0   80   32   48   215   23   7.2   110   63   21   0.34   0.20   25.0   0.34   0.78   34.3   10.2   1.66	В	0.36	4.4	9.5	0.80	0.35	28.0	0.30	0.35	21	70	120	15.0	2.2	102	60	70	130	22.0	9.6	466	298	8.45	Feb-23 20.9	
May-22   25.7°   8.23   210   328   9.0   8.0   145   80   655   198   1.8   7.0   94   41   20   0.38   0.17   33.94   0.68   0.59   9.0   4.7   0.32	В	1.56	11.5	32.7	0.76	0.86	32.02	0.06	0.34	24	58	79	12.0	2.4	220	50	33	83	12.0	8.4	326	208.64	7.98	Mar-23 23.9	
Min-23   24°C   7.30   202   315   8.2   11.0   88   40   48   170   2.4   10.0   110   47   2.5   0.32   0.10   2.6.63   0.53   0.43   31.8   9.8   14.7	В	1.66	10.2	34.3	0.78	0.34	25.0	0.20	0.34	21	63	110	7.2	2.3	215	48	32	80	11.0	9.8	296.9	190	8.10	Apr-23 23.0	
Nul-23   26.5°C   8.24   302   473   7.1   10.0   66   36   30   77   1.6   12.0   170   79   63   0.32   0.12   40.20   0.49   0.27   9.6   7.7   0.51	В	0.32	4.7	9.0	0.59	0.68	35.94	0.17	0.38	20	41	94	7.0	1.8	198	65	80	145	8.0	9.0	328	210	8.23	May-23 25.3	
Aug-22   22°C   7.50   170   266   7.6   12.0   158   124   34   172   2.6   10.0   110   47   17   0.46   0.10   23.80   0.34   0.60   6.6   2.9   0.22	В	1.47	9.8	31.8	0.43	0.53	26.63	0.10	0.32	25	47	110	10.0	2.4	170	48	40	88	11.0	8.2	315	202	7.30	Jun-23 24	
Sep-23   26°C   7.62   212   332   8.2   10.0   84   52   32   122   1.4   10.0   130   41   25   0.24   0.12   29.94   0.84   0.85   4.9   2.5   0.23	В	0.51	7.7	9.6	0.27	0.49	40.20	0.12	0.32	63	79	170	12.0	1.6	77	30	36	66	10.0	7.1	473	302	8.24	Jul-23 26.3	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	В	0.22	2.9	6.6	0.60	0.34	23.80	0.10	0.46	17	47	110	10.0	2.6	172	34	124	158	12.0	7.6	266	170	7.50	Aug-23 22	
Nov23   24.7°C   7.51   179   281   7.9   9.0   88   51   37   97   1.6   10.0   140   79   14   0.39   0.14   32.56   0.59   0.49   9.1   6.1   0.42	В	0.23	2.5	4.9	0.85	0.84	29.94	0.12	0.24	25	41	130	10.0	1.4	122	32	52	84	10.0	8.2	332	212	7.62	Sep-23 26	
Dec/3   19.5°   7.91   180   281   9.4   10.0   125   30   95   85   1.4   10.0   110   70   11   0.64   0.22   24.66   0.51   0.42   6.3   4.8   0.24	В	0.25	4.79	5.65	0.43	0.54	25.36	0.17	1.32	21	70	110	11.0	1.7	104	36	62	98	12.0	7.6	313	200	7.20	Oct-23 25.5	
SAR.   Month   Temp   pH   TDS (mg/l)   EC (uS/cm)   DO (mg/l)   Fluoride (mg/l)   Hurdress (mg/l)   Hurdress (mg/l)   Magnetium (mg/l)   Magnet	В	0.42	6.1	9.1	0.49	0.59	32.56	0.14	0.39	14	79	140	10.0	1.6	97	37	51	88	9.0	7.9	281	179	7.51	Nov-23 24.	Ш
S.No. Month Temp pH TOS (mth) EC (µS/cm) pH TOS (mth) DO (mth) Chiloride (mth) Marginesium (mth) (mth) Marginesium (mth) (mth) Marginesium	В	0.24	4.8	6.3	0.42	0.51	24.66	0.22	0.64	11	70	110	10.0	1.4	85	95	30	125	10.0	9.4	281	180	7.91	Dec-23 19.5	
Second   Fine									_	war District	S at Roorkee, Harid	er Ganga Canal D/	Upp		_		_						_		
Feb-23 17.7°C 8.30 270 422 9.5 14.0 82 40 42 62 2.0 10.0 120 43 21 0.46 0.04 30.0 0.36 0.70 4.0 2.9 0.19  Mar-23 19.2°C 8.14 141.4 221 8.9 14.0 296 144 152 245 2.4 12.0 94 21 10 0.87 0.22 31.24 0.23 0.29 34.2 8.4 0.86  Apr-23 23.0°C 8.20 140 218.8 9.0 12.0 288 138 150 240 2.2 7.8 120 41 22 0.41 0.02 30.4 0.32 0.75 35.0 8.2 0.89  May-23 24.6°C 7.69 245 383 8.8 8.0 142 64 78 171 2.2 8.0 94 47 26 0.49 0.32 38.92 0.46 0.52 5.9 2.8 0.21  Jun-23 23°C 8.20 186 290 7.8 10.0 254 118 136 214 2.0 8.2 110 63 33 0.64 0.21 30.87 0.34 0.42 34.4 8.6 0.94  Jul-23 25.7°C 8.12 239 374 7.8 8.0 80 45 35 55 2.2 16.0 170 79 63 0.29 0.16 36.50 0.34 0.36 5.2 3.4 0.25  Aug-23 23°C 7.52 180 281 7.4 12.0 127 93 34 142 2.4 10.0 170 63 26 0.63 0.05 21.40 0.36 0.70 5.6 4.8 0.21  Sep-23 24°C 7.42 208 325 8.1 10.0 69 35 34 82 1.8 12.0 170 47 24 0.29 0.10 30.56 0.87 0.65 0.7 1.9 0.04	Designated Best use (DBU) Water Quality Criteria	SAR	Potassium (mg/l)	Sodium (mg/l)	Fluoride (mg/l)	Phosphate (mg/l)		Allania - Al ( (1)	NIA		FC (MPN/100 ml)	TC (MPN/100 ml)	COD (mg/l)	BOD (mg/l)				Hardness (mg/l)		DO (mg/l)	EC (μS/cm )	TDS (mg/l)	рН	nth Te	S.No.
Mar-23 19.2°C 8.14 141.4 221 8.9 14.0 296 144 152 245 2.4 12.0 94 21 10 0.87 0.22 31.24 0.23 0.29 34.2 8.4 0.86  Apr-23 23.0°C 8.20 140 218.8 9.0 12.0 288 138 150 240 2.2 7.8 120 41 22 0.41 0.02 30.4 0.32 0.75 35.0 8.2 0.89  May-23 24.6°C 7.69 245 383 8.8 8.0 142 64 78 171 2.2 8.0 94 47 26 0.49 0.32 38.92 0.46 0.52 5.9 2.8 0.21  Jun-23 23°C 8.20 186 290 7.8 10.0 254 118 136 214 2.0 8.2 110 63 33 0.64 0.21 30.87 0.34 0.42 34.4 8.6 0.94  Jul-23 25.7°C 8.12 239 374 7.8 8.0 80 45 35 55 2.2 16.0 170 79 63 0.29 0.16 36.50 0.34 0.36 5.2 3.4 0.25  Aug-23 23°C 7.52 180 281 7.4 12.0 127 93 34 142 2.4 10.0 170 63 26 0.63 0.05 21.40 0.36 0.70 5.6 4.8 0.21  Sep-23 24°C 7.42 208 325 8.1 10.0 69 35 34 82 1.8 12.0 170 47 24 0.29 0.10 30.56 0.87 0.65 0.7 1.9 0.04	В	0.14	2.1	3.1	0.78	0.22		Nitrite-N (mg/l)	Nitrate-N (mg/i)	(MPN/100 ml)								0.0	12.0				_		
Apr-23 23.0°C 8.20 140 218.8 9.0 12.0 288 138 150 240 2.2 7.8 120 41 22 0.41 0.02 30.4 0.32 0.75 35.0 8.2 0.89  May-23 24.6°C 7.69 245 383 8.8 8.0 142 64 78 171 2.2 8.0 94 47 26 0.49 0.32 38.92 0.46 0.52 5.9 2.8 0.21  Jun-23 23°C 8.20 186 290 7.8 10.0 254 118 136 214 2.0 8.2 110 63 33 0.64 0.21 30.87 0.34 0.42 34.4 8.6 0.94  Jul-23 25.7°C 8.12 239 374 7.8 8.0 80 45 35 55 2.2 16.0 170 79 63 0.29 0.16 36.50 0.34 0.36 5.2 3.4 0.25  Aug-23 23°C 7.52 180 281 7.4 12.0 127 93 34 142 2.4 10.0 170 63 26 0.63 0.05 21.40 0.36 0.70 5.6 4.8 0.21  Sep-23 24°C 7.42 208 325 8.1 10.0 69 35 34 82 1.8 12.0 170 47 24 0.29 0.10 30.56 0.87 0.65 0.7 1.9 0.04		0.19			0.76	0.32	29.08				31	94	12.0	2.2	61	50	38	88	13.0	9.7	435	278	7.72	Jan-23 14.	55
May-23 24.6°C 7.69 245 383 8.8 8.0 142 64 78 171 2.2 8.0 94 47 26 0.49 0.32 38.92 0.46 0.52 5.9 2.8 0.21  Jun-23 23°C 8.20 186 290 7.8 10.0 254 118 136 214 2.0 8.2 110 63 33 0.64 0.21 30.87 0.34 0.42 34.4 8.6 0.94  Jul-23 25.7°C 8.12 239 374 7.8 8.0 80 45 35 55 2.2 16.0 170 79 63 0.29 0.16 36.50 0.34 0.36 5.2 3.4 0.25  Aug-23 23°C 7.52 180 281 7.4 12.0 127 93 34 142 2.4 10.0 170 63 26 0.63 0.05 21.40 0.36 0.70 5.6 4.8 0.21  Sep-23 24°C 7.42 208 325 8.1 10.0 69 35 34 82 1.8 12.0 170 47 24 0.29 0.10 30.56 0.87 0.65 0.7 1.9 0.04	В	****						0.01	0.84	12								<b>.</b>	<del>                                     </del>				+		55
Jun-23       23°C       8.20       186       290       7.8       10.0       254       118       136       214       2.0       8.2       110       63       33       0.64       0.21       30.87       0.34       0.42       34.4       8.6       0.94         Jul-23       25.7°C       8.12       239       374       7.8       8.0       80       45       35       55       2.2       16.0       170       79       63       0.29       0.16       36.50       0.34       0.36       5.2       3.4       0.25         Aug-23       23°C       7.52       180       281       7.4       12.0       127       93       34       142       2.4       10.0       170       63       26       0.63       0.05       21.40       0.36       0.70       5.6       4.8       0.21         Sep-23       24°C       7.42       208       325       8.1       10.0       69       35       34       82       1.8       12.0       170       47       24       0.29       0.10       30.56       0.87       0.65       0.7       1.9       0.04	В		2.9	4.0	0.70	0.36	30.0	0.01	0.84	12 21	43	120	10.0	2.0	62	42	40	82	14.0	9.5	422	270	8.30	Feb-23 17.	55
Jul-23     25.7°C     8.12     239     374     7.8     8.0     80     45     35     55     2.2     16.0     170     79     63     0.29     0.16     36.50     0.34     0.36     5.2     3.4     0.25       Aug-23     23°C     7.52     180     281     7.4     12.0     127     93     34     142     2.4     10.0     170     63     26     0.63     0.05     21.40     0.36     0.70     5.6     4.8     0.21       Sep-23     24°C     7.42     208     325     8.1     10.0     69     35     34     82     1.8     12.0     170     47     24     0.29     0.10     30.56     0.87     0.65     0.7     1.9     0.04		0.86	2.9	4.0	0.70 0.29	0.36 0.23	30.0 31.24	0.01 0.04 0.22	0.84 0.46 0.87	12 21 10	43 21	120 94	10.0	2.0	62 245	42 152	40 144	82 296	14.0 14.0	9.5 8.9	422 221	270 141.4	8.30	Feb-23 17.7 Mar-23 19.2	55
Aug-23       23°C       7.52       180       281       7.4       12.0       127       93       34       142       2.4       10.0       170       63       26       0.63       0.05       21.40       0.36       0.70       5.6       4.8       0.21         Sep-23       24°C       7.42       208       325       8.1       10.0       69       35       34       82       1.8       12.0       170       47       24       0.29       0.10       30.56       0.87       0.65       0.7       1.9       0.04	В	0.86	2.9 8.4 8.2	4.0 34.2 35.0	0.70 0.29 0.75	0.36 0.23 0.32	30.0 31.24 30.4	0.01 0.04 0.22 0.02	0.84 0.46 0.87 0.41	12 21 10 22	43 21 41	120 94 120	10.0 12.0 7.8	2.0 2.4 2.2	62 245 240	42 152 150	40 144 138	82 296 288	14.0 14.0 12.0	9.5 8.9 9.0	422 221 218.8	270 141.4 140	8.30 8.14 8.20	Feb-23 17.7 Mar-23 19.2 Apr-23 23.0	55
Sep-23 24°C 7.42 208 325 8.1 10.0 69 35 34 82 1.8 12.0 170 47 24 0.29 0.10 30.56 0.87 0.65 0.7 1.9 0.04	ВВ	0.86 0.89 0.21	2.9 8.4 8.2 2.8	4.0 34.2 35.0 5.9	0.70 0.29 0.75 0.52	0.36 0.23 0.32 0.46	30.0 31.24 30.4 38.92	0.01 0.04 0.22 0.02 0.32	0.84 0.46 0.87 0.41 0.49	12 21 10 22 26	43 21 41 47	120 94 120 94	10.0 12.0 7.8 8.0	2.0 2.4 2.2 2.2	62 245 240 171	42 152 150 78	40 144 138 64	82 296 288 142	14.0 14.0 12.0 8.0	9.5 8.9 9.0 8.8	422 221 218.8 383	270 141.4 140 245	8.30 8.14 8.20 7.69	Feb-23 17.7 Mar-23 19.2 Apr-23 23.0 May-23 24.0	55
	B B B B	0.86 0.89 0.21 0.94 0.25	2.9 8.4 8.2 2.8 8.6 3.4	4.0 34.2 35.0 5.9 34.4 5.2	0.70 0.29 0.75 0.52 0.42 0.36	0.36 0.23 0.32 0.46 0.34 0.34	30.0 31.24 30.4 38.92 30.87 36.50	0.01 0.04 0.22 0.02 0.32 0.21 0.16	0.84 0.46 0.87 0.41 0.49 0.64 0.29	12 21 10 22 26 33 63	43 21 41 47 63 79	120 94 120 94 110 170	10.0 12.0 7.8 8.0 8.2 16.0	2.0 2.4 2.2 2.2 2.0 2.2	62 245 240 171 214 55	42 152 150 78 136 35	40 144 138 64 118 45	82 296 288 142 254 80	14.0 14.0 12.0 8.0 10.0 8.0	9.5 8.9 9.0 8.8 7.8 7.8	422 221 218.8 383 290 374	270 141.4 140 245 186 239	8.30 8.14 8.20 7.69 8.20 8.12	Feb-23 17.  Mar-23 19.  Apr-23 23.  May-23 24.  Jun-23 23.  Jul-23 25.	55
I I UCC-231 25°C I 8.10 I 228 I 345 I 7.6 I 12.0 I 120 I 82 I 38 I 130 I 1.9 I 12.0 I 120 I 94 I 17 I 1.64 I 0.21 I 31.86 I 0.35 I 0.45 I 27.09 I 11.90 I 1.90 I 1.97 .	B B B B	0.86 0.89 0.21 0.94 0.25 0.21	2.9 8.4 8.2 2.8 8.6 3.4 4.8	4.0 34.2 35.0 5.9 34.4 5.2 5.6	0.70 0.29 0.75 0.52 0.42 0.36 0.70	0.36 0.23 0.32 0.46 0.34 0.34 0.36	30.0 31.24 30.4 38.92 30.87 36.50 21.40	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63	12 21 10 22 26 33 63 26	43 21 41 47 63 79 63	120 94 120 94 110 170	10.0 12.0 7.8 8.0 8.2 16.0	2.0 2.4 2.2 2.2 2.0 2.2 2.4	62 245 240 171 214 55 142	42 152 150 78 136 35 34	40 144 138 64 118 45 93	82 296 288 142 254 80 127	14.0 14.0 12.0 8.0 10.0 8.0 12.0	9.5 8.9 9.0 8.8 7.8 7.8	422 221 218.8 383 290 374 281	270 141.4 140 245 186 239 180	8.30 8.14 8.20 7.69 8.20 8.12 7.52	Feb-23 17.  Mar-23 19.  Apr-23 23.  May-23 24.  Jun-23 23  Jul-23 25.  Aug-23 23	55
	B B B B B B	0.86 0.89 0.21 0.94 0.25 0.21 0.04	2.9 8.4 8.2 2.8 8.6 3.4 4.8	4.0 34.2 35.0 5.9 34.4 5.2 5.6 0.7	0.70 0.29 0.75 0.52 0.42 0.36 0.70 0.65	0.36 0.23 0.32 0.46 0.34 0.34 0.36 0.87	30.0 31.24 30.4 38.92 30.87 36.50 21.40 30.56	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05 0.10	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63 0.29	12 21 10 22 26 33 63 26 24	43 21 41 47 63 79 63 47	120 94 120 94 110 170 170	10.0 12.0 7.8 8.0 8.2 16.0 10.0	2.0 2.4 2.2 2.2 2.0 2.2 2.4 1.8	62 245 240 171 214 55 142 82	42 152 150 78 136 35 34 34	40 144 138 64 118 45 93 35	82 296 288 142 254 80 127	14.0 14.0 12.0 8.0 10.0 8.0 12.0	9.5 8.9 9.0 8.8 7.8 7.4 8.1	422 221 218.8 383 290 374 281 325	270 141.4 140 245 186 239 180 208	8.30 8.14 8.20 7.69 8.20 8.12 7.52 7.42	Feb-23 17.  Mar-23 19.2  Apr-23 23.0  May-23 24.0  Jul-23 25.  Aug-23 23  Sep-23 24	55
	B B B B	0.86 0.89 0.21 0.94 0.25 0.21	2.9 8.4 8.2 2.8 8.6 3.4 4.8	4.0 34.2 35.0 5.9 34.4 5.2 5.6	0.70 0.29 0.75 0.52 0.42 0.36 0.70	0.36 0.23 0.32 0.46 0.34 0.34 0.36	30.0 31.24 30.4 38.92 30.87 36.50 21.40	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63 0.29 1.64	12 21 10 22 26 33 63 26 24	43 21 41 47 63 79 63 47 94	120 94 120 94 110 170 170 120	10.0 12.0 7.8 8.0 8.2 16.0 10.0 12.0	2.0 2.4 2.2 2.2 2.0 2.2 2.4	62 245 240 171 214 55 142	42 152 150 78 136 35 34	40 144 138 64 118 45 93	82 296 288 142 254 80 127	14.0 14.0 12.0 8.0 10.0 8.0 12.0	9.5 8.9 9.0 8.8 7.8 7.8	422 221 218.8 383 290 374 281	270 141.4 140 245 186 239 180	8.30 8.14 8.20 7.69 8.20 8.12 7.52 7.42	Feb-23 17.  Mar-23 19.  Apr-23 23.  May-23 24.  Jun-23 25.  Aug-23 23  Sep-23 24  Oct-23 25	55
River Banganga D/S at Laksar before entering U.P	B B B B B B B B	0.86 0.89 0.21 0.94 0.25 0.21 0.04 1.07	2.9 8.4 8.2 2.8 8.6 3.4 4.8 1.9	4.0 34.2 35.0 5.9 34.4 5.2 5.6 0.7 27.09	0.70 0.29 0.75 0.52 0.42 0.36 0.70 0.65 0.45	0.36 0.23 0.32 0.46 0.34 0.34 0.36 0.87 0.35	30.0 31.24 30.4 38.92 30.87 36.50 21.40 30.56 31.86	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05 0.10 0.21	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63 0.29 1.64 Festival.	12 21 10 22 26 33 63 26 24 17	43 21 41 47 63 79 63 47 94	120 94 120 94 110 170 170 170 120 anal was closed d	10.0 12.0 7.8 8.0 8.2 16.0 10.0 12.0 Ca	2.0 2.4 2.2 2.2 2.0 2.2 2.4 1.8	62 245 240 171 214 55 142 82 130	42 152 150 78 136 35 34 34 38	40 144 138 64 118 45 93 35 82	82 296 288 142 254 80 127 69 120	14.0 14.0 12.0 8.0 10.0 8.0 12.0 10.0 12.0	9.5 8.9 9.0 8.8 7.8 7.4 8.1 7.6	422 221 218.8 383 290 374 281 325 345	270 141.4 140 245 186 239 180 208 228	8.30 8.14 8.20 7.69 8.20 8.12 7.52 7.42 8.10	Feb-23 17.  Mar-23 19  Apr-23 23.  May-23 24.  Jun-23 25.  Aug-23 23  Sep-23 24  Oct-23 25  Nov-23	55
S.No. Month Temp pH TDS (mg/l) EC (µS/cm) DO (mg/l)	B B B B B B	0.86 0.89 0.21 0.94 0.25 0.21 0.04	2.9 8.4 8.2 2.8 8.6 3.4 4.8	4.0 34.2 35.0 5.9 34.4 5.2 5.6 0.7	0.70 0.29 0.75 0.52 0.42 0.36 0.70 0.65	0.36 0.23 0.32 0.46 0.34 0.34 0.36 0.87	30.0 31.24 30.4 38.92 30.87 36.50 21.40 30.56	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05 0.10	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63 0.29 1.64	12 21 10 22 26 33 63 26 24 17 cose before Diwali	43 21 41 47 63 79 63 47 94 see to cleaning purp 94	120 94 120 94 110 170 170 170 120 unal was closed d	10.0 12.0 7.8 8.0 8.2 16.0 10.0 12.0 Ca	2.0 2.4 2.2 2.2 2.0 2.2 2.4 1.8	62 245 240 171 214 55 142 82	42 152 150 78 136 35 34 34	40 144 138 64 118 45 93 35	82 296 288 142 254 80 127	14.0 14.0 12.0 8.0 10.0 8.0 12.0	9.5 8.9 9.0 8.8 7.8 7.4 8.1	422 221 218.8 383 290 374 281 325	270 141.4 140 245 186 239 180 208	8.30 8.14 8.20 7.69 8.20 8.12 7.52 7.42 8.10	Feb-23 17.  Mar-23 19  Apr-23 23.  May-23 24.  Jun-23 25.  Aug-23 23  Sep-23 24  Oct-23 25  Nov-23	55
56 Jan-23 16.2°C 7.75 594 772 5.0 29.0 100 70 30 221 2.8 16.0 110 48 24 0.68 0.02 35.40 0.31 0.84 25.8 8.7 1.12	B B B B B B B B	0.86 0.89 0.21 0.94 0.25 0.21 0.04 1.07	2.9 8.4 8.2 2.8 8.6 3.4 4.8 1.9 11.90	4.0 34.2 35.0 5.9 34.4 5.2 5.6 0.7 27.09	0.70 0.29 0.75 0.52 0.42 0.36 0.70 0.65 0.45	0.36 0.23 0.32 0.46 0.34 0.34 0.36 0.87 0.35	30.0 31.24 30.4 38.92 30.87 36.50 21.40 30.56 31.86	0.01 0.04 0.22 0.02 0.32 0.21 0.16 0.05 0.10 0.21	0.84 0.46 0.87 0.41 0.49 0.64 0.29 0.63 0.29 1.64 Festival.	12 21 10 22 26 33 63 26 24 17 cose before Diwali 11 tering U.P	43 21 41 47 63 79 63 47 94 ue to cleaning purp 94 at Laksar before en	120 94 120 94 110 170 170 170 120 unal was closed d 140 ver Banganga D/S	10.0 12.0 7.8 8.0 8.2 16.0 10.0 12.0 12.0 Ca	2.0 2.4 2.2 2.2 2.0 2.2 2.4 1.8 1.9	62 245 240 171 214 55 142 82 130	42 152 150 78 136 35 34 34 38	40 144 138 64 118 45 93 35 82	82 296 288 142 254 80 127 69 120	14.0 14.0 12.0 8.0 10.0 8.0 12.0 10.0 10.0 10.0	9.5 8.9 9.0 8.8 7.8 7.4 8.1 7.6	422 221 218.8 383 290 374 281 325 345	270 141.4 140 245 186 239 180 208 228	8.30 8.14 8.20 7.69 8.20 7.52 7.42 8.10	Feb-23 17.  Mar-23 19  Apr-23 23.  May-23 24.  Jun-23 25.  Aug-23 23  Sep-23 24  Oct-23 25  Nov-23  Dec-23 19	

	Feb-23	24.2 °C	7.91	580	906	5.2	25.0	112	64	48	215	2.4	16.8	120	63	20	0.54	0.02	34.6	0.30	0.40	20.9	8.2	0.85	В
	Mar-23	25.8°C	8.04	144	225	5.9	11.0	68	40	28	250	1.8	10.0	130	63	24	0.26	0.44	21.50	0.22	0.45	13.5	4.5	0.71	В
	Apr-23	20.0°C	8.19	150	234.4	7.8	16.0	66	48	18	246	1.8	8.8	120	70	25	0.52	0.04	33.8	0.30	0.45	12.4	4.3	0.66	В
	May-23	24.9°C	7.62	268	419	5.0	14.0	158	85	73	118	2.6	10.0	110	58	32	0.56	0.44	40.86	0.88	0.79	11.0	4.0	0.38	В
	Jun-23	23.2°C	7.80	170	266	5.2	16.0	62	46	16	80	1.8	7.6	120	48	22	0.87	0.22	31.28	0.23	0.66	12.8	4.8	0.71	В
	Jul-23	26.5°C	7.98	418	654	5.1	12.0	98	50	48	148	2.6	14.0	140	79	63	0.49	0.27	48.70	0.78	0.45	26.1	13.5	1.15	В
	Aug-23	23°C	7.56	189	296	5.8	10.0	92	48	44	120	2.4	10.0	120	46	17	0.59	0.22	38.70	0.58	0.55	18.1	11.0	0.82	В
	Sep-23	28°C	7.89	460	718	5.2	8.0	110	62	48	112	2.2	10.0	110	41	17	0.52	0.24	34.02	0.54	0.32	22.6	5.39	0.93	В
	Oct-23	28°C	7.80	240	375	5.7	10.0	305	260	45	316	2.1	10.0	140	70	13	1.87	0.24	30.23	0.22	0.60	25.96	5.96	0.65	В
	Nov-23	25.8°C	7.92	207	324	5.4	10.0	221	161	60	241	1.6	8.0	120	94	11	0.66	0.26	38.47	0.52	0.68	20.0	14.0	0.58	В
	Dec-23	22.4°C	8.02	220	344	5.4	14.0	270	105	165	210	1.8	12.0	140	110	13	0.65	0.23	31.46	0.22	0.60	18.5	9.6	0.49	В
														River Ganga D/	S at Sultanpur, Hari	dwar									
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
57	Jan-23	15.7°C	8.30	167	261	10.3	21.0	79	36	43	63	1.8	10.0	70	14	9.3	0.28	0.03	25.89	0.23	0.43	2.4	2.1	0.12	В
	Feb-23	23.7 °C	7.92	170	260	9.0	18.0	72	32	40	65	1.8	9.6	84	39	17	0.30	0.04	22.4	0.35	0.42	5.4	2.0	0.27	В
	Mar-23	20.5°C	7.69	175.3	274	8.9	8.0	179	111	68	292	2.4	12.0	120	63	25	0.63	0.08	24.51	0.05	0.07	30.3	7.3	0.98	В
	Apr-23	22.3°C	8.20	168	262.5	9.8	8.8	168	109	59	283	1.8	7.5	94	43	20	0.32	0.02	21.8	0.36	0.40	24.5	7.0	0.82	В
	May-23	22.6°C	7.98	194	303	9.2	7.0	150	90	60	198	1.8	8.0	70	20	9.1	0.23	0.04	28.32	0.44	0.32	11.3	4.3	0.40	В
	Jun-23	22.5°C	7.90	143	223	8.1	8.0	172	110	62	150	1.8	7.4	94	47	15	0.46	0.02	23.13	0.57	0.32	26.2	8.2	0.87	В
	Jul-23	25.4°C	8.20	202	316	7.6	3.0	64	35	29	51	1.4	10.0	130	63	46	0.27	0.16	39.46	0.33	0.28	6.1	3.8	0.33	В
	Aug-23	23°C	7.58	182	285	8.2	8.0	84	46	38	96	1.6	6.0	94	33	21	0.47	0.19	29.46	0.41	0.32	8.1	6.0	0.38	В
	Sep-23	26°C	7.56	210	328	8.4	6.0	112	72	40	144	1.6	8.0	110	39	20	0.29	0.15	40.12	0.26	0.21	6.4	2.5	0.26	В
	Oct-23	27.6°C	7.80	209	320	7.2	9.0	120	75	45	128	1.8	10.0	130	79	21	1.49	0.12	22.36	0.50	0.33	6.59	2.93	0.26	В
	Nov-23	24.1°C	7.95	180	276	7.9	8.0	96	53	43	112	1.6	9.0	110	70	14	0.41	0.12	29.78	0.55	0.39	8.2	5.4	0.36	В
	Dec-23	22°C	7.79	195	294	9.2	8.0	150	50	100	108	1.4	12.0	140	94	17	0.50	0.12	22.49	0.53	0.35	7.8	3.3	0.28	В
														River Nayar D/S	at Satpuli , Pauri Ga	rhwal									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
58	Jan-23	14°C	7.25	64	98	10.4	6.0	65	55	10	60	1.0	4.0	49	26	8.1	0.09	0.04	16.80	0.15	0.21	4.5	1.9	0.24	A
	Feb-23	15°C	7.36	52	80	10.2	4.0	75	50	25	56	1.0	4.0	48	46	6.8	0.09	0.03	17.32	0.19	0.30	13.5	1.8	0.67	A
	Mar-23	18°C	7.28	75	114	10.4	7.0	80	48	32	72	1.0	4.0	49	47	8.1	0.05	0.03	19.22	0.15	0.28	4.8	2.2	0.23	А
	Apr-23	23°C	7.40	65	99	10.2	5.0	49	36	13	52	1.0	4.0	47	43	6.8	0.06	0.01	16.33	0.13	0.19	4.3	1.9	0.26	A
	May-23	18°C	8.31	148	223	10.0	8.0	81	72	9	69	1.0	4.0	49	48	10	0.11	0.09	15.28	0.15	0.26	4.0	1.7	0.19	A
	Jun-23	31°C	8.45	70	108	9.8	6.0	63	58	05	72	1.0	4.0	49	48	3.7	0.12	0.03	18.95	0.16	0.45	5.3	2.3	0.29	A
	Jul-23	20°C	7.80	52	84	9.4	3.0	52	37	15	58	1.0	4.0	49	48	7.8	0.09	0.02	17.29	0.15	0.15	4.8	2.0	0.29	A
	Aug-23	17°C	7.45	67	103	9.6	5.0	69	53	16	72	1.0	4.0	46	33	4.0	0.08	0.02	25.22	0.24	0.19	4.5	2.4	0.23	A

	Sep-23	21°C	7.39	55	85	9.8	6.0	59	45	14	63	1.0	4.0	47	40	4.0	0.05	0.04	20.41	0.22	0.16	3.9	2.1	0.22	A
	Oct-23	18°C	7.51	50	77	10.0	5.0	54	44	10	58	1.0	4.0	48	34	2.0	0.03	0.01	23.41	0.22	0.18	3.4	3.5	0.20	A
	Nov-23	16°C	7.36	43	65	10.2	4.0	48	40	08	50	1.0	4.0	48	40	4.5	0.03	0.01	20.78	0.19	0.13	3.6	2.6	0.23	A
	Dec-23	14°C	7.57	49	75	10.4	3.0	51	41	10	53	1.0	4.0	46	33	4.0	0.03	0.01	21.43	0.10	0.16	3.3	2.8	0.20	A
															at Satpuli , Pauri Ga										
S.No.	Month	Temp	pН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride	Hardness (mg/l)	Calcium	Magnesium	Alkalinity	BOD (mg/l)	COD (mg/l)		FC (MPN/100 ml)	Fecal Steptococcss	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality
							(mg/l)		(mg/l)	(mg/l)	(mg/I)					(MPN/100 ml)			(mg/l)						Criteria
59	Jan-23	13°C	7.03	61	93	10.6	5.0	68	57	11	57	1.0	4.0	40	22	4.0	0.13	0.03	19.35	0.16	0.23	6.4	1.0	0.33	A
	Feb-23	14°C	7.19	55	84	10.4	3.0	68	61	07	54	1.0	4.0	46	43	5.6	0.11	0.05	20.07	0.16	0.25	13.2	1.3	0.69	A
	Mar-23	19°C	7.65	74	112	10.6	6.0	72	50	22	68	1.0	4.0	41	39	6.0	0.06	0.02	15.36	0.22	0.22	4.4	1.9	0.22	А
	Apr-23	22°C	7.10	62	93	10.4	4.0	45	32	13	49	1.0	4.0	39	34	5.5	0.07	0.03	18.16	0.18	0.25	4.0	1.7	0.25	A
Ш	May-23	17°C	8.20	142	215	10.2	7.0	79	68	11	65	1.0	4.0	47	43	6.0	0.13	0.05	17.36	0.17	0.20	3.6	1.4	0.17	A
	Jun-23	31°C	8.38	68	104	10.0	4.0	64	60	04	68	1.0	4.0	49	41	5.5	0.09	0.02	17.28	0.20	0.37	5.0	2.1	0.27	A
	Jul-23	21°C	7.90	50	81	9.6	2.0	46	34	12	56	1.0	4.0	48	41	5.6	0.05	0.01	20.37	0.20	0.17	4.4	1.8	0.28	A
	Aug-23	16°C	7.50	62	95	9.8	4.0	65	51	14	69	1.0	4.0	43	31	4.0	0.06	0.03	23.17	0.20	0.15	4.0	2.1	0.22	A
	Sep-23	20°C	7.32	48	74	10.0	5.0	53	41	12	58	1.0	4.0	48	41	2.0	0.05	0.04	18.42	0.21	0.18	3.6	1.9	0.21	A
	Oct-23	17°C	7.42	44	69	10.2	4.0	50	41	09	54	1.0	4.0	46	33	<1.8	0.10	0.04	20.41	0.18	0.20	3.0	3.3	0.18	A
	Nov-23	15°C	7.29	39	60	10.4	3.0	43	36	07	48	1.0	4.0	43	23	2.0	0.08	0.03	22.40	0.17	0.17	3.4	2.8	0.22	A
	Dec-23	13°C	7.45	44	67	10.6	2.0	47	38	09	50	1.0	4.0	40	27	2.0	0.06	0.01	23.41	0.13	0.15	3.0	2.5	0.19	A
								•						Nainital Lake	Water Intake, Naini	ital	•								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/I)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
60	Jan-23	08°C	7.42	266	390	9.2	17.0	256	142	114	212	1.0	5.0	170	120	8.3	0.11	0.07	108.62	0.23	0.31	9.6	3.0	0.25	В
	Feb-23	10°C	7.17	281	410	9.0	13.0	244	126	118	238	1.4	6.0	150	130	11	0.15	0.09	55.36	0.23	0.31	18.9	4.9	0.52	В
	Mar-23	12°C	7.94	299	430	9.0	11.0	248	138	110	206	1.8	6.0	120	110	10	0.12	0.03	63.24	0.13	0.37	8.1	3.3	0.22	В
	Apr-23	14°C	7.66	321	470	8.6	15.0	262	146	116	218	2.2	6.0	94	84	5.5	0.10	0.03	73.22	0.16	0.38	6.4	3.7	0.17	В
	May-23	16°C	7.85	315	470	8.2	19.0	254	142	112	226	2.0	7.0	120	94	3.7	0.11	0.04	65.26	0.14	0.35	6.0	3.2	0.16	В
	Jun-23	18°C	7.51	301	450	8.4	13.0	256	138	118	222	2.4	7.0	110	84	5.5	0.08	0.002	33.94	0.20	0.29	12.0	10.7	0.32	В
	Jul-23	16°C	7.38	275	410	8.8	15.0	240	132	108	194	2.0	6.0	130	94	6.0	0.09	0.01	38.16	0.23	0.31	6.3	1.6	0.18	В
$\vdash \vdash$	Aug-23	15°C	7.76	259	380	9.2	13.0	234	122	112	188	1.2	5.0	140	110	6.1	0.12	0.04	39.71	0.29	0.33	13.3	4.0	0.38	В
$\square$	Sep-23	14°C	7.49	271	390	9.0	17.0	246	130	116	196	1.8	6.0	170	140	4.0	0.15	0.05	35.42	0.25	0.30	11.9	3.7	0.33	В
$\vdash$	Oct-23	14°C	7.63	277	410	8.6	13.0	250	136	114	210	2.0	6.0	140	110	6.1	0.13	0.03	40.42	0.20	0.25	10.6	3.2	0.29	В
$\vdash$	Nov-23	13°C	7.71	285	430	8.6	15.0	258	138	120	206	1.6	5.0	94	70	2.0	0.11	0.02	45.72	0.15	0.20	9.7	3.6	0.26	В
	Dec-23	11°C	7.33	297	440	9.2	11.0	266	144	122	214	2.0	5.0	110	79 Water Intake, Nair	4.0	0.09	0.04	55.43	0.22	0.23	9.0	3.1	0.24	В
											l			Directifical Edite	intake, idali	I						1			Designated Best use
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	(DBU) Water Quality Criteria

61	Jan-23	11°C	7.88	167	240	9.0	15.0	208	112	96	168	1.2	6.0	150	79	21	0.09	0.03	22.90	0.20	0.30	6.4	4.3	0.19	В
	Feb-23	12°C	8.15	149	220	8.8	17.0	196	108	88	176	1.6	5.0	170	120	17	0.17	0.06	66.20	0.19	0.29	18.7	4.8	0.57	В
	Mar-23	14°C	7.36	140	210	8.6	13.0	184	102	82	154	1.4	5.0	130	120	14	0.17	0.08	59.20	0.18	0.25	5.4	3.7	0.17	В
	Apr-23	16°C	7.83	122	180	8.2	19.0	216	114	102	162	1.8	6.0	110	94	13	0.13	0.06	62.85	0.17	0.28	7.9	1.7	0.23	В
	May-23	18°C	7.43	138	210	8.0	17.0	228	122	106	184	1.4	5.0	130	110	11	0.14	0.05	63.11	0.15	0.25	7.1	1.5	0.20	В
	Jun-23	20°C	7.68	145	220	8.2	15.0	214	116	98	176	1.8	6.0	150	130	9.1	0.11	0.001	28.49	0.19	0.33	11.1	10.5	0.33	В
	Jul-23	18°C	7.16	129	190	8.6	11.0	196	102	94	158	1.2	5.0	180	120	6.8	0.10	0.02	25.81	0.15	0.37	5.4	1.4	0.17	В
	Aug-23	17°C	7.39	110	160	9.0	13.0	184	96	88	152	1.0	4.0	120	94	4.0	0.18	0.03	30.59	0.18	0.31	8.9	3.7	0.28	В
	Sep-23	17°C	7.76	118	180	8.8	11.0	204	106	98	164	1.2	4.0	150	120	4.0	0.16	0.05	28.52	0.15	0.28	8.1	3.3	0.25	В
	Oct-23	16°C	7.51	125	190	8.4	15.0	212	110	102	172	1.6	5.0	170	140	4.5	0.13	0.04	33.16	0.18	0.23	7.5	3.0	0.22	В
	Nov-23	15°C	7.29	140	210	8.4	17.0	198	104	94	168	2.0	6.0	110	79	4.5	0.09	0.03	30.41	0.16	0.18	6.9	3.3	0.21	В
	Dec-23	13°C	7.81	122	180	8.8	19.0	202	112	90	164	1.4	5.0	94	70	2.0	0.07	0.03	35.73	0.20	0.21	6.1	3.0	0.19	В
														Gola River a	t Haldwani, Nainita	l									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
62	Jan-23	13°C	8.12	184	260	8.8	19.0	230	126	104	172	1.4	5.0	94	63	9.3	0.12	0.05	50.86	0.11	0.26	6.9	3.5	0.19	В
	Feb-23	14°C	7.84	163	240	8.6	21.0	236	134	102	194	1.6	6.0	110	94	13	0.18	0.10	55.11	0.26	0.38	12.4	4.9	0.34	В
	Mar-23	16°C	7.39	171	260	8.2	25.0	240	132	108	190	2.0	6.0	94	84	12	0.13	0.09	60.17	0.17	0.23	5.6	2.8	0.15	В
	Apr-23	19°C	8.17	179	260	7.8	27.0	238	128	110	186	2.0	7.0	84	70	9.3	0.09	0.05	57.15	0.18	0.25	8.1	3.1	0.22	В
	May-23	22°C	7.79	185	280	7.6	21.0	248	132	116	192	2.2	7.0	94	79	6.0	0.08	0.04	48.33	0.14	0.14	7.7	2.8	0.21	В
	Jun-23	23°C	7.35	172	260	7.4	25.0	242	130	112	184	2.2	6.0	84	84	5.5	0.12	0.002	21.49	0.15	0.30	11.1	10.4	0.31	В
	Jul-23	20°C	7.41	166	240	7.8	21.0	222	116	106	166	2.4	7.0	120	94	4.0	0.10	0.06	27.28	0.26	0.33	7.3	2.8	0.21	В
	Aug-23	19°C	7.91	158	230	8.2	19.0	216	112	104	172	2.0	6.0	120	94	6.1	0.15	0.06	29.84	0.23	0.22	4.8	3.7	0.14	В
	Sep-23	18°C	7.25	177	260	8.4	23.0	232	122	110	182	2.0	6.0	210	170	6.1	0.15	0.06	25.63	0.20	0.25	4.1	3.5	0.12	В
	Oct-23	18°C	7.66	189	280	7.8	24.0	226	118	108	188	2.4	6.0	170	150	6.1	0.12	0.03	30.40	0.17	0.28	3.7	2.9	0.11	В
	Nov-23	17°C	7.83	163	250	8.2	21.0	230	126	104	176	2.2	6.0	170	110	7.8	0.10	0.02	28.46	0.13	0.23	4.3	3.1	0.12	В
	Dec-23	15°C	7.36	181	270	8.6	23.0	212	114	98	172	1.8	5.0	140	94	6.1	0.09	0.03	30.50	0.16	0.20	4.5	3.4	0.13	В
														Satta	lake, Nainital								1		•
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
63	Jan-23	09°C	7.38	113	160	9.2	13.0	170	96	74	152	1.0	4.0	140	84	13	0.13	0.05	42.93	0.14	0.25	5.9	3.2	0.19	В
	Feb-23	10°C	7.51	118	170	9.0	13.0	180	94	86	164	1.2	5.0	150	120	11	0.11	0.13	59.36	0.25	0.45	12.5	5.0	0.40	В
	Mar-23	11°C	7.17	129	180	9.0	17.0	164	88	76	146	1.4	4.0	170	150	12	0.22	0.03	57.99	0.22	0.28	5.4	2.9	0.18	В
	Apr-23	13°C	8.24	86	130	8.4	11.0	152	84	68	126	1.0	4.0	150	130	13	0.15	0.07	60.23	0.15	0.33	5.1	2.0	0.17	В
	May-23	15°C	7.94	93	140	8.2	13.0	162	92	70	132	1.2	4.0	170	150	11	0.13	0.06	58.71	0.18	0.30	4.8	1.9	0.16	В
	Jun-23	17°C	7.61	113	170	8.6	15.0	182	104	78	154	1.4	5.0	130	120	9.2	0.13	0.003	38.09	0.23	0.23	12.0	10.6	0.39	В
	Jul-23	15°C	7.43	99	150	8.8	13.0	176	94	82	142	1.2	5.0	170	110	11	0.13	0.08	40.41	0.22	0.42	5.2	1.6	0.17	В
	Aug-23	14°C	7.58	84	130	9.2	11.0	148	82	66	136	1.0	4.0	120	94	4.0	0.23	0.08	40.08	0.16	0.25	3.4	1.0	0.12	В
	Sep-23	13°C	7.81	91	140	9.2	11.0	156	88	68	144	1.2	4.0	170	140	4.0	0.14	0.05	35.63	0.18	0.28	3.0	0.8	0.10	В

	Oct-23	13°C	7.75	89	140	8.8	13.0	166	92	74	152	1.0	4.0	150	120	2.0	0.11	0.01	31.44	0.20	0.23	3.4	1.2	0.11	В
	Nov-23	12°C	7.36	97	150	9.0	15.0	182	98	84	148	1.2	4.0	140	94	4.0	0.07	0.03	36.76	0.18	0.19	3.1	1.6	0.10	В
	Dec-23	10°C	7.51	108	160	9.2	11.0	172	96	76	156	1.0	4.0	170	79	4.5	0.09	0.04	42.76	0.22	0.26	3.5	1.8	0.12	В
							•							Naukichy	atal lake, Nainital										
S.No. M	lonth	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
64	Jan-23	10°C	7.42	138	190	9.0	19.0	178	92	86	166	1.2	5.0	84	47	12	0.15	0.05	26.17	0.17	0.36	6.1	3.5	0.19	В
	Feb-23	12°C	7.19	124	180	8.8	15.0	174	98	76	154	1.2	5.0	94	84	11	0.20	0.03	62.19	0.23	0.25	12.7	4.9	0.41	В
	Mar-23	13°C	7.75	131	180	8.8	11.0	180	98	82	172	1.0	4.0	84	70	10	0.18	0.02	69.07	0.24	0.26	6.0	3.8	0.19	В
	Apr-23	15°C	7.61	114	170	8.2	15.0	186	108	78	152	1.2	4.0	79	70	6.1	0.10	0.03	71.17	0.19	0.43	6.3	1.9	0.20	В
	May-23	17°C	7.37	107	160	8.0	11.0	190	106	84	148	1.4	5.0	94	84	8.2	0.11	0.05	67.38	0.23	0.36	5.8	1.6	0.18	В
	Jun-23	18°C	8.13	119	180	8.2	18.0	192	112	80	166	1.8	6.0	79	70	8.1	0.12	0.003	87.62	0.23	0.36	14.4	10.4	0.45	В
	Jul-23	16°C	7.65	122	190	8.4	15.0	190	102	88	154	1.2	5.0	110	84	7.8	0.08	0.02	28.09	0.23	0.41	6.1	1.4	0.19	В
	Aug-23	16°C	7.24	109	170	8.8	13.0	174	92	82	142	1.2	4.0	94	70	6.1	0.13	0.03	64.32	0.23	0.35	2.5	2.3	0.08	В
	Sep-23	15°C	7.38	125	190	9.0	17.0	184	96	88	158	1.6	5.0	120	94	4.0	0.14	0.04	58.43	0.20	0.30	2.8	2.0	0.09	В
	Oct-23	15°C	7.80	119	180	8.4	19.0	196	102	94	164	1.8	5.0	130	79	2.0	0.13	0.04	52.40	0.19	0.25	2.4	1.8	0.07	В
	Nov-23	14°C	7.51	127	190	8.4	15.0	190	104	86	168	1.4	4.0	110	70	4.0	0.10	0.03	48.93	0.17	0.20	2.9	2.2	0.09	В
	Dec-23	12°C	7.94	142	210	9.0	15.0	198	108	90	160	1.4	5.0	110	70	2.0	0.13	0.05	52.73	0.20	0.26	3.3	2.5	0.10	В
													River	Shipra D/S near Ne	em Karoli Dam, Bh	wali, Nainital									
S.No. M	lonth	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
65	Jan-23	10°C	7.56	149	220	9.0	17.0	192	104	88	158	1.8	5.0	94	63	11	0.15	0.06	12.92	0.22	0.41	7.3	3.0	0.22	D
	Feb-23																				*****	7.5	3.0	0.22	В
		11°C	7.48	157	230	8.6	19.0	204	112	92	162	1.4	5.0	84	79	13	0.11	0.05	60.25	0.25	0.29	17.1	3.0	0.22	В
	Mar-23	11°C 13°C	7.48 7.52	157 142	230 210	8.6 8.6	19.0 21.0	204 192	112 108	92 84	162 184	1.4 2.0	5.0	84 94			<del> </del>	0.05 0.03	60.25 68.11	0.25 0.15		1	-		
厂											<b>-</b>				79	13	0.11				0.29	17.1	3.0	0.51	В
H	Mar-23	13°C	7.52	142	210	8.6	21.0	192	108	84	184	2.0	6.0	94	79 84	13 14	0.11 0.11	0.03	68.11	0.15	0.29 0.29	17.1 5.1	3.0 1.7	0.51	В
	Mar-23 Apr-23	13°C 15°C	7.52 7.22	142 167	210 240	8.6 8.0	21.0 19.0	192 200	108 116	84 84	184 176	2.0	6.0	94 110	79 84 94	13 14 12	0.11 0.11 0.05	0.03 0.04	68.11 70.10	0.15 0.25	0.29 0.29 0.29	17.1 5.1 7.0	3.0 1.7 3.4	0.51 0.15 0.21	B B B
	Mar-23 Apr-23 May-23	13°C 15°C 18°C	7.52 7.22 7.57	142 167 159	210 240 240	8.6 8.0 7.8	21.0 19.0 21.0	192 200 206	108 116 114	84 84 92	184 176 172	2.0 2.0 2.2	6.0 6.0 7.0	94 110 130	79 84 94 84	13 14 12 10	0.11 0.11 0.05 0.11	0.03 0.04 0.06	68.11 70.10 66.24	0.15 0.25 0.26	0.29 0.29 0.29 0.30	17.1 5.1 7.0 6.5	3.0 1.7 3.4 3.0	0.51 0.15 0.21 0.19	B B B
	Mar-23 Apr-23 May-23 Jun-23	13°C 15°C 18°C 19°C	7.52 7.22 7.57 7.43	142 167 159 140	210 240 240 230	8.6 8.0 7.8 8.0	21.0 19.0 21.0 17.0	192 200 206 216	108 116 114 120	84 84 92 96	184 176 172 164	2.0 2.0 2.2 2.0	6.0 6.0 7.0 6.0	94 110 130 110	79 84 94 84 94	13 14 12 10 9.2	0.11 0.11 0.05 0.11 0.09	0.03 0.04 0.06 0.002	68.11 70.10 66.24 22.56	0.15 0.25 0.26 0.26	0.29 0.29 0.29 0.30 0.37	17.1 5.1 7.0 6.5 11.2	3.0 1.7 3.4 3.0 10.5	0.51 0.15 0.21 0.19 0.33	B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23	13°C 15°C 18°C 19°C 17°C	7.52 7.22 7.57 7.43 7.88	142 167 159 140 131	210 240 240 230 190	8.6 8.0 7.8 8.0 8.4	21.0 19.0 21.0 17.0 19.0	192 200 206 216 192	108 116 114 120 112	84 84 92 96 80	184 176 172 164 160	2.0 2.0 2.2 2.0 1.8	6.0 6.0 7.0 6.0 6.0	94 110 130 110 140	79 84 94 84 94 94	13 14 12 10 9.2 9.8	0.11 0.11 0.05 0.11 0.09 0.10	0.03 0.04 0.06 0.002 0.01	68.11 70.10 66.24 22.56 28.09	0.15 0.25 0.26 0.26 0.23	0.29 0.29 0.29 0.30 0.37 0.41	17.1 5.1 7.0 6.5 11.2 6.9	3.0 1.7 3.4 3.0 10.5 3.1	0.51 0.15 0.21 0.19 0.33 0.22	B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50	142 167 159 140 131 122 127	210 240 240 230 190 170 190 210	8.6 8.0 7.8 8.0 8.4 8.6	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0	192 200 206 216 192 194 206 200	108 116 114 120 112 106 110	84 84 92 96 80 88 96 92	184 176 172 164 160	2.0 2.0 2.2 2.0 1.8 1.4 1.2	6.0 6.0 7.0 6.0 6.0 5.0 4.0	94 110 130 110 140 84 110	79 84 94 84 94 94 63 79 70	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12	B B B B B B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C 15°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50 7.58 8.13	142 167 159 140 131 122 127 139	210 240 240 230 190 170 190 210	8.6 8.0 7.8 8.0 8.4 8.6 8.8 8.2	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0	192 200 206 216 192 194 206 200 210	108 116 114 120 112 106 110 108	84 84 92 96 80 88 96 92 98	184 176 172 164 160 168 154 176	2.0 2.0 2.2 2.0 1.8 1.4 1.2 1.8	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0	94 110 130 110 140 84 110 120 94	79 84 94 84 94 94 63 79 70 63	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09 0.11	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06 0.05	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43 25.38	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19 0.13	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8 4.5	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0 1.2 1.8	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12 0.13	B B B B B B B B B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50	142 167 159 140 131 122 127	210 240 240 230 190 170 190 210	8.6 8.0 7.8 8.0 8.4 8.6 8.8	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0	192 200 206 216 192 194 206 200	108 116 114 120 112 106 110	84 84 92 96 80 88 96 92	184 176 172 164 160 168 154 176	2.0 2.0 2.2 2.0 1.8 1.4 1.2	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0 5.0	94 110 130 110 140 84 110 120 94 140	79 84 94 84 94 94 63 79 70 63 94	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8 4.0	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12	B B B B B B B B B B
	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C 15°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50 7.58 8.13	142 167 159 140 131 122 127 139	210 240 240 230 190 170 190 210	8.6 8.0 7.8 8.0 8.4 8.6 8.8 8.2	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0	192 200 206 216 192 194 206 200 210	108 116 114 120 112 106 110 108	84 84 92 96 80 88 96 92 98	184 176 172 164 160 168 154 176	2.0 2.0 2.2 2.0 1.8 1.4 1.2 1.8	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0 5.0	94 110 130 110 140 84 110 120 94 140	79 84 94 84 94 94 63 79 70 63	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8 4.0	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09 0.11	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06 0.05	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43 25.38	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19 0.13	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8 4.5	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0 1.2 1.8	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12 0.13	B B B B B B B B B B B B B
S.No. M	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C 15°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50 7.58 8.13	142 167 159 140 131 122 127 139	210 240 240 230 190 170 190 210	8.6 8.0 7.8 8.0 8.4 8.6 8.8 8.2	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0	192 200 206 216 192 194 206 200 210	108 116 114 120 112 106 110 108	84 84 92 96 80 88 96 92 98	184 176 172 164 160 168 154 176	2.0 2.0 2.2 2.0 1.8 1.4 1.2 1.8	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0 5.0 Kosi Rive	94 110 130 110 140 84 110 120 94 140	79 84 94 84 94 94 63 79 70 63 94	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8 4.0	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09 0.11	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06 0.05	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43 25.38	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19 0.13	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8 4.5	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0 1.2 1.8 1.6	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12 0.13	B B B B B B B B B B B B B
S.No. M	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C 15°C 14°C 12°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50 7.58 8.13 7.57	142 167 159 140 131 122 127 139 143 129	210 240 240 230 190 170 190 210 190	8.6 8.0 7.8 8.0 8.4 8.6 8.8 8.2 8.6 8.8	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0 15.0 21.0	192 200 206 216 192 194 206 200 210 222	108 116 114 120 112 106 110 108 112 118	84 84 92 96 80 88 96 92 98 104	184 176 172 164 160 168 154 176 166 180	2.0 2.0 2.2 2.0 1.8 1.4 1.2 1.8 1.2	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0 5.0 Kosi Rive	94 110 130 110 140 84 110 120 94 140	79 84 94 84 94 94 63 79 70 63 94 ur Road Bridge, Kas	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8 1.8 4.0 hipur, US Nagar	0.11 0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09 0.11	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06 0.05 0.03	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43 25.38 30.25	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19 0.13 0.16	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28 0.22 0.20	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8 4.5 4.1	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0 1.2 1.8 1.6	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12 0.13 0.12	B B B B B B B B B B C B B B C B B B B B
$\vdash \vdash$	Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23	13°C 15°C 18°C 19°C 17°C 16°C 15°C 15°C 12°C 14°C	7.52 7.22 7.57 7.43 7.88 7.62 7.50 7.58 8.13 7.57	142 167 159 140 131 122 127 139 143 129	210 240 240 230 190 170 190 210 190 190	8.6 8.0 7.8 8.0 8.4 8.6 8.8 8.2 8.6 8.8	21.0 19.0 21.0 17.0 19.0 25.0 21.0 24.0 15.0 21.0 Chloride (mg/l)	192 200 206 216 192 194 206 200 210 222	108 116 114 120 112 106 110 108 112 118	84 84 92 96 80 88 96 92 98 104	184 176 172 164 160 168 154 176 166 180	2.0 2.0 2.2 2.0 1.8 1.4 1.2 1.8 1.2	6.0 6.0 7.0 6.0 6.0 5.0 4.0 5.0 5.0 5.0 Kosi Rive	94 110 130 110 140 84 110 120 94 140 rat Kashipur Bajp	79 84 94 84 94 94 63 79 70 63 94 ur Road Bridge, Kas	13 14 12 10 9.2 9.8 2.0 <1.8 <1.8 4.0  hipur, US Nagar  Fecal Steptococcss (MPN/100 ml)	0.11 0.05 0.11 0.09 0.10 0.16 0.16 0.09 0.11 0.11	0.03 0.04 0.06 0.002 0.01 0.02 0.03 0.06 0.05 0.03	68.11 70.10 66.24 22.56 28.09 21.09 20.43 22.43 25.38 30.25	0.15 0.25 0.26 0.26 0.23 0.19 0.15 0.19 0.13 0.16	0.29 0.29 0.30 0.37 0.41 0.39 0.34 0.28 0.22 0.20	17.1 5.1 7.0 6.5 11.2 6.9 4.4 4.0 3.8 4.5 4.1	3.0 1.7 3.4 3.0 10.5 3.1 1.3 1.0 1.2 1.8 1.6	0.51 0.15 0.21 0.19 0.33 0.22 0.14 0.12 0.12 0.13 0.12	B B B B B B B B B B C B B B B B B B B B

	Apr-23	22°C	7.40	368	569	7.0	17.0	263	222	41	211	2.0	28.0	170	130	63	0.09	0.05	108.0	0.21	0.19	11.1	4.3	0.30	В
	May-23	31°C	7.60	365	531	6.8	21.0	236	202	34	194	2.2	24.0	210	170	58	0.12	0.04	115.0	0.20	0.20	8.6	3.2	0.24	В
	Jun-23	31°C	7.80	365	558	7.3	24.0	276	228	48	158	2.0	20.0	220	210	63	0.14	0.07	102.35	0.15	0.18	12.4	5.4	0.32	В
	Jul-23	28°C	7.90	152	248	7.0	16.0	175	141	34	155	2.2	20.0	350	280	79	0.14	0.05	102.0	0.18	0.22	6.3	4.4	0.21	В
	Aug-23	28°C	7.50	131	230	7.2	13.0	164	122	42	130	2.6	16.0	280	170	49	0.38	0.28	185.32	0.46	0.28	7.7	6.5	0.26	В
	Sep-23	29°C	7.50	119	211	7.0	18.0	155	125	30	135	2.8	16.0	170	130	47	0.28	0.25	90.18	0.42	0.22	6.4	8.4	0.22	В
	Oct-23	25°C	7.60	154	232	6.9	17.0	170	137	33	145	3.0	16.0	220	130	26	0.31	0.28	96.4	0.44	0.23	8.3	5.2	0.28	В
	Nov-23	25°C	7.70	250	369	7.2	15.0	233	180	53	260	2.6	16.0	170	140	20	0.21	0.25	75.2	0.39	0.25	6.8	4.5	0.19	В
	Dec-23	23°C	7.50	257	381	7.6	11.0	260	190	70	290	2.4	16.0	210	140	17	0.24	0.31	68.40	0.35	0.28	9.5	6.4	0.26	В
													Dhella Riv	er U/S at Kashipu	r Moradabad Road	Bridge, US Nagar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/I)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
67	Jan-23	13°C	7.50	220	284	7.6	13.0	250	150	100	188	2.8	20.0	1600	920	94	0.11	0.04	20.14	0.23	0.27	17.8	3.0	0.48	С
	Feb-23	19°C	7.70	244	367	7.4	12.0	196	114	82	170	3.0	24.0	>1600	920	110	0.13	0.05	27.81	0.19	0.31	8.7	3.1	0.26	С
	Mar-23	23°C	7.90	235	348	7.5	11.0	174	103	71	162	2.8	20.0	1600	920	94	0.12	0.04	25.0	0.18	0.27	6.2	3.3	0.20	С
	Apr-23	21°C	7.60	180	262	7.2	13.0	150	130	20	148	2.8	24.0	540	430	84	0.11	0.06	28.0	0.16	0.25	10.6	3.0	0.37	С
	May-23														River Dry										
	Jun-23	34°C	7.80	388	596	7.2	9.0	144	95	49	106	2.6	20.0	350	350	120	0.09	0.14	29.58	0.11	0.21	14.9	5.1	0.54	В
	Jul-23	28°C	7.60	217	334	7.0	11.0	128	88	40	135	2.7	20.0	540	430	130	0.11	0.06	29.0	0.17	0.25	4.6	5.5	0.18	С
	Aug-23	27°C	7.80	146	236	6.6	17.0	145	95	50	175	2.9	24.0	350	240	94	0.20	0.52	54.15	0.36	0.35	10.8	15.4	0.39	В
	Sep-23	31°C	7.60	158	254	6.4	19.0	140	102	38	165	3.0	20.0	430	350	79	0.17	0.23	47.03	0.29	0.29	9.6	3.9	0.35	В
	Oct-23	29°C	6.80	161	260	6.2	18.0	144	108	36	160	3.0	20.0	540	240	70	0.15	0.25	51.2	0.32	0.27	9.9	4.9	0.36	С
	Nov-23	25°C	7.70	178	275	6.0	20.0	190	135	55	235	3.0	24.0	350	240	94	0.17	0.23	45.2	0.29	0.29	10.2	4.8	0.32	В
	Dec-23	20°C	7.30	171	260	6.4	15.0	204	148	56	230	2.8	20.0	280	220	47	0.19	0.28	40.20	0.34	0.35	11.4	3.0	0.35	В
													Dhella	River D/S at Thak	urdwara, Aliganj Ro	oad, US Nagar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
68	Jan-23	12°C	7.20	435	565	2.3	28.0	344	275	69	243	24.0	144.0	920	540	170	0.15	0.09	27.99	0.21	0.39	23.3	9.7	0.54	Е
	Feb-23	19°C	7.30	472	710	1.5	48.0	282	230	52	235	38.0	240.0	1600	540	150	0.15	0.12	31.1	0.18	0.43	71.0	6.4	1.83	Е
	Mar-23	23°C	7.20	640	972	1.6	45.0	251	224	27	214	36.0	192.0	>1600	920	110	0.10	0.11	32.0	0.16	0.39	52	3.6	1.42	Е
	Apr-23	21°C	7.00	815	990	1.4	62.0	615	494	121	225	32.0	196.0	1600	540	70	0.12	0.10	34.0	0.19	0.36	118.0	24.6	2.06	Е
	May-23	28°C	7.10	562	856	1.2	64.0	585	468	117	212	34.0	188.0	>1600	920	110	0.16	0.12	45.0	0.25	0.34	82.5	12.2	1.47	Е

	Jun-23	33°C	7.40	856	1254	1.4	56.0	380	310	70	148	30.0	176.0	1600	920	170	0.11	0.15	40.89	0.18	0.30	48.1	13.8	1.07	Е
	Jul-23	29°C	7.70	418	613	3.6	40.0	205	170	35	215	16.0	128.0	1600	540	150	0.15	0.10	39.0	0.22	0.31	26.1	5.3	0.79	E
	Aug-23	30°C	7.40	220	335	4.0	29.0	160	125	35	190	15.0	120.0	920	540	130	0.34	0.95	129.80	0.61	0.51	19.8	7.7	0.68	D
	Sep-23	32°C	7.10	192	298	4.1	28.0	158	121	37	180	14.0	108.0	1600	920	220	0.26	0.6	83.52	0.46	0.34	19.7	5.1	0.68	D
	Oct-23	28°C	7.00	254	375	3.8	35.0	196	152	44	205	16.0	116.0	>1600	1600	170	0.30	0.66	95.1	0.54	0.36	36.2	8.1	1.12	E
	Nov-23	25°C	7.10	343	492	2.8	45.0	250	186	64	300	22.0	160.0	1600	920	140	0.38	0.58	112.1	0.68	0.32	56.2	9.2	1.54	Е
	Dec-23	23°C	7.40	368	544	1.4	58.0	270	198	72	240	28.0	192.0	540	350	110	0.44	0.61	128.10	0.72	0.38	57.5	10.1	1.51	Е
													Bhella	River U/S Kashipur	, (U/S Ramnagar Ro	oad), US Nagar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
69	Jan-23	13°C	7.80	155	195	7.7	10.0	200	105	95	110	2.0	12.0	540	430	150	0.11	0.08	14.20	0.22	0.33	8.7	1.8	0.26	С
	Feb-23	15°C	7.50	174	262	7.6	14.0	162	124	38	118	2.6	16.0	920	430	170	0.14	0.13	17.4	0.14	0.36	6.2	2.4	0.21	С
	Mar-23	24°C	7.50	208	316	7.4	16.0	148	116	32	152	2.8	16.0	920	540	210	0.13	0.09	15.0	0.15	0.32	4.4	2.6	0.2	С
	Apr-23	21°C	7.80	168	247	7.1	15.0	162	124	38	168	3.0	20.0	540	430	170	0.15	0.08	18.0	0.17	0.28	6.3	1.6	0.21	С
	May-23														River Dry										
	Jun-23	30°C	7.30	126	182	5.6	14.0	126	85	41	92	2.4	16.0	430	430	110	0.12	0.17	20.09	0.10	0.25	15.1	3.8	0.58	В
	Jul-23	27°C	7.60	114	185	6.2	19.0	115	71	44	120	2.2	16.0	540	350	120	0.17	0.05	20.0	0.14	0.21	5.1	6.9	0.21	С
	Aug-23	27°C	7.20	143	246	6.0	20.0	135	105	30	140	2.8	16.0	430	350	120	0.23	0.53	62.91	0.29	0.45	8.7	6.8	0.32	В
	Sep-23	26°C	7.30	147	242	6.2	18.0	128	95	33	125	2.6	16.0	350	240	110	0.19	0.31	40.53	0.22	0.3	13.4	2.7	0.51	В
	Oct-23	23°C	7.30	138	214	6.0	20.0	124	95	29	115	2.8	16.0	280	220	94	0.17	0.28	36.2	0.20	0.28	9.7	2.4	0.38	В
	Nov-23	24°C	7.70	107	181	6.2	18.0	98	72	26	110	2.6	16.0	220	170	49	0.15	0.22	29.2	0.22	0.25	9.4	1.8	0.41	В
	Dec-23	18°C	7.40	159	229	6.6	15.0	128	92	36	155	2.4	16.0	170	130	46	0.19	0.26	25.20	0.19	0.29	10.8	1.8	0.41	В
	<u> </u>						ı	ı	ı			Bhe	lla River a	at Lohia Bridge D/S	Kashipur (D/S Lohi	ya Bridge), US Naga	r I	•				ı	· ·		
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
70	Jan-23	13°C	7.70	260	350	3.0	21.0	266	227	39	200	18.0	128.0	920	540	350	0.08	0.07	19.82	0.25	0.31	21.6	3.7	0.57	Е
	Feb-23	18°C	6.80	311	469	1.8	26.0	284	250	34	194	28.0	224.0	1600	920	280	0.09	0.10	27.4	0.17	0.39	55.8	13.0	1.43	Е
	Mar-23	23°C	6.70	431	636	1.9	22.0	256	221	35	185	26.0	176.0	>1600	920	350	0.08	0.11	25.0	0.18	0.33	31.1	9.5	0.84	Е
	Apr-23	22°C	7.40	368	598	1.7	23.0	240	210	30	165	28.0	184.0	920	540	220	0.11	0.10	27.0	0.17	0.34	35.1	3.5	0.98	Е
	May-23	27°C	7.20	288	416	1.8	32.0	224	190	34	172	26.0	176.0	1600	920	240	0.21	0.11	35.0	0.22	0.32	28.8	4.5	0.83	Е
	Jun-23	32°C	7.60	382	588	1.8	21.0	220	180	40	118	24.0	144.0	920	920	170	0.08	0.17	22.45	0.13	0.28	27.1	13	0.79	Е
	Jul-23	30°C	7.20	245	371	4.2	18.0	163	132	31	135	14.0	80.0	1600	920	220	0.22	0.09	31.0	0.18	0.28	7.9	5.8	0.27	D

	Aug-23	29°C	7.20	131	216	4.4	17.0	140	100	40	184	12.0	76.0	1600	920	130	0.44	0.71	84.62	0.82	0.56	8.4	9.9	0.31	D
	Sep-23	32°C	7.10	166	269	4.2	21.0	148	105	43	190	12.0	80.0	920	540	170	0.34	0.59	62.03	0.51	0.36	11.5	6.3	0.41	D
	Oct-23	27°C	7.00	206	305	3.9	25.0	178	128	50	195	14.0	96.0	920	350	110	0.38	0.54	66.4	0.54	0.39	17.7	4.2	0.58	E
	Nov-23	24°C	6.80	166	254	3.0	30.0	165	115	50	250	20.0	128.0	540	240	94	0.42	0.59	74.4	0.62	0.44	18.4	4.8	0.62	Е
	Dec-23	22°C	7.10	212	308	1.8	41.0	240	166	74	270	26.0	168.0	920	350	70	0.39	0.55	67.50	0.55	0.48	22.7	6.1	0.64	Е
														Pilakhar River at B	ilaspur, Rampur, U	S Nagar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
71	Jan-23	12°C	7.60	535	690	3.2	27.0	460	270	190	334	10.2	64.0	920	540	150	0.13	0.03	56.76	0.23	0.41	33.0	6.6	0.66	Е
	Feb-23	18°C	7.40	545	820	2.6	37.0	486	335	151	348	12.0	96.0	540	430	170	0.17	0.06	78.5	0.39	0.45	47.0	24.0	0.92	Е
	Mar-23	23°C	7.30	595	918	2.9	32.0	394	289	105	364	10.0	88.0	430	350	150	0.15	0.04	69.0	0.36	0.38	28.5	22.3	0.62	E
	Apr-23	22°C	7.40	574	855	2.4	49.0	424	374	50	376	10.0	92.0	350	280	130	0.14	0.08	74.0	0.38	0.34	45.3	17.9	0.95	Е
	May-23	31°C	7.50	518	765	2.8	35.0	386	344	42	350	8.0	84.0	540	430	170	0.18	0.10	82.0	0.42	0.36	40.5	12.6	0.89	Е
	Jun-23	31°C	7.80	542	836	3.3	45.0	376	335	41	204	7.0	72.0	920	540	120	0.12	0.16	84.92	0.41	0.31	53.7	14.9	1.20	Е
	Jul-23	28°C	7.50	296	456	5.4	27.0	228	195	33	155	4.6	40.0	1600	920	130	0.16	0.08	72.0	0.38	0.29	11.7	6.3	0.34	D
	Aug-23	29°C	7.60	183	370	6.0	18.0	206	164	42	370	3.0	20.0	920	540	94	0.21	0.67	115.81	0.64	0.31	10.8	6.8	0.33	С
	Sep-23	28°C	7.30	162	263	6.2	17.0	195	150	45	290	2.8	20.0	540	350	140	0.12	0.18	68.53	0.37	0.24	9.4	6.5	0.29	С
	Oct-23	24°C	7.40	145	221	6.1	19.0	180	141	39	275	2.6	20.0	350	280	110	0.10	0.19	65.2	0.39	0.26	6.5	5.2	0.21	В
Ш	Nov-23	24°C	7.20	168	262	6.4	17.0	190	148	42	255	2.4	16.0	540	220	79	0.11	0.16	54.2	0.32	0.28	7.4	5.5	0.23	С
	Dec-23	24°C	7.30	356	524	7.2	12.0	285	220	65	285	2.0	16.0	430	350	94	0.15	0.20	61.20	0.35	0.35	14.7	3.6	0.38	В
												Nandua	r River U/	S Sitarganj Industi	ial Area, (Nandour	U/S Sitarganj), US N	lagar								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/I)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
72	Jan-23	12°C	7.70	115	205	9.2	9.0	270	156	114	222	1.8	8.0	540	430	170	0.08	0.06	11.28	0.19	0.19	23.0	1.8	0.60	С
	Feb-23														River was D	ry									
	Mar-23														River was D	ry									
Apr-23 River was Dry																									
	May-23														River was D	ry									
Ш	Jun-23	31°C	7.70	152	220	8.0	11.0	230	154	76	140	2.2	12.0	540	430	63	0.1	0.09	09.96	0.12	0.17	13.8	2.7	0.39	С
Ш	Jul-23	28°C	7.80	107	165	8.2	16.0	145	85	60	125	1.6	8.0	430	350	79	0.07	0.05	13.0	0.11	0.18	1.8	3.7	0.06	В
Ш	Aug-23	29°C	7.50	112	194	7.8	19.0	160	105	55	155	1.8	8.0	350	210	70	0.12	0.19	48.92	0.52	0.20	2.4	3.8	0.08	В
	Sep-23	30°C	7.50	115	193	7.4	21.0	135	90	45	140	2.0	8.0	540	240	79	0.10	0.15	33.38	0.34	0.17	4.5	1.6	0.17	С

	Oct-23	26°C	7.60	142	210	7.2	22.0	146	98	48	155	2.2	12.0	920	540	110	0.14	0.18	41.2	0.38	0.21	6.9	1.4	0.25	С
	Nov-23	25°C	7.90	131	194	7.4	19.0	140	86	54	170	2.0	8.0	540	350	94	0.09	0.14	36.2	0.29	0.18	4.8	2.2	0.18	С
	Dec-23	21°C	7.60	136	202	8.0	11.0	184	118	66	190	1.8	8.0	920	540	110	0.07	0.12	33.20	0.31	0.22	7.6	1.5	0.24	С
												Nandua	r River D/	'S Sitarganj Industi	ial Area, (Nandour	D/S Sitarganj), US N	lagar								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
73	Jan-23	12°C	7.90	170	280	8.6	12.0	234	160	74	180	2.6	16.0	920	540	220	0.10	0.09	13.03	0.19	0.31	9.8	1.9	0.27	С
	Feb-23	19°C	7.60	205	309	8.4	15.0	224	186	38	206	2.8	24.0	1600	920	280	0.08	0.07	16.57	0.17	0.33	7.4	2.6	0.21	С
	Mar-23	21°C	7.40	242	336	8.2	17.0	235	169	66	186	2.7	24.0	>1600	1600	350	0.09	0.06	15.0	0.16	0.34	9.6	2.8	0.27	С
	Apr-23	22°C	7.70	208	304	7.4	17.0	185	159	26	158	2.8	24.0	>1600	1600	430	0.08	0.07	17.0	0.15	0.29	8.7	2.0	0.28	С
	May-23	28°C	7.40	225	328	7.0	15.0	145	120	25	132	3.0	28.0	>1600	>1600	540	0.11	0.08	24.0	0.18	0.26	10.2	3.6	0.36	С
	Jun-23	32°C	7.90	186	263	7.2	13.0	126	104	22	84	2.8	24.0	>1600	>1600	920	0.12	0.14	32.11	0.20	0.28	9.5	5.8	0.37	С
	Jul-23	29°C	7.50	118	183	7.3	12.0	102	78	24	130	2.5	16.0	1600	920	430	0.10	0.06	17.0	0.15	0.22	2.9	7.1	0.12	С
	Aug-23	31°C	7.70	146	218	7.2	14.0	153	129	24	185	2.7	16.0	920	540	120	0.18	0.54	73.96	0.97	0.19	5.5	4.1	0.19	С
	Sep-23	32°C	7.60	119	196	7.0	19.0	145	108	37	160	2.8	20.0	920	350	94	0.14	0.38	48.73	0.53	0.21	10.2	2.7	0.37	С
	Oct-23	28°C	7.70	158	235	6.9	24.0	165	113	52	175	2.9	20.0	>1600	1600	120	0.18	0.43	52.5	0.64	0.20	7.3	1.8	0.25	С
	Nov-23	26°C	7.70	197	305	7.1	21.0	213	152	61	240	2.7	16.0	17×10 <sup>2</sup>	11×10 <sup>2</sup>	350	0.16	0.35	48.5	0.54	0.25	4.4	1.8	0.13	С
	Dec-23	23°C	7.50	199	308	7.8	16.0	225	164	61	215	2.4	12.0	1600	920	170	0.19	0.30	44.50	0.44	0.29	7.9	2.0	0.23	С
												Kichh	a River at	Kichha, (River Kich	ha (D/S Nagarbhal	a, Kashipur), US Na	gar								
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
74	Jan-23	12°C	7.60	376	505	7.0	20.0	380	232	148	228	3.8	28.0	350	280	48	0.14	0.12	75.24	0.28	0.40	83.3	5.7	1.85	D
	Feb-23	18°C	7.50	394	593	6.8	45.0	330	274	56	224	5.8	48.0	430	240	49	0.15	0.19	93.71	0.21	0.45	31.8	9.7	0.75	D
	Mar-23	22°C	7.40	464	672	5.8	49.0	318	258	60	206	7.8	56.0	540	430	84	0.14	0.17	86.0	0.18	0.42	28.9	8.5	0.70	D
	Apr-23	21°C	7.60	384	588	5.6	27.0	290	240	50	184	5.8	48.0	920	430	110	0.12	0.13	74.0	0.17	0.36	33.3	5.4	0.85	D
	May-23	28°C	7.40	225	328	7.0	15.0	145	120	25	132	3.0	28.0	>1600	>1600	540	0.11	0.08	24.0	0.18	0.26	10.2	3.6	0.36	С
	Jun-23	32°C	7.90	358	522	6.3	25.0	235	205	30	138	5.0	44.0	920	540	150	0.11	0.12	70.04	0.22	0.31	31.9	6.3	0.90	D
	Jul-23	32°C	7.70	227	334	7.0	20.0	184	152	32	165	3.0	28.0	540	430	120	0.08	0.06	50.0	0.12	0.27	12.9	9.8	0.41	С
	Aug-23	30°C	7.40	213	345	6.2	23.0	212	146	66	225	3.2	28.0	350	220	110	0.28	0.58	120.24	0.58	0.25	20.2	11.2	0.60	D
	Sep-23	30°C	7.60	183	265	6.5	20.0	190	135	55	205	3.0	24.0	430	350	110	0.16	0.32	71.87	0.37	0.29	12.2	5.4	0.38	В
	Oct-23	25°C	7.60	215	324	6.4	22.0	205	148	57	220	3.0	28.0	350	220	94	0.19	0.36	75.6	0.39	0.28	18.6	4.4	0.56	В
	Nov-23	25°C	7.60	369	533	6.2	30.0	250	175	75	295	3.2	32.0	280	220	70	0.24	0.34	83.6	0.35	0.26	25.2	6.3	0.69	D

	Dec-23	24°C	7.40	337	508	5.0	35.0	255	178	77	240	3.8	36.0	350	170	49	0.35	0.48	94.60	0.38	0.27	31.3	5.5	0.85	D
				•									Kalya	ni River at U/S Par	tnagar Industrial A	ea, US Nagar	<u>'</u>								'
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	) Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
75	Jan-23	13°C	7.40	281	386	7.2	15.0	360	220	140	246	3.0	16.0	350	280	130	0.15	0.06	27.18	0.23	0.30	9.5	2.5	0.21	В
	Feb-23	15°C	7.60	311	467	6.8	16.0	340	246	94	232	3.0	20.0	430	280	150	0.14	0.07	29.31	0.18	0.31	6.3	2.2	0.14	В
	Mar-23	20°C	7.50	321	482	6.9	13.0	324	228	96	214	2.8	16.0	1600	920	540	0.12	0.05	27.2	0.17	0.32	5.2	1.8	0.12	С
	Apr-23	20°C	7.50	315	469	6.2	21.0	278	245	33	208	2.9	16.0	920	540	280	0.14	0.06	31.0	0.24	0.29	11.5	3.1	0.30	С
	May-23	29°C	7.30	296	428	6.4	18.0	228	190	38	175	2.6	16.0	540	430	220	0.11	0.04	28.0	0.21	0.25	8.4	3.3	0.24	С
	Jun-23	29°C	7.70	306	451	5.2	22.0	254	210	44	130	3.0	20.0	430	430	150	0.14	0.23	34.55	0.14	0.24	10.5	5.4	0.28	В
	Jul-23	30°C	7.40	211	322	5.4	17.0	168	135	33	160	2.8	16.0	540	350	120	0.13	0.05	20.0	0.21	0.18	2.4	4.5	0.08	С
	Aug-23	28°C	7.10	215	412	5.0	13.0	192	154	38	230	3.0	20.0	430	350	94	0.19	0.25	54.54	0.41	0.38	5.4	6.1	0.16	В
	Sep-23	28°C	7.40	213	339	5.2	12.0	163	128	35	220	2.8	20.0	540	350	110	0.15	0.14	43.87	0.35	0.3	7.7	2.5	0.26	С
	Oct-23	23°C	7.30	247	364	5.1	14.0	178	136	42	235	2.9	20.0	430	220	79	0.13	0.12	38.2	0.31	0.29	8.8	2.5	0.29	В
	Nov-23	20°C	7.80	276	404	5.4	13.0	235	180	55	280	2.7	16.0	540	350	110	0.11	0.10	34.2	0.29	0.24	8.1	4.2	0.23	С
	Dec-23	19°C	7.30	253	385	6.2	9.0	255	194	61	265	2.4	12.0	430	350	110	0.15	0.16	30.20	0.27	0.23	7.6	2.6	0.21	В
												Ri	ver Kailas	Downstream bel	ind Sitarganj Indus	trial Area, US Nagar									
		_									_		1						_						_
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	) Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
S.No. 76	Month Jan-23	Temp	рн 7.60	TDS (mg/I) 256	EC (μ\$/cm)	DO (mg/l)		Hardness (mg/l)				BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss		Nitrite-N (mg/l)		Phosphate (mg/l)	Fluoride (mg/l) 0.32	Sodium (mg/l) 23.4	Potassium (mg/l)	sar 0.63	(DBU) Water Quality
			,				(mg/l)		(mg/l)	(mg/l)	(mg/l)					Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)		(mg/l)						(DBU) Water Quality Criteria
	Jan-23	13°C	7.60	256	338	9.0	(mg/l) 9.0	258	(mg/I) 160	(mg/l) 98	(mg/l) 272	2.2	12.0	84	70	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	0.03	(mg/l) 13.48	0.24	0.32	23.4	1.6	0.63	(DBU) Water Quality Criteria
	Jan-23 Feb-23	13°C 18°C	7.60	256 155	338	9.0 8.1	9.0 28.0	258 290	(mg/l) 160 220	(mg/l) 98 70	(mg/l) 272 284	2.2	12.0	84 94	70 79	Fecal Steptococcss (MPN/100 ml)  38	0.14 0.15	0.03	(mg/l) 13.48 50.69	0.24	0.32	23.4	1.6	0.63	(DBU) Water Quality Criteria B
	Jan-23 Feb-23 Mar-23	13°C 18°C 21°C	7.60 7.60 7.40	256 155 215	338 235 308	9.0 8.1 8.0	9.0 28.0 22.0	258 290 256	(mg/l) 160 220 204	98 70 52	(mg/l)  272  284  264	2.2 2.6 2.4	12.0 12.0 12.0	84 94 110	70 79 94	Fecal Steptococcss (MPN/100 ml)  38  33	0.14 0.15 0.12	0.03 0.08 0.06	(mg/l) 13.48 50.69 39.5	0.24 0.19 0.15	0.32 0.29 0.28	23.4 6.3 4.6	1.6 2.4 2.6	0.63 0.16 0.12	(DBU) Water Quality Criteria  B  B
	Jan-23 Feb-23 Mar-23 Apr-23	13°C 18°C 21°C 21°C	7.60 7.60 7.40 7.70	256 155 215 235	338 235 308 358	9.0 8.1 8.0 7.6	9.0 28.0 22.0 25.0	258 290 256 189	(mg/l) 160 220 204 105	98 70 52 84	(mg/l)  272  284  264  226	2.2 2.6 2.4 2.8	12.0 12.0 12.0 16.0	84 94 110 130	70 79 94 84	Fecal Steptococcss (MPN/100 ml)  38  33  21	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14	0.03 0.08 0.06 0.05	(mg/l) 13.48 50.69 39.5 44.0	0.24 0.19 0.15 0.24	0.32 0.29 0.28 0.30	23.4 6.3 4.6 6.9	1.6 2.4 2.6 1.4	0.63 0.16 0.12 0.22	B B B
	Jan-23 Feb-23 Mar-23 Apr-23 May-23	13°C 18°C 21°C 21°C 29°C	7.60 7.60 7.40 7.70 7.40	256 155 215 235 162	338 235 308 358 236	9.0 8.1 8.0 7.6 7.2	9.0 28.0 22.0 25.0 22.0	258 290 256 189 146	(mg/l) 160 220 204 105	(mg/l) 98 70 52 84 51	(mg/l) 272 284 264 226 155	2.2 2.6 2.4 2.8 2.8	12.0 12.0 12.0 16.0 20.0	84 94 110 130 170	70 79 94 84 130	Fecal Steptococcss (MPN/100 ml)  38  33  21  17	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19	0.03 0.08 0.06 0.05 0.07	(mg/l) 13.48 50.69 39.5 44.0 48.0	0.24 0.19 0.15 0.24 0.26	0.32 0.29 0.28 0.30 0.28	23.4 6.3 4.6 6.9 6.1	1.6 2.4 2.6 1.4	0.63 0.16 0.12 0.22 0.21	B B B B B
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23	13°C 18°C 21°C 21°C 29°C 31°C	7.60 7.60 7.40 7.70 7.40 7.70	256 155 215 235 162 215	338 235 308 358 236 308	9.0 8.1 8.0 7.6 7.2 7.4	(mg/l) 9.0 28.0 22.0 25.0 22.0 18.0	258 290 256 189 146 150	(mg/l) 160 220 204 105 95	(mg/l) 98 70 52 84 51 45	(mg/l)  272  284  264  226  155  82	2.2 2.6 2.4 2.8 2.8 2.6	12.0 12.0 12.0 16.0 20.0	84 94 110 130 170	70 79 94 84 130	Fecal Steptococcss (MPN/100 ml)  38  33  21  17  14  21	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19  0.17	0.03 0.08 0.06 0.05 0.07 0.25	(mg/l) 13.48 50.69 39.5 44.0 48.0	0.24 0.19 0.15 0.24 0.26 0.31	0.32 0.29 0.28 0.30 0.28 0.25	23.4 6.3 4.6 6.9 6.1 13.8	1.6 2.4 2.6 1.4 1.2 4.0	0.63 0.16 0.12 0.22 0.21 0.49	B B B B B B
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23	13°C 18°C 21°C 21°C 29°C 31°C 31°C	7.60 7.60 7.40 7.70 7.40 7.70	256 155 215 235 162 215 160	338 235 308 358 236 308 235	9.0 8.1 8.0 7.6 7.2 7.4	(mg/l) 9.0 28.0 22.0 25.0 22.0 18.0	258 290 256 189 146 150	(mg/l) 160 220 204 105 95 105	(mg/l) 98 70 52 84 51 45	(mg/l)  272  284  264  226  155  82  125	2.2 2.6 2.4 2.8 2.8 2.6 2.6	12.0 12.0 12.0 16.0 20.0 18.0	84 94 110 130 170 150	70 79 94 84 130 150	Fecal Steptococcss (MPN/100 ml)  38  33  21  17  14  21  27	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19  0.17	0.03 0.08 0.06 0.05 0.07 0.25 0.18	(mg/l) 13.48 50.69 39.5 44.0 48.0 46.74 35.0	0.24 0.19 0.15 0.24 0.26 0.31 0.20	0.32 0.29 0.28 0.30 0.28 0.25 0.19	23.4 6.3 4.6 6.9 6.1 13.8 2.6	1.6 2.4 2.6 1.4 1.2 4.0 4.3	0.63 0.16 0.12 0.22 0.21 0.49 0.11	B B B B B B B B
	Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23	13°C 18°C 21°C 21°C 29°C 31°C 31°C 30°C	7.60 7.60 7.40 7.70 7.40 7.70 7.40 7.50	256 155 215 235 162 215 160 118	338 235 308 358 236 308 235 176	9.0 8.1 8.0 7.6 7.2 7.4 7.2 6.8	(mg/l) 9.0 28.0 22.0 25.0 22.0 18.0 15.0	258 290 256 189 146 150 113	(mg/l) 160 220 204 105 95 105 75	(mg/l) 98 70 52 84 51 45 38	(mg/l) 272 284 264 226 155 82 125	2.2 2.6 2.4 2.8 2.8 2.6 2.6 2.8	12.0 12.0 12.0 16.0 20.0 18.0 20.0	84 94 110 130 170 150 170 210	70 79 94 84 130 150 120 140	Fecal Steptococcss (MPN/100 mil)  38  33  21  17  14  21  27  33	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19  0.17  0.15  0.24	0.03 0.08 0.06 0.05 0.07 0.25 0.18 0.38	(mg/l) 13.48 50.69 39.5 44.0 48.0 46.74 35.0 42.97	0.24 0.19 0.15 0.24 0.26 0.31 0.20 0.34	0.32 0.29 0.28 0.30 0.28 0.25 0.19	23.4 6.3 4.6 6.9 6.1 13.8 2.6 5.0	1.6 2.4 2.6 1.4 1.2 4.0 4.3	0.63 0.16 0.12 0.22 0.21 0.49 0.11 0.18	B B B B B B B B B B B B B
	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jul-23 Aug-23 Sep-23	13°C 18°C 21°C 21°C 29°C 31°C 31°C 30°C	7.60 7.60 7.40 7.70 7.40 7.70 7.40 7.50 7.60	256 155 215 235 162 215 160 118	338 235 308 358 236 308 235 176	9.0 8.1 8.0 7.6 7.2 7.4 7.2 6.8	(mg/l) 9.0 28.0 22.0 25.0 22.0 18.0 15.0 19.0	258 290 256 189 146 150 113 146 138	(mg/l) 160 220 204 105 95 105 75 110	(mg/l) 98 70 52 84 51 45 38 36 34	(mg/l) 272 284 264 226 155 82 125 165	2.2 2.6 2.4 2.8 2.8 2.6 2.6 2.8 2.6	12.0 12.0 12.0 16.0 20.0 18.0 20.0 20.0	84 94 110 130 170 150 170 210 350	70 79 94 84 130 150 120 140 240	Fecal Steptococcss (MPN/100 ml)  38  33  21  17  14  21  27  33  33	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19  0.17  0.15  0.24  0.20	0.03 0.08 0.06 0.05 0.07 0.25 0.18 0.38 0.29	(mg/l) 13.48 50.69 39.5 44.0 48.0 46.74 35.0 42.97 37.05	0.24 0.19 0.15 0.24 0.26 0.31 0.20 0.34 0.3	0.32 0.29 0.28 0.30 0.28 0.25 0.19 0.29	23.4 6.3 4.6 6.9 6.1 13.8 2.6 5.0 5.4	1.6 2.4 2.6 1.4 1.2 4.0 4.3 4.5 2.8	0.63 0.16 0.12 0.22 0.21 0.49 0.11 0.18 0.20	B B B B B B B B B B B B B B B B B B B
	Jan-23 Feb-23 Mar-23 Apr-23 Jun-23 Jun-23 Aug-23 Sep-23 Oct-23	13°C 18°C 21°C 21°C 29°C 31°C 30°C 30°C 25°C	7.60 7.60 7.40 7.70 7.40 7.70 7.60 7.70	256 155 215 235 162 215 160 118 111 128	338 235 308 358 236 308 235 176 183	9.0 8.1 8.0 7.6 7.2 7.4 7.2 6.8 7.0	(mg/l) 9.0 28.0 22.0 25.0 22.0 18.0 15.0 19.0 17.0	258 290 256 189 146 150 113 146 138	(mg/l) 160 220 204 105 95 105 75 110 104	(mg/l)  98  70  52  84  51  45  38  36  34	(mg/l) 272 284 264 226 155 82 125 165 156	2.2 2.6 2.4 2.8 2.8 2.6 2.6 2.6 2.6 2.8 2.6 2.7 2.8 2.6 2.8 2.6 2.7 2.8 2.6 2.8 2.6 2.8 2.6 2.8 2.6 2.8	12.0 12.0 12.0 16.0 20.0 18.0 20.0 20.0 16.0	84 94 110 130 170 150 170 210 350 280	70 79 94 84 130 150 120 140 240 220	Fecal Steptococcss (MPN/100 ml)  38  33  21  17  14  21  27  33  33  40	Nitrate-N (mg/l)  0.14  0.15  0.12  0.14  0.19  0.17  0.15  0.24  0.20  0.22	0.03 0.08 0.06 0.05 0.07 0.25 0.18 0.38 0.29 0.27	(mg/l) 13.48 50.69 39.5 44.0 48.0 46.74 35.0 42.97 37.05 38.5	0.24 0.19 0.15 0.24 0.26 0.31 0.20 0.34 0.3	0.32 0.29 0.28 0.30 0.28 0.25 0.19 0.29 0.25 0.25	23.4 6.3 4.6 6.9 6.1 13.8 2.6 5.0 5.4	1.6 2.4 2.6 1.4 1.2 4.0 4.3 4.5 2.8 1.3	0.63 0.16 0.12 0.22 0.21 0.49 0.11 0.18 0.20	B B B B B B B B B B B B B B B B B B B

S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
77	Jan-23	12°C	7.20	292	399	3.5	24.0	316	180	136	220	16.0	128.0	1600	920	430	0.13	0.05	47.46	0.25	0.28	25.7	4.6	0.62	Е
	Feb-23	19°C	7.30	352	529	2.9	15.0	224	160	64	190	25.0	160.0	>1600	920	540	0.16	0.05	15.89	0.20	0.34	20.3	10.3	0.58	Е
	Mar-23	22°C	7.10	408	625	3.0	17.0	212	156	56	170	23.0	144.0	>1600	1600	430	0.13	0.05	13.6	0.17	0.26	15.8	8.2	0.47	Е
	Apr-23	20°C	7.40	392	597	2.8	43.0	250	195	55	182	24.0	136.0	>1600	1600	350	0.17	0.09	28.0	0.22	0.24	42.4	8.6	1.16	E
	May-23	29°C	7.50	382	564	2.4	52.0	274	220	54	195	28	140.0	1600	920	430	0.13	0.10	20.0	0.18	0.20	5.4	0.9	0.14	Е
	Jun-23	33°C	7.20	315	456	2.4	44.0	170	145	25	150	26.0	132.0	920	540	240	0.15	0.13	17.32	0.25	0.21	40.7	8.8	1.35	Е
	Jul-23	29°C	7.40	262	396	4.1	33.0	195	158	37	175	12.0	84.0	1600	920	220	0.22	0.12	45.0	0.26	0.31	16.1	5.8	0.50	D
	Aug-23	28°C	7.00	326	420	4.0	28.0	205	174	31	250	14.0	92.0	1600	920	210	0.45	0.87	96.42	0.88	0.81	18.2	7.4	0.55	D
	Sep-23	29°C	6.80	285	408	4.0	30.0	185	145	40	245	15.0	92.0	920	540	170	0.35	0.52	62.2	0.52	0.63	18.9	3.6	0.60	D
	Oct-23	25°C	7.40	334	484	2.8	42.0	245	180	65	280	20.0	136.0	>1600	920	220	0.45	0.61	84.2	0.68	0.67	33.7	5.6	0.93	E
	Nov-23	22°C	7.20	338	498	2.4	45.0	285	208	77	325	24.0	160.0	1600	540	220	0.53	0.65	98.2	0.72	0.69	29.4	7.2	0.76	E
	Dec-23	20°C	7.00	333	491	1.6	51.0	354	255	99	285	30.0	196.0	1600	920	170	0.79	0.68	148.20	0.78	0.72	33.7	7.8	0.78	Е
													Rive	r Kosi D/S near Kh	airna- Ranikhet Brid	dge, Almora									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
78	Jan-23	10°C	7.24	145	210	8.6	21.0	230	122	108	178	1.2	5.0	130	79	12	0.12	0.05	7.66	0.26	0.29	9.1	2.0	0.25	В
	Feb-23	12°C	7.88	171	240	8.4	23.0	228	118	110	196	1.8	6.0	110	94	13	0.23	0.08	58.15	0.19	0.30	17.2	3.0	0.49	В
	Mar-23	14°C	7.18	160	230	8.4	21.0	214	110	104	188	1.4	5.0	120	110	14	0.16	0.05	52.35	0.19	0.25	9.8	2.6	0.29	В
	Apr-23	17°C	7.35	160	240	8.2	25.0	232	120	112	182	1.8	6.0	130	110	14	0.07	0.02	60.36	0.22	0.21	12.9	3.6	0.36	В
	May-23	20°C	7.61	151	230	7.6	27.0	234	128	106	178	2.2	6.0	120	94	11	0.13	0.03	47.43	0.19	0.28	11.8	3.1	0.33	В
	Jun-23	22°C	7.97	154	240	7.8	24.0	250	136	114	174	2.0	7.0	94	84	10	0.13	0.002	22.55	0.21	0.43	11.3	10.8	0.31	В
	Jul-23	19°C	7.24	143	210	8.0	19.0	228	118	110	156	2.4	7.0	120	94	6.8	0.05	0.01	37.39	0.22	0.43	10.4	1.8	0.30	В
	Aug-23	18°C	7.47	129	190	8.2	21.0	216	114	102	164	2.0	6.0	110	79	7.8	0.20	0.06	25.19	0.17	0.24	7.9	2.2	0.23	В
	Sep-23	17°C	7.13	149	210	8.4	24.0	218	112	106	176	1.8	5.0	120	94	6.8	0.18	0.05	22.43	0.15	0.20	7.2	1.9	0.21	В
	Oct-23	16°C	7.26	157	230	7.8	24.0	232	122	110	184	2.0	6.0	110	70	2.0	0.13	0.02	26.73	0.20	0.23	6.8	1.7	0.19	В
	Nov-23	15°C	7.67	160	240	8.0	21.0	224	118	106	172	1.6	6.0	120	94	2.0	0.10	0.04	30.46	0.18	0.27	6.4	2.0	0.19	В
	Dec-23	13°C	7.12	147	220	8.4	23.0	240	124	116	188	1.8	6.0	170	110	2.0	0.15	0.06	46.72	0.21	0.23	5.9	1.7	0.16	В
													R	iver Saryu D/S Ne	ar Bilona Bridge, Ba	geshwar									
S.No.	Month	Temp	рН	TDS (mg/l)	EC (μS/cm )	DO (mg/l)	Chloride (mg/l)	Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Fecal Steptococcss (MPN/100 ml)	Nitrate-N (mg/l)	Nitrite-N (mg/l)	Sulphate (mg/l)	Phosphate (mg/l)	Fluoride (mg/l)	Sodium (mg/l)	Potassium (mg/l)	SAR	Designated Best use (DBU) Water Quality Criteria
79	Jan-23	11°C	7.84	159	220	8.8	23.0	224	118	106	184	1.4	5.0	130	84	11	0.18	0.04	14.84	0.23	0.22	7.5	2.9	0.21	В

Feb-23	13°C	7.23	166	230	8.4	21.0	232	128	104	188	1.6	6.0	94	84	9.3	0.16	0.11	60.05	0.16	0.33	9.2	2.0	0.26	В
Mar-23	15°C	7.44	148	220	8.2	25.0	218	116	102	192	1.8	6.0	110	94	10	0.10	0.08	68.26	0.26	0.27	6.8	1.5	0.19	В
Apr-23	18°C	7.78	151	230	8.0	24.0	242	136	106	174	2.0	6.0	150	120	13	0.05	0.04	70.25	0.14	0.35	6.6	2.6	0.18	В
May-23	20°C	7.15	173	260	7.8	23.0	224	122	102	196	1.6	5.0	110	94	11	0.11	0.06	65.20	0.18	0.30	6.0	2.2	0.17	В
Jun-23	22°C	7.52	185	280	7.6	21.0	236	126	110	188	2.2	6.0	94	94	10	0.10	0.001	23.73	0.23	0.41	11.0	10.6	0.31	В
Jul-23	20°C	7.33	156	240	8.0	23.0	220	116	104	162	2.0	6.0	110	79	9.8	0.11	0.03	30.20	0.21	0.29	6.6	2.1	0.19	В
Aug-23	18°C	7.69	135	190	8.4	25.0	208	110	98	172	1.8	5.0	120	94	8.3	0.10	0.03	26.3	0.26	0.26	3.9	2.6	0.12	В
Sep-23	18°C	7.42	153	230	8.4	21.0	232	124	108	186	2.0	6.0	140	110	6.1	0.11	0.04	24.52	0.20	0.18	3.5	2.4	0.09	В
Oct-23	17°C	7.71	160	240	8.0	23.0	222	118	104	194	2.0	5.0	170	94	4.5	0.09	0.03	26.43	0.18	0.22	3.1	2.2	0.09	В
Nov-23	16°C	7.25	174	260	8.2	24.0	210	114	96	178	1.4	5.0	140	79	4.5	0.11	0.04	28.93	0.20	0.30	3.5	2.4	0.10	В
Dec-23	14°C	7.49	159	230	8.6	21.0	228	120	108	166	2.0	6.0	110	70	4.0	0.13	0.06	30.13	0.16	0.25	3.2	2.0	0.09	В