HYDRO-CONSULT ENGINEERING

CALCULATION FORM

Job: **Date: 2/15/2023** **Page**

Subject: Flood Frequency Analysi **Job No:** **Calc. By:**

Drg no: **Chkd. By:**

Recommended By:

Approved By:

River: Refernce: Applied Hydrology by VT Chow

Station No.

Location:

Total Catchment 645.8 Km2

Area below 5000 7.7 Km2

Year	Maximum flow	
	X = Qi	y = log(x)
51/52	123	2.088597
52/53	119	2.07664
53/54	377	2.576307
54/55	538	2.730693
55/56	255	2.407221
56/57	232	2.366311
57/58	157	2.196618
58/59	163	2.213358
59/60	151	2.179149
60/61	255	2.406881
61/62	92	1.963882
62/63	140	2.145342
63/64	91	1.957114
64/65	187	2.272422
65/66	236	2.373464
66/67	129	2.111699
67/68	242	2.383923
68/69	151	2.177715
69/70	220	2.341514
70/71	212	2.327083
71/72	116	2.063799
72/73	187	2.271333
73/74	528	2.72261
74/75	164	2.214099
75/76	176	2.245453
76/77	132	2.121934

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77/78	160	2.203944
78/79	190	2.279699
79/80	272	2.434586

Statistical Parameter

Mean	206.8	2.271	y_{mean}
Std. Devia	109.6	0.191	s
Coef Skev	2.0	0.761	C_s

Statistical Analiysis

			Jhimruk							
Return Period	Parameters		**Log normal**			**Log Pearsion III**			**Gumbel**	
	p	w	z	X_T	X	K_T	X_T	X	yT	xT
1	1.000	0.000	-2.516	1.791	**61.8**	-1.771	1.933	**86**		
2	0.500	1.177	0.000	2.271	**186.6**	-0.040	2.263	**183**	0.37	**189**
2.33	0.429	1.301	0.178	2.305	**201.7**	0.137	2.297	**198**	0.58	**207**
5	0.200	1.794	0.841	2.431	**269.9**	0.866	2.436	**273**	1.50	**286**
10	0.100	2.146	1.282	2.515	**327.4**	1.417	2.541	**348**	2.25	**350**
20	0.050	2.448	1.645	2.584	**384.1**	1.915	2.636	**432**	2.97	**411**
50	0.020	2.797	2.054	2.662	**459.6**	2.522	2.752	**564**	3.90	**491**
100	0.010	3.035	2.327	2.714	**518.0**	2.956	2.834	**683**	4.60	**550**
200	0.005	3.255	2.576	2.762	**577.9**	3.374	2.914	**820**	5.30	**610**
500	0.002	3.526	2.879	2.820	**659.9**	3.909	3.016	**1037**	6.21	**688**
1000	0.001	3.717	3.091	2.860	**724.3**	4.302	3.091	**1233**	6.91	**747**