

Bello folashade shakiratu

1711115011083

Civil Engineering

① SAGA GIS: It is a GIS platform oriented to spatial analysis. It is a simple but powerful tool with a big library focused on spatial analysis and characterization of basins.

② River modeling (HEC-RAS): It uses the gradient and topography to evaluate the flow depths, velocities and flooded zone. It is also useful to calculate sediment transport and water temperature.

③ IIRIC (International River Interface Cooperative) is a software developed with the purpose of offering a complete simulation environment of riverbed and the result can be exported and used to analyze & prevent disasters.

4) HEC-HMS: the hydrologic modeling system (HEC-HMS) is designed to simulate the hydrologic processes in basins.

5) SWAT: is a tool to evaluate soil and water at a basin scale. It is focused on precipitation-runoff modelling and transport of water and solutes through surface flow. It predicts the impact of soil management practices on water resources and sediments.



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
time	runoff	baseflow	direct runc	depth of d	2hr unit hydrograph	ordinate								
1	110	110	0	1.415	0									
2	120	110	10	1.415	7.067137E									
3	230	110	120	1.415	84.805653									
4	570	110	460	1.415	325.08833									
5	640	110	530	1.415	374.55830									
6	430	110	320	1.415	226.14840									
7	290	110	180	1.415	127.2084E									
8	200	110	90	1.415	63.604240									
9	160	110	50	1.415	35.335689									
10	120	110	10	1.415	7.067137E									
11	90	90	0	1.415	0									
12	80	80	0	1.415	0									

