

**Raja N. L. Khan Women's College (Autonomous)**

**PG 1<sup>st</sup> Semester End Examination, 2022**

**Semester : I**

**Post Graduate Dept. of Geography**

**Paper :106**

**Unit-11 : Hydrological Techniques (Practical)**

*(Use separate answer scripts for separate unit)*

1. Calculate rainfall depth in cm for the given basin (MAP 1) based on the rainfall recorded in different climatic stations using isohyetal method. 12

2. The landuse distribution under different Hydrological Soil Groups alongwith their corresponding CN values in a River basin are given in the following table. Estimate runoff from a rainfall of 50cm at the mouth this river basin following SCS-CN method. 08

	Curve Numbers				Area in the River basin (Sq Km)			
	HYDROLOGICAL SOIL GROUPS							
Land Uses	A	B	C	D	A	B	C	D
Settlement	51	68	79	84	8	4	24	7
Dense Forest	32	58	72	79	4	9	8	6
Cultivated land [contoured & terraced]	66	74	80	82	4	5	6	5
Marshy Land	89	92	95	98	9	8	2	-
Dry Fallow	77	86	91	94	3	4	8	5
Water Bodies	100	100	100	100	4	4	7	4

3. Laboratory note book and Viva voce

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# MAP 1

## Triveni River Basin

Rainfall in cm

