M.Sc. 3rd Semester Examination, 2019

REMOTE SENSING AND GIS

(*Application of Geo-informatics and Spatial Decision support system*)

(Practical)

PAPER — RSG-395

Full Marks : 25

Time : 2 hours

Answer **all** questions

The figures in the right hand margin indicate marks

1. Using SCS curve number (CN) method, compute the total runoff in a subwatershed from 8 days rainfall. The soil of that region is considered to be homogenous. CN values for individual land use and daily rainfall are given below :   8 + 2

Land Use	CN	Rainfall (cm)	
Cultivated Land	72	Day-1	20
Agricultural fallow	76	Day-2	25
Wet Land	95	Day-3	14
Dry fallow	77	Day-4	30
Settlement	80	Day-5	41
Dense forest	30	Day-6	2
Open forest	36	Day-7	26
Water body	98	Day-8	28

2. Estimate criterion weights using following pairwise comparison matrix :

Criterion	P	S	V
Price (p)	1	3	8
Slope (s)	1/3	1	5
View (v)	1/8	1/5	1

Measure consistency of the estimated weights.   4 + 6

3. Laboratory Note Book and Viva-voce .   5

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