M.Sc. 3rd Semester Practical Examination, 2015

REMOTE SENSING AND GIS

(Application of Geoinformatics and Spatial Decision Support System)

PAPER - RSG-305

(Practical)

Full Marks: 25

Time: 2 hours

Answer all questions

The figures in the right-hand margin indicate marks

1. Using SCS Run-off Curve Number (CN) method, compute the total run-off in a sub watershed from 7 day rainfall. The soil of that region is considered to be homogenous. Area and CN

(Turn Over.)

values for individual landuse and daily rainfall are given below: 10

Land Use	Area (hec)	CN	Rainfall (cm)	
Cultivated Land	115	72	Day-1	18
Agricultural Fallow	83	76	" -2	23
Wet Lands	22	95	" -3	12
Dry Fallow	50	77	" -4	28
Settlernent	25	80	" -5	39
Dense Forest	132	- 30	" -6	0
Open Forest	98	36	" -7	24
Water Body	8	98	" -8	26

- 2. Estimate the consistency ratio of the given (table-1) criterion weights based on pair wise comparison method. The Random Inconsistency (RI) index for n = 3 is 0.58.
- 3. Note Book + Viva-voce.

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