2017

M.Sc.

3rd Semester Examination

REMOTE SENSING AND GIS

PAPER—RSG-305

(PRACTICAL)

Full Marks : 25

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

[Application of Geo-informatics and Spatial Decision Support System]

Answer *all* questions.

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 homogeneous. Classify the subwatershed into following LULC Classes and compute the class area. CN values for individual Land use out daily rainfall are given below.

Land Use	*C N*	*Rainfall (cm)*
Cultivated Land	72	Day 1 – 22
Agricultural Fallow	83	Day 2 – 13
Wet Land	22	Day 3 – 28
Dry Fallow	50	Day 4 – 19
Dense Forest	30	Day 5 – 0
Open Forest	36	Day 6 – 24
Water Body	98	Day 7 – 25

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2. Estimate criterion weights through pair-wise comparison method using the given set of data. Calculate consistency of the estimated weights (RI = 0.58). 5+5

3. Laboratory note book and viva-voce. 5