M.Sc. 3rd Semester Examination, 2013

REMOTE SENSING AND GIS

PAPER — RSG-302(Gr. A + B)

Full Marks : 40

Time : 2 hours

The figures in the right hand margin indicate marks

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

Illustrate the answers wherever necessary

GROUP – A

[*Marks* : 20]

Answer any *two* questions

1. Discuss the role of Remote sensing technique for natural resource mapping and management. Explain the steps with suitable flowchart. 7 + 3

2. What are natural hazards ? How Geoinformatics plays an important role in Disaster management ? 10

3. Briefly discuss applications of Remote Sensing and GIS for planning urban areas. How site suitability analysis can be applied for city planning ?   5 + 5

4. Briefly explain different applications of Remote sensing and GIS techniques for managing agricultural activities. How multitemporal NDVI data can be used for identifying areas affected by agricultural drought ? Discuss with suitable flowchart.   5 + 5

GROUP – B

[*Marks* : 20]

Answer any *two* questions

1. What is spatial Multicriteria Decision Analysis (MCDA) ? How far GIS techniques are efficient for spatial multicriteria decision analysis ? Describe the framework for spatial multicriteria decision analysis with suitable graph.   2 + 3 + 5

2. What is criterion weighting ? Why criterion weighting is important for multicriteria decision making ? Briefly discuss the pairwise comparison method of criteria evaluation as proposed by Saaty (1980).   2 + 3 + 5

3. Discuss different components of Geographical Matrices with suitable graph. Differentiate between data and information. Explain Ranking method of criterion weighting.   5 + 2 + 3

4. Discuss very briefly about the architecture of SDSS.   10

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