M.Sc. 3rd Semester Examination, 2012

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. What is 'Geospatial Web Services', 'Web GIS' and 'Mobile GIS' ? How they could be applied in defence and internal security of accounting ?   4 + 6

2. (*a*) Explain the 'open GIS' and its utility briefly.

(b) Explain application of geoinformatics in environmental management. 5 + 5

3. What do you understand by 'Geomatics' and 'Geoinformatics' ? How Remote Sensing can be applied in agriculture. Discuss with the help of a flow diagram. 3 + 7

4. Explain elaborately with suitable examples on various components of geoinformatics and its application for natural hazards/disaster management. 10

GROUP – B

[*Marks* : 20]

Answer any *two* questions :

5. What do you mean by spatial decision support system ? State difference between probabilistic and deterministic decision making. Briefly discuss the concepts of 'uncertainty' in SDSS. 2 + 3 + 5

6. How SDSS is embedded with GIS ? What do you mean by error propagation in decision making ? Explain the method of Monte Carlo simulation to assess the error of some function. 3 + 2 + 5

7. How Multi Criteria Analysis technique helps to take the spatial decision ? Discuss the concepts 'Data Driven Approach' and 'Knowledge Driven Approach'. What do you mean by 'Suitability' in Multi Criteria Evaluation ? 3 + 5 + 2

8. Briefly discuss the Boolean logical combination and Algebraic combination method to take Multi Criteria Decision. 10