M.Sc. 3rd Semester Examination, 2010

REMOTE SENSING AND GIS

PAPER—X (RG-2103 & 2104)

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

PAPER—RG-2103

[*Marks*: 20]

Answer any **two** questions

1. Make a comparative analysis of sensing capabilities of the satellites launched in 20th century and in 21st century by Indian Space Research Organization (ISRO). 10

2. What do you understand by the term 'Government/Public GIS'? What role geoinformation can play in 'E-Governance' and how it could be advantageous over conventional techniques. 3 + 7

3. What is 'Geospatial Web Services', 'Web GIS' and 'Mobile GIS'? How there could be applied in tourism industry? 4 + 6

4. Discuss why the knowledge of 'Geoinformation' is necessary in Geo-technical engineering? How geophysical explorations and construction-site selections are today completely GIS dependent? 4 + 6

PAPER—RG-2104

(*Spatial Decision Support System*)

[*Marks*: 20]

Answer any **two** questions

1. (*a*) Give examples of spatial and non spatial analysis and modelling in view of planning and real world decision making process.

(*b*) On what basis the criteria for modelling are selected? 6 + 4

2. (*a*) What is database management system?

(*b*) What is the difference between the database management and model base management system?

(*c*) Briefly discuss about conceptual database model and object oriented database model? 2 + 3 + 5

3. (*a*) Define GIS from the technological and decision support perspectives.

(*b*) Explain the differences between a GIS and an SDSS.

(*c*) Discuss about the working process of spatial multicriteria decision analysis. 2 + 3 + 5

4. Write short notes on any *four*: 10

(*i*) Reclassification

(*ii*) Overlay analysis

(*iii*) Boolean operators

(*iv*) Spatial interaction matrix

(*v*) Decision alternatives

(*vi*) Decision analysis

(*vii*) MODM

(*viii*) Group decision making.
