#### 2018

# M.Sc. 1st Seme. Examination REMOTE SENSING & GIS

PAPER-RSG-102

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

#### RSG-102.1

Fundamentals of Geographic Information Systems
[Marks: 20]

Answer any two questions:

2×2

- 1. What is Topology in GIS?
- 2. Why is 'data' in GIS called georeferenced?

- 3. List the major applications areas of GIS.
- 4. Define 'spatial data'.

Answer any two questions:

2x4

- 5. What is the difference between raster and vector data?
- 6. Explain the different error in digitization.
- Discuss the nature and source of spatial and attribute data in GIS.
- 8. What are the different components of GIS?

Answer any one question:

1×8

- 9. (a) What is raster data model?
  - (b) How do you creat raster data models?
  - (c) What is mixed pixel issue in GIS? How it can be represented?

    2+2+(2+2)
- 10. Explain briefly the technology component of GIS.

#### RSG-102.2

## Digital Cartography

[Marks : 20]

### Group-A

Answer any two questions:

2×2

- 1. What is RGB color model?
- 2. How map lettering helps in Cartographic design?
- 3. What is the concept of digital cartography?
- 4. How the exaggeration technique is used in Cartographic design?

## Group-B

Answer any two questions:

 $2 \times 4$ 

- 5. Write a short note on qualitative and quantitative data.
- 6. Briefly explain the concept of large scale and small scale map with suitable example.

- 7. How the concept of digital cartography is utilized in GIS application?
- 8. What is Rubber sheeting? When this type of transformation is in use?

## Group-C

Answer any one question:

1×8

- Discuss about different types of variables in measuring geographic data variability.
- 10. What are the advantages and disadvantages of digital cartography?