

M.Sc. 3rd Semester Examination, 2022

REMOTE SENSING AND GIS

*(Application of Geoinformatics/Spatial Decision
Support System)*

PAPER – RSG-301.1 & 301.2

Full Marks : 40

Time : 2 hours

Answer all questions

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—RSG—301.1

(Application of Geoinformatics)

(Turn Over)

GROUP – A

Answer any two from the following : 2 × 2

- 1. What is Disaster and Mitigation ?**
- 2. What do you mean by DTM ?**
- 3. Illustrate Epicenter and Hypocenter.**
- 4. Which seismic zones mostly cover inter plate and intra plate regions of Indian peninsula ?**

GROUP – B

Answer any two from the following : 4 × 2

- 5. Discuss groundwater contaminations reported from eastern part of the country.**
- 6. Mention the application of geospatial techniques in rapid flood area delineation with suitable flow chart.**
- 7. How can RS and GIS technology be used for tourism management ?**

8. Mention the datasets required for dam site selection.

GROUP – C

Answer any one from the following : 8 × 1

9. Briefly discuss the role of geospatial technology in crop inventory and cropping system analysis.
10. Write down the major factors to be considered while fixing a canal system alignment.

PAPER—RSG-301.2

(*Spatial Decision Support System*)

GROUP – A

Answer any two from the following : 2 × 2

11. What are the main characteristics of SDSS ?
12. Mention the limitations of ranking method of criteria weighting.

13. What are the three phases of decision making ?
14. What do you mean by constraints in decision making process ?

GROUP – B

Answer any **two** from the following : 4 × 2

15. Write a short note on the types of decision problems and requirement of computer for their solution with suitable graph.
16. Explain the score range method of criteria standardization for cost and benefit criteria.
17. What are the principal components of SDSS ?
How GIS is interrelated with SDSS ?
18. How would you define the set of evaluation criteria ?

GROUP – C

Answer any **one** from the following : 8 × 1

19. Briefly explain the process of AHP with a suitable flow chart citing an example. 8
20. Write a short note on the elements of multicriteria decision analysis. Explain the framework of MCDA with a suitable illustration. 5 + 3
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