

Ph.D. GEOLOGY

Term-End Examination

June, 2019

RGYE-112 : GEOLOGICAL APPLICATIONS OF
REMOTE SENSING AND GIS

Time : 3 hours

Maximum Marks : 100

Note : (i) Answer any five questions.

(ii) All questions carry equal marks.

1. Discuss in detail applications of remote sensing in geomorphological studies. 20
2. Give a detailed account on the use of remote sensing and GIS in identifying potential mineralized zones. 20
3. Write an essay on recent Indian space programmes useful for geological studies. 20
4. Describe in detail the recent advances in remote sensing and GIS analysis and applications in geological disasters. 20
5. Describe the importance of integrated use of remote sensing and GIS for hydrogeological studies. 20
6. Discuss in detail digital image processing. 20

7. Write short notes on **any two** of the following : **2x10=20**
- (a) Sampling pattern
 - (b) Data integration
 - (c) Accuracy assessment
 - (d) Importance of ground truthing in geological research
8. Write short notes on **any two** of the following : **2x10=20**
- (a) DEM
 - (b) Spatial analysis
 - (c) Principal of GNSS operation
 - (d) Utility of visual image interpretation in identifying geological structures.
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