

**Ph.D. (GEOLOGY)
(PHDGY)**

Term-End Examination

00214

December, 2016

**RGYE-010 : FIELD AND LABORATORY TECHNIQUES
IN GEOLOGICAL APPLICATIONS OF REMOTE
SENSING AND GIS**

Time : 2 hours

Maximum Marks : 50

Note :

- (i) Answer any five questions.*
- (ii) Each question carries equal marks.*
- (iii) Give diagrams wherever required.*

1. Elaborate on the elements of visual image interpretation. How do these elements help us to interpret remote sensing imagery? 10
2. Describe the requirements of ground truthing with reference to remote sensing data analysis. 10
3. Discuss geometric correction in detail. 10
4. Elaborate on the techniques of image transformation. 10

5. Describe the steps in supervised image classification. Add a note on its significance. 10
6. Write an essay on the importance of remote sensing data in geological mapping. 10
7. Write short notes on any *two* of the following : $2 \times 5 = 10$
- (a) Image Interpretation Keys
 - (b) Data Conversion
 - (c) Georeferencing
 - (d) Image Fusion
8. Write short notes on any *two* of the following : $2 \times 5 = 10$
- (a) Data Formats
 - (b) Colour Composite
 - (c) Data Quality
 - (d) Field Safety Measures
-