

**M. SC. (GEOINFORMATICS) SEM-I (CBCS) (2013 COURSE) :**

**WINTER - 2017**

**SUBJECT: FUNDAMENTALS OF REMOTE SENSING**

Day: **Monday**  
Date: **20/11/2017**

Time: **10.00 AM TO 01.00 PM**  
Max Marks. 60

*W. 2017 - 0994*

**N.B.**

- 1) Answer any **FIVE** questions.
- 2) Figures to the right indicate **FULL** marks.

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- Q.1** a) Differentiate between active and passive remote sensing giving their advantages and disadvantages. (06)
- b) Explain the phenomena of Rayleigh scatter with its significance in remote sensing. (06)
- Q.2** a) Discuss the energy- matter interactions at the sensor system. (06)
- b) Explain an ideal remote sensing system with a neat diagram. (06)
- Q.3** a) Explain the factors controlling scale of an aerial photography. (06)
- b) What is photographic resolution? Explain the factors controlling it. (06)
- Q.4** a) Discuss X, Y location, size and shape as elements of image interpretation giving suitable examples. (06)
- b) What is difference between multispectral and hyperspectral scanners? Enumerate the uses of images obtained from them in different fields. (06)
- Q.5** a) Explain Stefan-Boltzmann law with its significance in remote sensing. (06)
- b) Write a note on mirror stereoscope. (06)
- Q.6** Write short notes on any **THREE** (12)
- a) Geometric characteristics of along track scanner imagery
  - b) Relief displacement in aerial photography
  - c) Sensor characteristics of Landsat 7
  - d) Applications of meteorological satellites

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