M. SC. (GEOINFORMATICS) SEM-II (CBCS) (2013 COURSE) :
WINTER - 2017
SUBJECT: ADVANCED REMOTE SENSING

Day: **Tuesday** Time: **02.00 PM TO 05.00 PM**
Date: **14/11/2017** Max Marks. 60

W-2017-0998

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

Q.1 **a)** Explain the working principle of a scatterometer. **(06)**

b) Explain the computation of azimuth resolution for radar imagery. **(06)**

Q.2 **a)** Give the salient features of AVIRIS. **(06)**

b) Write a note on Hyperion sensor. **(06)**

Q.3 **a)** Under what circumstances would you use hyperspectral images over multispectral images? Explain giving examples. **(06)**

b) Describe the tonal characteristics of radar imagery. **(06)**

Q.4 **a)** Discuss the canopy penetration ability of LIDAR. **(06)**

b) Draw a neat diagram showing geometry characteristics of radar imagery acquired by a SLAR system. **(06)**

Q.5 **a)** Describe the methodology giving a flow chart of LIDAR use in any urban application. **(06)**

b) What are the significant features of Advanced Microwave Scanning Radiometer (AMSR)? **(06)**

Q.6 Write short notes on any **THREE** **(12)**

a) Shadows in radar image
b) Time travel measurements in LIDAR
c) Pixel purity index
d) End member determination

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