

M. SC. (GEOINFORMATICS) SEM-II (CBCS) (2013 COURSE) :
WINTER - 2017

SUBJECT: DIGITAL IMAGE PROCESSING

Day: **Wednesday**
Date: **15/11/2017**

W-2017-0999

Time: **02.00 PM TO 05.00 PM**
Max Marks. 60

N.B.

- 1) Answer any **FIVE** questions.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1** a) Describe with a diagram the sensor characteristic for multispectral and hyperspectral remote sensing. (06)
- b) Explain the significance of correlation matrix in digital image processing. (06)
- Q.2** a) Diagrammatically describe BIL, BIP and BSQ. (06)
- b) Write a short note on atmospheric correction. (06)
- Q.3** a) What are the dominant factors that control leaf reflectance? Why are vegetation seen better in near infrared bands? (06)
- b) Describe the process of accuracy assessment in digital image analysis. (06)
- Q.4** a) Differentiate between NDVI and SAVI (06)
- b) Write a short note on atmospheric correction. (06)
- Q.5** a) Describe fuzzy classification and its advantages. (06)
- b) Describe any one change detection algorithm for digital image analysis. (06)
- Q.6** Write short notes on any **THREE** (12)
- a) Laplacian operators
 - b) Training sites
 - c) Intensity interpolation
 - d) Ground Control Points

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