Uva Wellassa University, Sri Lanka
End Semester Examination – February / March 2012

CST 471-2 – Remote Sensing and Image Interpretation

Time: Two (02) hours

Answer **all questions**

Illustrate your answers with sketch diagrams where necessary

1. Write illustrated notes on the followings.

i. Often used ranges of the Electro Magnetic spectrum in remote sensing

ii. Sun synchronous orbit VS geostationary orbit

iii. Across track scanning VS along track scanning in image acquisition

(12.5 marks)

2. Briefly explain the elements of image interpretation.

(12.5 marks)

3. Briefly explain followings.

i. Significance of Atmospheric Windows in Remote Sensing

ii. Image enhancement

iii. Application of filters in image processing

(12.5 marks)

4. Briefly describe each of the four types of "resolution" associated with remote sensing and explain what differentiates high versus low resolution.

(12.5 marks)

5. Briefly explain what atmospheric processes are responsible for blocking electromagnetic radiation from passing through the atmosphere as well as what ranges of the electromagnetic spectrum are principally affected by these processes.

(12.5 marks)

6. What is the main difference between passive and active sensors? Elaborate your answer with examples.

(12.5 marks)

7. Describe how the remote sensing data can be used in GIS applications.

(12.5 marks)

8. What is georeferencing? Describe the basic steps and methods used in georeferencing.

(12.5 marks)