



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES, MIHINTALE**

**B.Sc. (Special) Degree in Information Technology
Fourth Year Semester I Examinations – October/ November 2015**

ICT 4208- GEOGRAPHIC INFORMATION SYSTEMS

Time: One and a half (1 1/2) hours

Answer ALL (3) questions.

1.
 - a. "In Geometric Correction there are two similar processes that can help build the link between images and real world locations". Explain this statement using suitable examples. [10 marks]
 - b. Discuss the differences between Global Coordinate System and Universal Transverse Mercator coordinate systems [10 marks]
 - c. Explain the Universal Transverse Mercator parameters using illustrations [05 marks]

2.
 - a. List the data inputs for GIS and explain how it is used? [10 marks]
 - b. Define Global Positioning System (GPS) and how it is used in GIS [05 marks]
 - c. Explain the reasons for using data analysis and manipulation of data in GIS [10 marks]

3.
 - a. How can data be represented with Raster and Vector models ? [05 marks]
 - b. Describe the concept of Vector and Raster [10 marks]
 - c. Explain the Raster and the Vector models using illustrations [10 marks]
