



Uva Wellassa University, Sri Lanka
Faculty of Science and Technology
3Year 2nd Semester Examination –August/September, 2014
Mineral Resources and Technology Degree Programme
MRT 342–1 Remote Sensing and Geographic Information Systems Laboratory

Number of questions: Two (2) Part- I (Laboratory test) and Part-II (Structured questions)
Time allocation: Two (2) Hours
Answer All questions
Mark allocation: 40 mark
Return the question paper after the examination

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Part-I

1. Suppose you are a final year student collecting GIS data for your research project, in which you will prepare a land cover map for Mannar region. You have contacted different institutes and obtained from them only IKONOS satellite data that seemed relevant for your project. Now you need to examine that data and determine whether it will in fact be useful and find out existing land cover types in the study area. You are required to create different shapefiles for five (5) major land cover types. Your ultimate goal is to produce a land cover map for your research project.

Things to consider:

- Image data, shapefiles and reference maps are in a folder called "MRT_RS Lab" and located in the Z drive.
- Spatial resolution of IKONOS satellite data is 4 m and the data have been provided as four layers. Create a subset of the study area using given AOI.
- Make sure to digitise your coverage as accurately as possible.
- You need to prepare the map with appropriate map parameters such as legend, north arrow, scale bar, title, author information and scale for the display.
- Save your map in jpg. format with an appropriate resolution (i.e. 350 dpi).
- Save the subset of the image that have been created for this task and the final map in the Z drive.

mark)

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