ASSOCIATION OF CANADA LANDS SURVEYORS - BOARD OF EXAMINERS
WESTERN CANADIAN BOARD OF EXAMINERS FOR LAND SURVEYORS
ATLANTIC PROVINCES BOARD OF EXAMINERS FOR LAND SURVEYORS

SCHEDULE II / ITEM 5 **March 2005**

LAND INFORMATION SYSTEMS

Note: This examination consists of _9_ questions on _1_ pages. **Marks**

Time: 3 hours

Q. No		Value	Earned
1	Describe the three feature types of the vector data model. Explain how the vector data model differs from the raster data model in representing land (spatial) features.	10	
2	What is a relational database? List two advantages of using the relational database model in LIS. Show, with examples, how a relational database can be used to store the spatial and non-spatial data for land parcels.	15	
3	What types of data can one use to create a TIN? Define the role of breaklines in the construction of a TIN.	10	
4	In GIS network analysis, how does the traveling salesman problem differ from the shortest-path analysis? Define allocation as a type of spatial analysis. Use an example to explain location-allocation analysis.	15	
5	What are metadata standards? Explain, with examples, how the metadata standard is different from metadata itself. In what ways can metadata be useful to GIS users?	12	
6	How do GIS/LIS "analytical" functions differ from "retrieval" functions? You are asked to prepare a preliminary map that shows land parcels in a county that meet the following two criteria: (1) within 300 metres of streams, and (2) located in a conservation priority area. You are given two digital maps: one shows streams and the other shows the priority areas. Describe the procedure that you will use to complete the task.	13	
7	Describe different types of GIS/LIS users and their relationships. What are the major issues pertaining to people in GIS/LIS?	10	
8	What are the data issues you feel are very important in implementing a GIS/LIS today?	10	
9	How important is the Internet to land information management today?	5	
	Total Marks:	100	