CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS
ATLANTIC PROVINCES BOARD OF EXAMINERS FOR LAND SURVEYORS

SCHEDULE II / ITEM 5 — October 2007

LAND INFORMATION SYSTEMS

Note: This examination consists of 8 questions on 1 page. **Marks**

Time: 3 hours

Q. No		Value	Earned
1	Given the recent advances in Web mapping and Internet GIS, how close is GIS software to becoming a household item?	10	
2	Compare the use of raster and vector formats for representing geographic data in terms of data storage, data retrieval, and data analysis.	13	
3	a) The relational data model has been the most popular data model for DBMS. Explain, with examples, the relational data model. b) Show how a relational database can be used to store the spatial and non-spatial data for a land parcel.	10	
4	a) Explain the concept of "layer" in a geographic/land information system. Why do we organize data in layers in LIS/GIS? b) Show a list of layers and their attributes that would likely be included in a LIS.	15	
5	a) Explain the difference between GIS "analytical" functions and "retrieval" functions. b) What are the GIS "analytical" functions that could be used for solving LIS problems?	10	
6	a) What are the problems of sharing geographic data? b) How would a data interchange standard help data sharing?	15	
7	What are the components of spatial data quality, normally required by metadata standards?	12	
8	A proposal from a GIS software vendor has reached your desk claiming that installing its software on a trial basis to complete a 6-month pilot project of your choice is better than conducting a long needs assessment and testing different packages. If you don't like it at the end of the trial period, you can return it at no cost. If you are reasonably satisfied, they will bill for goods and services rendered and work with your staff to address any perceived limitations in the software. What do you think (e.g., pros and cons, recommendations, etc.)?	15	
	Total Marks:	100	