ASSOCIATION OF CANADA LANDS SURVEYORS - BOARD OF EXAMINERS
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SCHEDULE II / ITEM 5   **October 2004**

LAND INFORMATION SYSTEMS

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

Q. No	Time: 3 hours	Value	Earned
1	Briefly discuss the similarities and differences between a GIS and a LIS.	10	
2	What are the advantages and disadvantages of storing geographic data in a DBMS?	10	
3	What are the relative merits and limitations of using raster and vector representations (in terms of data storage, data retrieval, data analysis, etc.)?	10	
4	Describe the concept of layers in a geographic/land information system. Explain why we organize data in layers in LIS/GIS? Compile a list of layers and attributes that would likely be included in a LIS.	14	
5	Define the term topology and discuss its importance in GIS/LIS. Also discuss the trend of storing minimum amount of topological relationship data in a LIS database and computing the rest on the fly when required.	12	
6	"Digital terrain modeling is only a fancy term for making contour maps. That's it!" Is this statement true? Provide your comments with examples.	10	
7	Define the following terms: "accuracy", "precision", "error", and "uncertainty". Briefly describe five major components used to determine the "quality" of digital data when used in a data quality reporting scheme.	12	
8	Briefly describe the steps involved in designing a LIS/GIS database, starting with a conceptual database design. Also show how the entity-relationship model is used in the database design, using examples.	12	
9	What is metadata? Why is the metadata important to LIS?	10	
	Total Marks:	100	