ASSOCIATION OF CANADA LANDS SURVEYORS - BOARD OF EXAMINERS
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SCHEDULE II / ITEM 5
LAND INFORMATION SYSTEMS

February 2001
(1990 Regulations)
(Closed Book)

This examination consists of __8__ questions on __1__ page

Q. No. **Time: 3 hours** **Marks**

1.	Compare the use of raster and vector formats for representing geographic data in terms of data storage, data retrieval, and data analysis.	14
2.	Many geographic databases store points using coordinates based on a map projection such as the UTM. Do you think this is a legacy from paper maps or is it actually advantageous to do so?	12
3.	What are the causes for uncertainty in geographic data, and why is it important to store information on uncertainty?	12
4.	You are asked to automatically generate a map at 1:1 000 000 scale from a database created from maps at 1:10 000 scale. Do you think this is possible with the current technology?	12
5.	What are the problems of sharing geographic data? How would a data interchange standard help data sharing?	14
6.	A planar graph model for topology is based on a flat representation of nodes, arcs, and polygons. How is a map represented in the planar graph model stored in the computer? What are the advantages and disadvantages of the planar graph model?	12
7.	What is spatial metadata and how does Web technology help spread its use?	12
8.	A proposal has reached your desk claiming that the reasons for acquiring a GIS to replace a manual system are to cut staff and to reduce the revision cycle. What do you think?	12

Total Marks: 100