

**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 2006

LAND INFORMATION SYSTEMS

Note: This examination consists of 10 questions on 1 page.

Marks

Q. No

Time: 3 hours

Value Earned

1	Having read many textbook definitions of GIS, do you think there is a working definition that one can use to test if a certain piece of software is a GIS or just some kind of mapping, drafting, image processing, or database management software?	10	
2	With the aid of one or more diagrams, explain the concept and process of geocoding by address matching. Why is the use of standards for address data particularly relevant to geocoding?	8	
3	Discuss the advantages and disadvantages of adopting either a vector or a raster approach to data representation, management and analysis.	12	
4	Give examples of redundant data in a LIS database. What are the advantages and disadvantages of storing redundant data in databases?	10	
5	Why is it useful to include the conceptual, logical, and physical levels of data modeling in the design of a LIS database? How is the conceptual data model different from the logical data model?	10	
6	Explain the following terms with special reference to geographic data: <i>de facto</i> standard, <i>de jure</i> standard, application standard, data standard, technology standard, and professional standard. Support your answer with example standards used in United States and Canada.	12	
7	Discuss the sources of error in a typical GIS/LIS project in terms of "inherent" or "operational" sources.	8	
8	How do you "sell" the benefits of GIS/LIS within your organization to gain the support from the management and end users?	12	
9	Why do LIS projects fail? Outline and briefly discuss some common problems that cause the failure of a project.	10	
10	What is client/server computing? Explain how the Internet/Web has changed spatial information management systems.	8	
Total Marks:		100	