

**ASSOCIATION OF CANADA LANDS SURVEYORS  
BOARD OF EXAMINERS**

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**SCHEDULE III / ITEM 2  
PROPERTY RIGHTS SYSTEMS ON CANADA LANDS**

**March 2004**  
**(March 18, 1999 Regulations)**

This examination consists of 10 questions on 2 pages plus one map and one diagram. Both must be turned in with the examination paper.

<u>Q. No</u>	<u>Time: 3 hours</u>	<u>Marks</u>	
		<u>Value</u>	<u>Earned</u>
1	Describe the land tenure system that applies in: a) the Yukon b) the Northwest Territories c) Nunavut	15	
2	There is significant talk of a potential Mackenzie Valley gas pipeline to bring northern Canada's gas to southern markets. a) What are the various property rights systems for surface interests that such a project would have to deal with, assuming the pipeline follows the route shown on the attached map? b) Describe briefly the role of the National Energy Board, if any, for such a project.	20	
3	Describe the following as to type of lands and legislation: a) National Park b) National Wildlife Area	6	
4	What are considered "surrendered lands" under the Indian Act?	4	
5	Describe the prime purpose of a legal survey in Canada.	5	
6	In your own words, differentiate between the following pairs of terms: a) innocent passage AND transit passage, b) territorial sea straight baseline AND territorial sea normal baseline, c) islet AND rock, d) rock awash AND low tide elevation, e) exclusive economic zone AND continental shelf.	15	
7	a) Now that Canada has ratified the United Nations Convention on the Law of the Sea (November 7, 2003), what responsibilities does Canada have to the United Nations and in what time frame, for: 1) territorial sea baselines 2) Exclusive Economic Zone 3) an extended Continental Shelf. b) What benefits Canada can enjoy from ratification that it did not have prior to ratification?	6 2	

8	<p>On the attached diagram of a typical oceanic profile, locate and label the following:</p> <ul style="list-style-type: none"> <li>a) foot of the slope</li> <li>b) 200 n.m. limit</li> <li>c) 60 n.m from the foot of the slope</li> <li>d) “Gardiner Line”</li> <li>e) the 2500-metre isobath</li> <li>f) 100 n.m. from the 2500-metre isobath</li> <li>g) 350 n.m. from the Territorial Sea baseline</li> <li>h) the maximum outer limit of the juridical continental shelf as allowed by Article 76 of UNCLOS.</li> </ul>	12	
9	<ul style="list-style-type: none"> <li>a) Given the precise GPS geographic position near the outer limit of the Territorial Sea, the geographic position of the two islets that are the end points of the relevant straight baseline of the Territorial Sea, describe the step-by-step procedure to calculate the exact geodetic distance from that GPS position to the Territorial Sea baseline. Discuss: horizontal datum, plane and/or spherical trigonometry, map projection corrections, geometric properties of lines, etc.</li> <li>b) At what distance from the straight baseline, do you advise your client that the GPS position in a) above, is “without a doubt” within the Territorial Sea, and what are your criteria for selecting that distance.</li> </ul>	7  2	
10	<p>Compare the responsibilities as they relate to the offshore of <u>two</u> of the three following organizations:</p> <ul style="list-style-type: none"> <li>a) Canadian Hydrographic Service (DFO),</li> <li>b) Geological Survey of Canada (NRCan), and</li> <li>c) Legal Surveys Division (NRCan).</li> </ul>	6	
	<b>Total Marks:</b>	100	