

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

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

October 2009

This examination consists of 12 questions on 2 pages.
The examination includes a map, which is to be handed in.

Q. No	Time: 3 hours	Marks	
		Value	Earned
1.	Hugo Grotius (de Groot) and John Seldon lived at approximately the same time. What were their legal opinions then? Why are, or are not, their legal opinions still valid?	6 4	
2.	Canada's territorial sea is not completely defined. a) Identify one such area. b) Why do YOU think the territorial sea has not been defined in that area? c) What are the options open to the Canadian government to define the territorial sea in that area? d) State your recommendation for the territorial sea limit in that area. e) Why do you make that recommendation?	1 2 2 1 2	
3.	The International Court of Justice in the Nicaragua-Honduras case (2007) defined, in its Award, the maritime boundary as the geodetic azimuth of 70° 14' 41.25" from an initial point, whose position is defined by latitude and longitude. From there it continues along the geodetic line until it reaches the outer limit of the 12-nautical-mile territorial sea of island "A". [see attached map] It then traces this territorial sea limit round to the south until it reaches the equidistance line between the Honduran islands "A", "B" and "C" and the Nicaraguan island "E". The delimitation line continues along this equidistance line until it reaches the outer limit of the territorial sea of island "C". The line then traces the arc of the outer limit of the 12-nautical-mile territorial sea of island "C" round to the north until it again connects with the geodetic line, whereafter the line continues along that geodetic line. The islands are represented by single positions of specified latitudes and longitudes. a) On the attached map, draw the boundary that the ICJ awarded. (Marking includes precision.) b) Describe how you would calculate the position (latitude/longitude) of the intersection of the geodetic azimuth and the westerly 12 nautical mile arc. (E.g., in triangle XYZ, sides XY and YZ and angle Y are known. Therefore one can compute XZ.) 1 nautical mile ≈ 1 minute of latitude.	4 8	
4.	What special consideration of Article 76 of United Nations Convention on the Law of the Sea must Canada, Denmark and Russia comply with in order to claim the Lomonosov Ridge in the Arctic Ocean's seabed as part of their continental shelf?	3	
5.	The foot of the slope of the continental shelf occurs at 547 km from the nearest point on the territorial sea baseline; the 2500-metre depth contour occurs at 482 km offshore. a) What must be the depth of sedimentary rock of the seabed at 635 km offshore to be part of the coastal State's continental shelf? b) What is the maximum permissible distance offshore of the continental shelf along that radial line assuming the sedimentary rock is the required thickness at 635 km? [1 nautical mile = 1852 metres]	7	

6.	Assume Canada and the United States agree to third party arbitration of an unresolved maritime boundary.		
	a) What are the roles of the following federal government departments within the Canadian Team: Foreign Affairs, Justice, Fisheries & Oceans, Natural Resources, Indian Affairs & Northern Development, Environment, and Transport?	5	
	b) What are the academic knowledge, experiences, and skills required of a CLS who is assisting the Canadian Team?	5	
7.	Describe the administration of placer mining claims.	10	
8.	Describe the main purpose of a land survey in Canada.	6	
9.	What is the relationship between a land survey system and a registration system? Is this relationship different in a provincial system from that of a territorial system? If your answer is yes, describe the differences.	10	
10.	Describe “Commissioner’s Lands” and their administration.	7	
11.	Describe the administration of subsurface rights on Indian Reserves.	7	
12.	How does one obtain a quartz mining claim?	10	
	Total Marks:	100	