

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

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**EXAMINATION P2  
PROPERTY RIGHTS SYSTEMS ON CANADA LANDS**

**March 2016**

This examination consists of 14 questions on 3 pages. The attached map must be handed in.

<u>Q. No</u>	<u>Time: 3 hours</u>	<u>Marks</u>	
		<u>Value</u>	<u>Earned</u>
1.	Who did the following and when, or in what context, did that person do it? a) proposed the concept of the freedom of the seas b) divided the Atlantic Ocean between two countries c) used the phrase “common heritage of mankind” d) was the first to claim a continental shelf e) stated that the seas could be enclosed	5	
2.	On the attached map, draw the maximum allowable territorial sea limit from the normal baselines along the coast. Secondly, on the same map, draw straight baselines that meet the constraints of the United Nations’ Convention on the Law of the Sea (UNCLOS) yet are most advantageous to Canada. Thirdly, draw the maximum allowable territorial sea limit from these straight baselines. Drafting accuracy is important. (One minute of latitude is approximately 1 nautical mile)	10	
3.	Describe the geometrical construction of the international maritime boundary in the Gulf of Maine as done by the Chamber of the International Court of Justice. Diagrams would help.	10	
4.	Canada needs to submit its claim to a continental shelf in the Arctic Ocean to the UN Commission on the Limits of the Continental Shelf (CLCS). What areas beyond 200 n.m. are likely to be included in the submission? What other countries have, or will have, claims to any of these areas, and if so, which areas are so claimed?	5	
5.	Given the precise GPS geographic position near the outer limit of the territorial sea, the 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.	5	

6.	<p>A profile of the ocean is as follows. The distance to the nearest point on the baseline is listed in Column “A”, the depth of water at the location is listed on Column “B”, and the thickness of the sedimentary rock that is under the ocean at that location is listed in Column “C”. Determine the maximum extent of the juridical continental shelf that can be claimed by the coastal State according to the provisions of the United Nations Convention on the Law of the Sea (1982). (1 nautical mile = 1852 metres)</p> <table border="1" data-bbox="284 399 828 982"> <thead> <tr> <th>“A”</th> <th>“B”</th> <th>“C”</th> </tr> </thead> <tbody> <tr><td>0 km</td><td>0 metres</td><td>---</td></tr> <tr><td>50 km</td><td>100 m</td><td>---</td></tr> <tr><td>100 km</td><td>150 m</td><td>---</td></tr> <tr><td>150 km</td><td>150 m</td><td>---</td></tr> <tr><td>200 km</td><td>170 m</td><td>---</td></tr> <tr><td>250 km</td><td>200 m</td><td>---</td></tr> <tr><td>300 km</td><td>2200 m</td><td>---</td></tr> <tr><td>350 km</td><td>3800 m</td><td>3500 m</td></tr> <tr><td>400 km</td><td>4100 m</td><td>3000 m</td></tr> <tr><td>450 km</td><td>4300 m</td><td>2500 m</td></tr> <tr><td>500 km</td><td>4400 m</td><td>1100 m</td></tr> <tr><td>550 km</td><td>4300 m</td><td>1000 m</td></tr> <tr><td>600 km</td><td>4500 m</td><td>700 m</td></tr> <tr><td>650 km</td><td>4200 m</td><td>600 m</td></tr> <tr><td>700 km</td><td>4000 m</td><td>500 m</td></tr> </tbody> </table>	“A”	“B”	“C”	0 km	0 metres	---	50 km	100 m	---	100 km	150 m	---	150 km	150 m	---	200 km	170 m	---	250 km	200 m	---	300 km	2200 m	---	350 km	3800 m	3500 m	400 km	4100 m	3000 m	450 km	4300 m	2500 m	500 km	4400 m	1100 m	550 km	4300 m	1000 m	600 km	4500 m	700 m	650 km	4200 m	600 m	700 km	4000 m	500 m	10	
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7.	<p>Which part(s) of the Canadian government is/are responsible for:</p> <ul style="list-style-type: none"> <li>a) location of the Low Water Line (LWL)</li> <li>b) thickness of the sedimentary rock offshore</li> <li>c) location of the outer limit of the Exclusive Economic Zone (EEZ)</li> <li>d) negotiate a maritime boundary with the United States</li> <li>e) define petroleum exploration lease limits</li> </ul>	5																																																	
8.	What is a "special reserve"?	5																																																	
9.	Who owns mineral rights in National Parks?	5																																																	
10.	Where are mineral rights and oil and gas rights on an Indian Reserve registered?	5																																																	
11.	Define Aboriginal comprehensive claims.	5																																																	
12.	What land rights can non-First Nation people obtain on Indian Reserves and how does it work?	10																																																	
13.	What are Canada Lands?	15																																																	
14.	What are special management areas in Yukon?	5																																																	
	<b>Total Marks:</b>	100																																																	

