

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

**SCHEDULE III / ITEM 1
ACTS AND REGULATIONS RELATING TO SURVEYS OF CANADA LANDS**

October 2007
(March 18, 1999 Regulations)

Notice to Candidates:

This examination is based on the e-Edition to the Manual of Instructions for the Survey of Canada Lands.

This examination consists of 9 questions on 3 pages

Marks

Q. No

Time: 3 hours

Value Earned

1	A Canada Lands Surveyor, acting under instructions from the Surveyor General, makes a legal survey of an agricultural lease in the Yukon Territory. The parcel has 8 rectilinear boundaries monumented during the survey and a remaining boundary defined by the ordinary high water mark of a navigable lake. The position of the OHWM is determined by measuring perpendicular offsets from a single traverse line roughly parallel to it, which also provides a closure for the parcel between the rectilinear boundaries intersecting the OHWM.		
	a. What is the allowable angular misclosure for this survey?	4	
	b. Describe how you would distribute the angular misclosure for this survey.	3	
	c. If the total distance for the rectilinear boundaries and the closing line is 1,906.55 metres, compute the semi-major axis of the ellipse showing the 95% confidence region for the positioning of one monument relative to another.	5	
	d. Express the result in c. as an accuracy ratio.	3	
	e. To what accuracy must the natural boundary be located?	2	
2	Jurisdictions and authorities are ever-present factors in the work of a Canada Lands Surveyor. Give the proper name of the official or entity having statutory responsibility for the following;		
	a. administration of mineral rights in the Northwest Territories	2	
	b. authorization and direction of the survey of any creek or river baseline pursuant to provisions of the <i>Placer Mining Act (Yukon)</i>	2	
	c. amendment of Schedule 1 of the <i>National Parks Act</i> for the purpose of enlarging a park	2	
	d. issuance of a certificate of title pursuant to the <i>Land Titles Act (Yukon)</i>	2	
	e. administration, direction and control of surveys under the <i>Canada Lands Surveys Act</i> .	2	
	f. authorization of the survey of reserves pursuant to the <i>Indian Act</i> .	2	

3	Using a neatly drawn and fully labelled and dimensioned sketch for each, explain the three kinds of claims dealt with by the <i>Placer Mining Act (Yukon)</i> .	9	
4	Describe the purpose of an explanatory plan. What purpose can an explanatory plan not be used for?	8	
5	a. How many sections are there in Grid Area 47°00', 59°00' as prescribed in the Canada Oil and Gas Land Regulations?	3	
	b. Describe precisely the north boundary of Grid Area 60°20', 135°00.	4	
6	Describe the datum used for horizontal control surveys into which surveys of Canada Lands may be incorporated.	3	
7	Write the number and units as appropriate to respond to each of the following statements:		
	a. the number of claims that may be grouped together for the performance of work pursuant to the <i>Quartz Mining Act (Yukon)</i>	3	
	b. the ideal number of bearing trees made to reference a CLS monument placed in a forested area	3	
	c. the number of days a Yukon placer miner must wait before locating a second or subsequent claim within the valley or basin of the same creek or river pursuant to the <i>Placer Mining Act (Yukon)</i>	3	
	d. the number of blazes to be made on a suitable tree flanking the boundary of a parcel of Canada Lands being surveyed	3	
	e. the maximum recommended spacing between monuments on straight line boundaries of Canada Lands being surveyed	3	
	f. the total width of the statutory reservation to the Crown from a grant of territorial lands surveyed as a parcel straddling the Yukon - Northwest Territories boundary	3	
	g. the value of annual representation work required to be performed on a placer mining claim pursuant to the <i>Placer Mining Act (Yukon)</i>	3	
	h. the number of CLS short standard posts to be established on a fixed bottom-mounted offshore development platform whose position is being established pursuant to the Canada Oil and Gas Land Regulations	3	
	i. the minimum number of legal posts required to locate a mineral claim in accordance with the Canada Mining Regulations	3	
j. the number of curve geometry elements to be shown for a non-tangential curve in official field notes.	3		

8	What three sources are authorized for the naming of features shown on an official plan prepared pursuant to the <i>Canada Lands Surveys Act</i> ?	6	
9	As a Canada Lands Surveyor making a survey of a group of granted quartz mining claims in Yukon, you discover an unintended gore of "open" land between two tiers of parallel claims. The gore is approximately 18,000 feet long and between 150 and 250 feet wide. Show with a neatly dimensioned and detailed sketch how you would claim this land for your client.	8	
	Total Marks	100	0