CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E-3 ENVIRONMENTAL MANAGEMENT

March, 2013

	: This examination consists of 5 questions on 1 page.	Mai	<u>rks</u>
<u>Q. No</u>	Time: 3 hours	<u>Value</u>	Earned
1.	Across North America, cities have expanded and suburbia has spread outwards from city cores. Discuss, in general terms, the potential adverse environmental effects of this expansion of large areas of low density housing into previously undeveloped areas at the outskirts of urban cores, with respect to: a) Water quality	20	
	b) Water quantity	20	
	c) Biodiversity and wildlife habitat		
	d) Greenhouse gas emissions		
2.	Discuss how modern urban planners are coping with these issues:		
	a) Water quality	20	
	b) Water quantity		
	c) Biodiversity and wildlife habitat		
	d) Greenhouse gas emissions		
3.	Define the following:		
	a) Carbon sequestration		
	b) Critical habitat		
	c) Precautionary principle		
	d) Unconfined aquifer		
	e) LD50	20	
	f) In situ remediation		
	g) Conservation covenant		
	h) Oil-water separator		
	i) Sustainable development		
	j) Orphan site		
4.	The regulation of contaminated sites rests mainly with the Provinces and as such varies across Canada. All specify environmental site assessments that follow a broadly similar procedure. Discuss the phases or stages of investigation that are triggered when a property is suspected of being contaminated.	20	
5.	An actively growing Canadian town has decided to implement measures to minimize the siltation of its streams and waters. Accordingly it has enacted a bylaw requiring developers to draw up "Erosion and Sediment Control" plans. List the key points in such a plan, and describe how you would complete it.	20	
	Total Marks:	100	