CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E3 - ENVIRONMENTAL MANAGEMENT

March 2015

Note:	This examination consists of six questions on one page.	Maı	<u>'ks</u>
Q. No	<u>Time: 3 hours</u>	Value	Earned
1.	A friend wants to be a land developer and is contemplating purchasing a large tract of land that borders on a medium-sized river. The land gently slopes up from the river bank. There is a small tributary stream running through the property. The area has never been developed. He wishes to subdivide the property and build detached single family homes.		
	a) List the main constraints that he may face in developing this property.	10	
	b) How may they affect his plans?	10	
2.	Broadly explain the main steps that may be involved in an Environmental Assessment of a potentially contaminated site.	20	
3.	Conversion of land with native vegetation to residential communities with houses, roads, driveways and other impervious features accelerates the rate at which water runs into stormwater facilities. This may place a stress on existing infrastructure. List some ways that this acceleration of runoff can be minimized.	15	
4.	Environmental legislation in Canada resides mainly at the provincial level, but there are some Acts that apply across the country. Describe the objectives, rationale and effects (on land development) of these two acts:		
	a) Fisheries Act;	10	
	b) Species at Risk Act	10	
5.	Briefly define the following:		
	a) riparian ecosystem;	2	
	b) critical habitat;	2	
	c) biodiversity;	2	
	d) eutrophication;	2	
	e) turbidity	2	
6.	Identify which land development activities affect climate change and explain how the effects occur?	15	
	Total Marks:	100	