

CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E3 – ENVIRONMENTAL MANAGEMENT

October 2017

Note: This examination consists of 7 questions on 1 page.

Marks

Q. No

Time: 3 hours

Value Earned

1.	The Trudeau government has announced that it will phase out coal-power generation in Canada by 2030.		
	a) Keeping in mind that power will still be needed, how will this help Canada meet its targets under the Paris Climate Accord?	10	
	b) Assuming that thermal coal exports to Asian countries will continue, how will this affect the global environment? Explain.	10	
2.	Explain how the following Federal Acts affect land development in Canada:		
	a) Fisheries Act;	5	
	b) Species at Risk Act;	5	
	c) Canadian Environmental Assessment Act	5	
3.	Define the following:		
	a) Sustainable development;	3	
	b) Carbon sequestration;	3	
	c) Greenhouse effect;	3	
	d) Unconfined aquifer;	3	
	e) Contaminant plume	3	
4.	A large construction site is located near a sensitive stream containing fish habitat. What measures would you suggest to ensure that the stream does not experience high turbidity ?	15	
5.	A developer wants to build 35 townhouses on his newly acquired property. But a stream runs through the parcel and the local government requires that a riparian buffer be implemented. Because of this he can only build 17 townhouses and he is hopping mad about it.		
	a) What are the reasons behind the policy of setting riparian buffers?	7	
	b) In general, when might such measures be unreasonable?	8	
6.	In many Canadian towns and cities there a number of lots where gas stations used to be, some of them in prime real estate areas. Now they are fenced off and sitting vacant.		
	a) Explain why they might be in this condition. What is going on?	5	
	b) If you were to consider making an offer on one of these lots, what would you do as part of your due diligence?	5	
7.	Populations of many songbirds have declined in the last 10 to 20 years. Explain why this may be. [most songbirds are migratory and only spend summers in Canada]	10	
Total Marks:		100	