## CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

## E3 – ENVIRONMENTAL MANAGEMENT

October 2020

Note: This examination consists of 6 questions on 1 page. Read each question <u>carefully</u> and ensure your answer reflects the question.

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<u>Q. No</u>	Time: 3 hours	Value	Earned
1.	Discuss the SINGLE <b>most important</b> environmental effect of a) power from coal, and b) power from nuclear fission, in a modern Canadian context. Explain how these effects occur and how they affect the environment, including <b>for example</b> : air, water, climate, soil, ecosystems, wildlife and human health (but not necessarily all of these).	20	
	Briefly a) define the following and b) state why they are important in <b>analysing trends</b> in environmental quality in Canada.		
2.	a) Habitat		
	b) Permafrost	3 3	
	c) Hydraulic fracturing	3	
	d) Carbon storage	3 3	
	e) Algal blooms	3	
	f) Pollinator decline	3 3	
	g) Extirpation	3	
	h) Methane	3	
	i) Thermal pollution		
	j) Mine reclamation		
3.	In the US (but not yet in Canada), various agencies are participating in a movement to <b>dismantle dams on rivers</b> . What are the various reasons for doing this? What are the major problems associated with this movement?	15	
4.	Canada is an oil-rich nation, but has trouble getting this product to international markets. Discuss the relative environmental and safety merits of <b>transporting oil</b> by pipeline, rail, or highways.	15	
5.	Why are <b>plastics</b> an environmental problem? Consider local, national and global scales.	10	
6.	Many environmental scientists are concerned about <b>Ocean Acidification</b> . Why does this occur and why is it important?	10	
	Total Marks:	100	