

CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E3 - ENVIRONMENTAL MANAGEMENT

March 2016

Note: This examination consists of 6 questions on 1 page.

Marks

Q. No

Time: 3 hours

Value Earned

1.	<p>A national trucking company has purchased a 50 acre lot to park 400 of its vehicles. The lot has never been developed but has been cleared of vegetation. Some trucks will remain there for less than a day before being driven off, others may stay parked for 3 weeks. Adjacent to the lot is a small river, which is important not just for the resident fish but also as a biological link between two wetlands a few kilometres up and downstream.</p> <p>a) What are the potential environmental effects of this development, and b) How might these effects be mitigated?</p>	10 15	
2.	<p>Forests influence climate change because they store, or ‘sequester’ carbon that would otherwise be in the atmosphere. A treed area in a town in your province is slated to be cut down to make a recreational area with grassed playing fields.</p> <p>Discuss the implications of this development with respect to carbon. Are opponents correct in their assertion that it will promote global warming? Consider different scenarios.</p>	15	
3.	<p>How will these three Federal Acts (applicable across Canada), affect your work as a Professional Surveyor?</p> <p>a) Fisheries Act b) Species at Risk Act c) Migratory Birds Convention Act</p>	15	
4.	<p>A prospective buyer of a 100 acre brownfield lot knows there is a risk that it is contaminated by industrial use prior to abandonment in the 1960s. The site is heavily brushed in and has no visible evidence of the past land use. He asks for proposals from several environmental consulting firms to conduct a combined Phase 1/ Phase 2 assessment. He receives cost estimates mainly in the \$80,000 to \$100,000 level, but one comes in at \$25,000. What should he be looking at to evaluate these proposals? What are the risks if he chooses the lowest bid?</p>	15	
5.	<p>Why are wetlands important? Consider all aspects.</p>	15	
6.	<p>Define the following:</p> <p>a) red-listed species; b) riparian; c) turbidity; d) unconfined aquifer; e) conservation covenant.</p>	3 3 3 3 3	
	Total Marks:	100	