CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E3 – ENVIRONMENTAL MANAGEMENT

October 2018

	This examination consists of 6 questions on 1 page.	Mai	<u>rks</u>
Q. No	Time: 3 hours	Value	Earned
1.	All provinces and territories have regulations governing work in or around a watercourse. A logging company wants to build a bridge over a large stream. It will need permits to do this.	15	
	a) What kind of information do you think they will need to provide for such a permit?		
	b) How could such construction affect the aquatic ecosystem?		
	c) What kinds of mitigation would limit these effects?		
2.	The Kinder Morgan pipeline project is currently very controversial in Canada. It will involve twinning of an existing pipeline between Alberta and Vancouver. What are the main environmental concerns associated with this project?	15	
3.	A person is contemplating making an offer on a 10 ha parcel of land in an area currently zoned 'residential'. However, directly adjacent to this parcel, the land has been zoned as 'industrial' for 45 years. The parcel in question is covered in vegetation that suggests there has been some clearing in the past, but there is no obvious evidence of disturbance, such as excavation or past construction. a) As part of his 'due diligence', what should the person do prior to making an offer? b) What could happen if he failed to carry out his 'due diligence'?	15	
4.	What should a professional surveyor know about the following: a) Fisheries Act b) Species at Risk Act c) Canadian Environmental Assessment Act	15	
5.	The City in which you live is proposing to develop a 40 ha tract of land that has never been developed, and contains native vegetation (typical of your part of Canada). The only use that this land has sustained is trails mostly utilized by dogwalkers (who are passionately opposed to any development). Suggest what kind of studies you think the City should commission to ensure that any development is environmentally sustainable.	20	
6.	Songbirds in Canada are mostly migratory, flying south for thousands of kilometres in the fall and returning to nest in the spring. For most species their numbers are declining, in some cases, alarmingly so.	20	
	a) Suggest at least three reasons for this.		
	b) How could these three effects be mitigated?		
	Total Marks:	100	