

CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

E3 – ENVIRONMENTAL MANAGEMENT

March 2022

Note: This examination consists of 5 questions on 1 page.

Marks

Please read all questions carefully before answering

Q. No

Time: 3 hours

Value Earned

1.	<p>There is renewed interest in nuclear power, particularly in a new breed of small nuclear reactors (SMRs) to provide electric power in Canadian (and international) cities. These SMRs are much smaller than the earlier generations of nuclear power plants. From the perspective of energy sustainability and environmental quality, what are the:</p> <p>a) positive aspects of this development; and</p> <p>b) negative aspects?</p> <p>(Use points or numbers to organize your answer).</p>	20	
2.	<p>A development company hired an Environmental Consulting Firm to conduct a Phase 1 ESA on a property it hopes to purchase. The land was cleared of vegetation many years ago but is now overgrown with dense brush. It has remained vacant for decades. The Phase 1 report gave a green light for the company to purchase the property, but the Provincial agency reviewing the application is suspicious of the report. What in the report should the agency review to determine if it was completed with due diligence (that is, done to an appropriate and acceptable level of care)?</p>	20	
3.	<p>Urban planners in every major Canadian city have policies, goals, objectives and guidelines to ensure that they will be “environmentally sustainable” in the future. Select three of these measures and evaluate them in terms of their effectiveness (their costs and benefits) and practicality.</p>	20	
4.	<p>A local government, with help from Provincial agencies, needs to replace its aging sanitary landfill. It has selected 3 potential sites, all in semi-rural areas with low population density (mostly hobby farming). But local residents are strongly opposed to all three. They cite adverse environmental impacts. Assuming all the proposed sites are undeveloped:</p> <p>a) what are the major environmental impacts to the local community; and</p> <p>b) how could these impacts be mitigated?</p>	20	
5.	<p>The Canadian government has committed to planting 2 billion trees over the next 10 years. The project is known as 2BT.</p> <p>a) In general, what should be the goals of this program?</p> <p>b) Would it be effective in achieving this goal (and what could go wrong?)</p> <p>(Marks will be awarded for a thoughtful discussion of the merits of such a project, not for a detailed knowledge of this specific Federal program.)</p>	20	
Total Marks:		100	