

**CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS**

**E3 – ENVIRONMENTAL MANAGEMENT**  
**Please read each question carefully before responding**

**March 2021**

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

**Marks**

**Q. No**

Time: 3 hours

Value    Earned

|                     |   |                      |  |
|---------------------|---|----------------------|--|
| 1.                  | <p>Imagine if, instead of being a professional surveyor, you were an environmental consultant, and you were charged with carrying out a routine <b>Phase 1</b> ESA of a property.</p> <p>a) How you would complete this assignment, or what information would you collect?</p> <p>b) What liabilities would you (or your employer) carry after you submit your report?</p> <p>c) How would you minimize this liability?</p>   | 15<br><br>3<br><br>2 |  |
| 2.                  | <p>Just outside a small Canadian city, an old two-lane bridge is approaching the end of its design life, and needs replacement. The bridge spans a small river that supports a popular sports fishery. The water flow in the river varies substantially through the year.</p> <p>a) What are the main environmental concerns?</p> <p>b) How would you address them?</p>   | 10<br><br>10         |  |
| 3.                  | <p>Canadian cities vary in the amount of tree cover within their boundaries. Imagine that in your city or town there is a movement to support policies or measures to increase tree cover on public land (e.g.: streets, parks, civic centres).</p> <p>a) What are the benefits of increasing tree cover?</p> <p>b) What are the costs?</p>   | 10<br><br>10         |  |
| 4.                  | <p>In the worlds oceans many fish stocks have declined over the past several decades, some catastrophically.</p> <p>a) What the main reasons for this?</p> <p>b) With what measures can this trend can be halted or reversed?</p>   | 10<br><br>10         |  |
| 5.                  | <p>Imagine that you are surveying a vacant lot for a client who is planning to rezone and subdivide it for a mixed residential development. During the course of your work, you learn that this area has been identified by the Province as possible habitat for a red-listed species, in this case a species of bird; an otherwise non-descript sparrow, who uses the vegetation in one part of the property for nesting.</p> <p>When you report this to your client, he becomes enraged, saying that he is not going to forego this development project – and prospective profits - just for the sake of some stupid bird, and that this is just another example of over-regulation and government over-reach.</p> <p>What arguments can you make to support the protection of red-listed species in general, and this sparrow in particular?</p> | 20                   |  |
| <b>Total Marks:</b> |   | 100                  |  |