

**CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS**

**SCHEDULE II / ITEM 4**

**October 2009**

**LAND USE PLANNING AND ENVIRONMENTAL MANAGEMENT**

**Note: This examination consists of 10 questions on 2 pages.**

**Marks**

**Q.No**

**Time: 3 hours**

**Value   Earned**

1.	<p>You are a town planner for a Canadian municipality that has a population of 120,000 and a property tax base that has residential, commercial and light-to-medium industrial components. A resolution of the municipal council directs you to produce for councilors a comprehensive discussion paper identifying ways to address the slow decay of the downtown core area and migration of existing businesses to new mall developments, anchored by Big Box national stores, in the city suburbs. Inadequacy of parking for retail and office/professional businesses has been often cited as a major reason for this migration trend.</p> <p>Write in point form how you would approach this assignment and provide some options for consideration.</p>	10	
2.	<p>Economic viability, growth potential, quality of life and sufficient living, transportation and recreational facilities are commonly identified as the factors that determine the ideal size of a modern city.</p> <p>Outline your view of the ideal city size.</p>	10	
3.	<p>a. What factors determine the minimum outside radius of a cul-de-sac in a residential subdivision?</p> <p>b. What should the maximum length of a cul-de-sac roadway be?</p>	5 5	
4.	<p>What is the purpose of a spiral curve in highway design and construction?</p>	4	
5.	<p>Dr. Gro Harlem Brundtland of Norway established and chaired the World Commission on Environment and Development (WECD) for the United Nations.</p> <p>a. Identify the broad political concept that the Commission developed and provide the definition it gave to that concept.</p> <p>b. As a future professional surveyor, identify some actions you might take in your professional activities that would support the objectives of the Commission.</p>	5 5	
6.	<p>Mobile home parks, sometimes referred to as trailer parks, often suffer a negative image in comparison to residential subdivisions.</p> <p>Name some ways to improve this negative image.</p>	6	
7.	<p>What are the eight stages in the typical site planning cycle in which the designer is properly involved?</p>	12	
8.	<p>Identify four sources of indoor pollution and four sources of outdoor pollution.</p>	8	

9.	<p>Provide the definition of each of the following terms as they apply to site planning and environmental management:</p> <ul style="list-style-type: none"> <li>a. biosphere</li> <li>b. berm</li> <li>c. net density</li> <li>d. restrictive covenant</li> <li>e. zero lot line</li> <li>f. grade separation</li> <li>g. OCP</li> <li>h. angle of repose</li> <li>i. floor area ratio</li> <li>j. cluster design</li> </ul>	2 2 2 2 2 2 2 2 2 2	
10.	<p>A mineral exploration camp was established in a remote region in Canada under authority of a land use permit. The camp was initially operated on a seasonal basis and in later years on a year-round basis once an economic ore body had been confirmed. A production decision has been made and the mining company's engineers and planners commence planning for construction of a 200-person permanent camp in closer proximity to the mining and milling area.</p> <ul style="list-style-type: none"> <li>a. What factors would <u>you</u> take into consideration in determining the "closeness" of the permanent camp to the operations area?</li> <li>b. What abandonment and reclamation activities would you contemplate undertaking for the exploration camp once the permanent camp commences operation?</li> </ul>	5 5	
<b>Total Marks:</b>		100	