

**Association of Canada Lands Surveyors - Board of Examiners
Western Canadian Board of Examiners for Land Surveyors
Atlantic Provinces Board of Examiners for Land Surveyors**

**Schedule I - Item 7
Cadastral Studies**

February, 2000

1990 Regulations - Closed book

Time: 3 hours

This examination consists of 40 questions (worth equal marks) on nine pages. Be familiar with the entire exam paper before commencing. Circle the letter of the phrase or statement which *best* answers the question.

1. The legal doctrine of precedent requires a court to adhere to a previous decision with a similar fact pattern:

- a) in all situations
- b) only if the previous decision was from a court of equal jurisdiction
- c) only if the previous decision was from a higher court
- d) only if the previous decision was from the Supreme Court of Canada

2. What is the important component of a judgment known as the *ratio decidendi*?

- a) the legal principle of the case
- b) any supporting case law
- c) the jurisdiction and level of the court
- d) an observation on a legal question

3. The British North America (BNA) Act of 1867 established the powers of the two levels of government. Which levels were given the authority in dealings with property within the provinces?

- a) federal
- b) provincial
- c) municipal
- d) both *a* and *b*
- e) both *b* and *c*

4. A parcel may have which of the following interests existing in it at the same time?

- a) a leasehold estate
- b) a life estate
- c) a fee simple estate
- d) both *b* and *c*
- e) *a, b* and *c*

5. Zoning legislation typically includes controls that:

- a) establish some sort of plan for community development
- b) establish a series of zones within a community based on population trends
- c) establish guidelines for annexing new land into municipalities
- d) *a* and *c* only
- e) *a*, *b* and *c*

6. Under the common law:

- a) owners may do whatever they please with their property
- b) a balance between an owner's right to use their property and the public good is established
- c) an owner of property who uses their land in a manner injurious to a neighbour may be subject to damages towards that neighbour
- d) *b* and *c* only
- e) *a*, *b* and *c*

7. Which of the following might be considered a faulty description?

- a) The northeast quarter of Section nine (9), Township fifty (50), Range two (2) west of the Fourth Meridian, containing one hundred, sixty (160) acres, more or less
- b) Commencing at the point on the south bank of the Lusignan River; thence northerly a distance of 1000 metres; thence easterly a distance of 1000 metres; thence southerly to the bank of the Lusignan River; thence, westerly, following bank to the point of commencement
- c) Plan Brentwood Calgary 6 J.K.
Block fourteen (14)
Lot twenty-four (24)
excepting all mines and minerals

8. Descriptions of land often refer to registered plans. The advantages of this include:

- a) the size of the parcel is guaranteed by the plan measurements
- b) boundary marks can be more easily found as the plan will require each corner to be so marked
- c) visual inspection and resurvey of the parcel will not be required for each new transaction involving the parcel.
- d) none of the above

9. "More or less" should be used in descriptions of land when:

- a) a natural boundary is included in the description
- b) a boundary has actually been surveyed on the ground
- c) a boundary has not been surveyed on the ground
- d) *a* and *b*
- e) *a* and *c*
- f) none of the above

10. Which of the following characteristics of the Canadian Dominion Lands Surveys (DLS) System best denotes the major differences between it and the American system which influenced it?

- a) road allowances were wider and numbering of sections within a township began in the SE corner rather than the NE corner
- b) provision was made for road allowances, and the numbering of sections within a township began in the SE corner instead of the NE corner.
- c) road allowances were narrower and numbering of sections began in the SE corner instead of the SW corner
- d) none of the above

11. Which of the following is the correct designation of the parcel near Medicine Hat, Alberta, that is described as:

The northwest quarter of section nine (9), Township Thirteen (13), Range Five (5) west of the Fourth Meridian?

- a) NW-9-13-5-4
- b) NW-9-13-4-5
- c) 4-5-13-9-NW
- d) 5-4-13-9-NW

12. Under the various DLS systems, which of the following would not be the nominal dimensions of a township (chains N-S by chains E-W)?

- a) 489 x 489
- b) 483 x 486
- c) 486 x 483
- d) 480 x 480

13. A section, quarter section or legal subdivision are all considered to be surveyed when _____ corner(s) of the parcel has/have been monumented.

- a) 1
- b) 2
- c) 3
- d) 4

14. In the DLS system, which of the following would not have been used to mark a corner?

- a) wooden post
- b) squared tree
- c) four pits and mound with wooden or iron post
- d) circular trench with wooden or iron post

15. The delimitation of boundaries entails:

- a) the creation of the boundary by the proper actions of the owner
- b) the measurement and marking of the ground points
- c) the drafting of plans of survey
- d) *a* and *c*
- e) *a*, *b* and *c*

16. With the plan of subdivision, the pins placed in the ground become monuments of the boundary as a result of:

- a) the owner's intent to subdivide as stated on the plan
- b) the registration of the plan itself
- c) the action of the surveyor placing the pin
- d) *a* and *b*
- e) *a* and *c*
- f) *a, b* and *c*

17. The fundamental land management institution in Canadian society has been a system of tenure:

- a) based on the private ownership of resources
- b) that has focused the dominant decision-making powers in the hands of the individual land owner
- c) that is evolving to include increased government regulation
- d) *a* and *b*
- e) *b* and *c*
- f) *a, b* and *c*

18. The demand for new land information management tools can be partially attributed to a desire for:

- a) improved management of urban growth into surrounding areas
- b) increased access to recreational lands and preservation of wildlife areas
- c) increased environmental monitoring and protection
- d) *b* and *c*
- e) *a, b* and *c*

19. As a professional, the land surveyor must meet more than just the legal requirements of a boundary retracement and demarcation. The land surveyor is also:

- a) a public officer
- b) a final boundary arbiter
- c) a creator of boundaries
- d) all of the above

20. A land surveyor's practice is governed by the:

- a) laws of government (federal, provincial and municipal)
- b) professional association of the appropriate jurisdiction
- c) needs of his client
- d) *a* and *b*
- e) *a* and *c*
- f) *a, b* and *c*

21. Land surveyors must hold foremost in their mind when practising surveying:

- a) the public interest
- b) the needs of his client
- c) the "letter of the law"
- d) the regulations of the surveyors' association
- e) the standards established by the courts

22. Any individual may practise which of the following?

- a) the determination of the position of points or features on, over, or under the surface of the earth
- b) the survey of lakes, rivers or watercourses to determine their boundaries
- c) the determination of the form of the earth
- d) *a* and *c*
- e) *a*, *b* and *c*

23. In the Canadian Land Titles systems, the principle of indefeasibility of the registered titles derives, originally, from the fundamental principle of the Torrens-type systems:

- a) to verify the root of title and to maintain the priority of registered documents
- b) to conclusively represent the ownership of every parcel on record and to remove the need to check behind the register of title
- c) to prevent forged and incorrect documents from entering the system to the detriment of an innocent purchaser for value
- d) to guarantee that the priority of interests is based on the date of registration of the instrument and not on its date of execution
- d) to maintain the integrity of recorded instruments by defeating those not meeting the criteria for equitable redemption

24. If three owners hold a parcel of land in joint tenancy, the registered owners are entitled to:

- a) equal proceeds from the sale of the property in case the property reverts to the Crown for non-payment of taxes
- b) a unity of interests in respect of the share possessed, the instruments in which title to the land originates, and the extent of liability for liens and other encumbrances
- c) identical interests in respect of the share possessed over the entire property, a common instrument from which title is derived, the time over which the rights are enjoyed, and the type and extent of rights which are enjoyed
- d) equivalent interests in the property, so that the rights of the holder of the fee tail match those of the holder of the life estate.

25. In 1980, A granted a limited interest (in the nature of a profit a prendre) to B, allowing him to extract ten per cent of the gravel on Greenacre - A's 100-acre parcel - over a 25 year period. After the death of A due to excessive 'millennium' celebrations, which of the following statements best describes the rights (if any) which B enjoys?

- a) *B* then gains the right to extract the remaining 90 per cent of the gravel and the right to sell the initial 10 per cent which was granted to him
- b) With *A*'s death, *B* loses the right originally granted to extract 10 per cent of the gravel and gains the right of first refusal to purchase the rights to extract the remaining 90 per cent
- c) Because, in *A*'s will, he granted the ten acres from which *B* extracted his 10 per cent of the gravel to his eldest son, *B* loses all rights to the land
- d) The death of *A* does not affect *B*'s right to extract ten per cent of the gravel for the duration agreed to because the interest attaches to the property

26. In a typical modern land titles system, records of ownership are linked to information on valuation, land use, taxation, etc. What kinds of information which also affect land may not necessarily be reflected in the cadastral record?

- a) zoning regulations
- b) statutory rights of expropriation
- c) public health prohibitions in certain areas
- d) restrictions on building height due to air traffic
- e) environmental contamination on site
- f) all of the above
- g) *a, c and d*

27. In a typical deeds registry system, how are competing instruments claiming interests in the same parcel differentiated?

- a) the claim which includes the more accurate legal description prevails
- b) all other things being equal, the better right derives from the previously-registered instrument
- c) where an existing registered instrument purports to claim good title, a subsequent claim will succeed only if the subsequent claimant paid a higher price for the subject property
- d) the instrument more closely related to the original crown grant will prevail

28. Which three principles constitute the hallmarks of the Torrens-type systems of land registration in use in western Canada?

- a) reflection, insurance and curtain
- b) protection, mirror and curtain
- c) mirror, insurance and shield
- d) insurance, curtain & mirror

29. Land tenure is best described by the following statement:

- a) 'tenure' derives from the Latin word for patron, implying the protection of property for the benefit of another
- b) the doctrine of tenure in the English law developed from the time of the Norman Conquest when land was scarce and had to be protected and, hence, 'held onto.'
- c) 'tenure' derives from the Latin word for 'hold,' and originally described various relationships between landlord and tenant in feudal England
- d) rent payments for land in feudal England required military protection to ensure that large estates were not fragmented into small uneconomical 'holdings'

30. Which of the following best describes the characteristics of an easement?

- a) an easement is a restriction imposed upon the title of the dominant tenement
- b) an easement is the right of one owner of land to use another parcel for the benefit of his land
- c) easements require formal written agreements in order to be valid at law
- d) an easement may be gained through long uninterrupted use, followed by registration

31. A fiscal cadastre may be best described as:

- a) a database of geo-coded polygons with topological linkages which enable the projection, over time, of physical infrastructure requirements
- b) an information base for taxation of real and personal property which, when factored with the mill rate and area of each parcel, yields the market value of the property
- c) a guide to determining the optimal land use of proprietary land units based on market demand and the degree of parcel fragmentation
- d) an inventory of land parcels that provides the information required to determine the value of each parcel and the tax due on it

32. Which of the following best summarizes the juridical aspect of the cadastre?

- a) the recording of legal rights attached to the land, including the owner's name, the nature of his interest in the land, and a legal description of the land
- b) the recording of judicially accepted rights in land, including the current legal description of the parcel
- c) a record of the adjudicated boundary sanctioned by the courts as the conclusive record of ownership
- d) the archival material relating to ownership which is attached in a judicious manner to the legal database within a land-related information system

33. What are the distinguishing characteristics of the multipurpose cadastre?

- a) it is based on the cadastral parcel; it relates the parcel to multiple data themes
- b) it accurately represents land use and environmental data; data integrity prevents overlapping parcels
- c) where possible, it contains complete records for all parcels in a defined area; ensures accessibility of data
- d) *a and b*
- e) *c and a*
- f) *c and b*

34. In the process of assessing the existing survey fabric, a survey party find that a previous field crew had already been on site and had dug-up several monuments on the streetline. The crew complete their survey and, after they leave the site, a man jogging beside the sidewalk stumbles into one of the monument holes and fractures his tibia in four places. Which of the following statements best describes the licensed land surveyor's exposure to liability?

- a) Because the surveyor had a contract with the owner of the property, and did not have a contract with passers-by, he is not responsible for damages suffered by the jogger.
- b) The surveyor is not responsible for the condition of the site after his survey is done. The work of a previous survey party is their responsibility, as is their failure to fill in the monument holes.
- c) The surveyor and, by extension, her crew, owe a duty of care to others because of their special training in land surveying and, therefore, knowing of a situation that might cause harm to others, should have acted to prevent the mishap by filling in the holes.
- d) The passer-by exercised poor judgment by walking outside of the concrete sidewalk and, therefore, must suffer the unfortunate consequences of his actions without legal recourse.

35. Which of the following best illustrates the difference between liability in contract and liability in negligence?

- a) A land surveyor is liable for certain consequences if he fails to complete a survey for which he signed a written contract, but he is not liable in respect of non-completion of work which was initiated simply by a phone call and no written document.
- b) Where a land surveyor complies with the ordinary standards of the profession (i.e., he works prudently, properly and reasonably just as any other surveyor would) and a mistake occurs in the work, he may not be liable in negligence. However, he may be liable in contract if he failed to complete a task expressly required by the contract.
- c) Liability in negligence is considerably less damaging to a firm's reputation than liability arising from non-completion of items of work specified in a written contract.
- d) A surveyor who, without ill intent, overlooks certain requirements specified in his province's *Land Survey* statute cannot be accused of negligence.

36. Which of the following is a true statement about a surveyor's liability for his actions?

- a) Surveyors who have professional liability insurance are thereby insulated from insurance claims and need not worry about actions against them for negligence.
- b) All surveying associations in Canada require practitioners offering surveying services to the public to demonstrate proof of financial responsibility for the possibly damaging consequences of their work.
- c) When a surveyor issues a copy of an old plan prepared by his firm, he cannot be held liable for consequences if the plan is wrong and someone relies on the information depicted on it to his detriment.
- d) If a client demands that a survey be completed urgently under difficult field conditions, and the survey is incorrect, the surveyor is not liable and the client has no remedy because her inappropriate demands precipitated the error.

37. Following completion of an incorrect survey, a client discovers that he has suffered damages as a consequence of the surveyor's work. Commencing at that date, within what period of time must the injured party commence an action in negligence for damages? (Based on the references, state the period generally accepted in the common law provinces).

- a) 6 months
- b) 6 years
- c) 10 years
- d) 4 years

38. Survey systems other than the DLS system obtain in other parts of Canada. Which of the following statements best conveys a comparison between DLS townships and the township surveys of Ontario?

- a) The exterior boundaries of early Ontario townships are run in the cardinal directions and, reflecting great foresight for difficulties in retracement, were all marked with steel posts.
- b) The DLS survey fabric is controlled by magnetic, rather than astronomic, directions and consequently contains many jogs and correction lines unlike the later Ontario systems.
- c) The DLS 'point-line' definition of surveyed lines is well-suited to flat country, such as in the Canadian prairie but would be difficult in Ontario, owing to its varied terrain.
- d) The Ontario systems, by and large, due to the abundance of forest cover, could not depend on a 'point-to-point' definition of surveyed lines and typically require that lines not run in the original survey be run on a 'governing bearing.'

39. Early survey systems in the Atlantic provinces are best characterized by which of the following?

- a) There was no extensive, rigorous, survey system applied to the Atlantic provinces.
- b) Surveys were poorly controlled, even into this mid-century.
- c) Survey statutes were not popular with the surveying profession, which lobbied against them.
- d) It was difficult to enforce standards of survey due to poor communication networks.
- e) *a* and *c*

40. Societal trends away from viewing land simply as a commodity and towards a 'stewardship' mentality will impact cadastral surveying in the following way:

- a) Land development projects will be scrutinized more carefully for environmental impact as a tighter focus is brought to polluted ecosystems.
- b) The surveying profession will have to strategically adapt the services they provide to the market's changing needs.
- c) Government regulation of land development will make it more difficult to operate cadastral surveying companies.
- d) *a* and *c*