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Second Efficiency Bar Examination for Officers in Class II, Grade II of the Sri Lanka Surveyors' Service (SLSS) - 2018

(01) Land Law and Surveying of Lands

Three hours

Answer only five questions.

- 1. (i) What are the information to be included when preparing the schedule of lots in court commission surveys? (06 marks)
 - (ii) What are the actions to be taken, when more than one person claim for one lot in Acquisition surveys? (08 marks)
 - (iii) What are the general practices to be applied on surveying reservations? (06 marks)
- 2. (i) What is the planimetric positional uncertainty of a detail point on general boundaries or a mix of fixed and general boundaries or non-identical fixed boundaries? (03 marks)
 - (ii) What is the positional accuracy that should be maintained in a cadastral map area on a subsequent surveys when establishing boundary points? (03 marks)
 - (iii) What action to be taken in field verification of 1:50,000 topographic sheets on administrative boundaries, names of places & other details? (08 marks)
 - (iv) What are the requirements and limits in boundary data collection, in detail surveys? (06 marks)
- 3. (i) What are the main steps in Land Title Registration? (06 marks)
 - (ii) Who is eligible to carry out cadastral surveys for the purpose of Land Title Registration? (04 marks)
 - (iii) What is the Act and Section for preparation of Cadastral maps for the Land Title Registration? (04 marks)
 - (iv) Once the Cadastral map is completed, what are the amendments to be made to old records? (06 marks)
- 4. (i) What is the procedure to be adopted to send the application of acquisition to District Survey Office? (04 marks)
 - (ii) What are the steps to be taken to perform surveys under Land Acquisition Act in Cadastral Map completed area? (08 marks)
 - (iii) What are the new techniques used for surveying and mapping activities in the Survey Department at present? Describe them in brief. (08 marks)

- 5. (i) What are the structural changes occurred in Survey Department with the enactment of survey act? (08 marks)
 - (ii) What section of the title registration act to be followed for subsequent survey in cadastral survey area?

(04 marks)

- (iii) What action to be taken on obstruction of land survey according to survey act? (08 marks)
- 6. (i) What are the Ordinances to make provision for the grant and disposition of state lands in Sri Lanka? (03 marks)
 - (ii) What is the Act to provide for the vesting in the state, of agricultural or estate land which is vested in the Land Reform Commission under that Land Reform Law? (03 marks)
 - (iii) What are the Guide Lines for Establishing of Survey Control Points with Global Navigation Satellite System (GNSS) Technology? (08 marks)
 - (iv) What are the type of accuracies to be maintained in control traverses in Cadastral Surveys? (06 marks)

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Second Efficiency Bar Examination for Officers in Class II, Grade II of the Sri Lanka Surveyors' Service (SLSS) - 2018

(02) Survey Management

Answer five questions only.

Three hours

- (i) Compare 'Laser scanning' and 'Total station' technologies used in surveying in surveyor's point of view. (05 marks)
 (ii) Compare Laser scanning and Total station in administrative point of view. (05 marks)
 (iii) How do you use LiDAR technology for updating hydrographical features for mapping? (05 marks)
 (iv) How do you use 'parcel fabric' concept to manage your survey work efficiently? (05 marks)
- 2. (i) What is the 'land administration' meant by? (05 marks)
 (ii) When designing an information system, what are the key factors to be considered? (05 marks)
 (iii) Write five benefits of a good land administration system. (05 marks)
 (iv) Write down the importance of public land inventory/register. (05 marks)
 3. (i) Write down five land conflicts commonly observed in the society. (05 marks)
 (ii) How land administration support to minimize land disputes? (05 marks)
- 4. (i) Write down five spatial data capturing methods. (05 marks)

(iii) What is the role of a surveyor to minimize land disputes?

- (ii) Compared to Aerial photographs, write five advantages of using satellite images? (05 marks)
- (iii) Propose a methodology to be adopted where satellite signals or communication signals are **not** available while using CORS technology. (05 marks)
- (iv) Write down advantages and disadvantages of fixed boundary and general boundary. (05 marks)
- 5. (i) A survey requisition is received for "settlement of land and preparation of a plan".

 This Temple and Devala land was encroached and occupied by people for a long time. Briefly explain how to attend this survey requisition. (05 marks)
 - (ii) If a private landowner intends to allocate a land owned by him for government use, briefly state all steps involved in this process for a successful transaction. (05 marks)
 - (iii) What are the main five steps explaining the state land alienation process under Land Development Ordinance? (05 marks)
 - (iv) What is 'land consolidation' meant by? (05 marks)

(10 marks)

6. (i) When issuing farm lands for development for the public, soil erosion should be avoided and underground water should be preserved. Mention **three** aspects that should consider on this regard.

(05 marks)

(ii) Define 'National Spatial Data Infrastructure (NSDI)'.

(05 marks)

(iii) The millions of points generated when collecting data by LiDAR survey. This may cause complications in compilation. It is not possible to store all this data in the internal memory, even in a most sophisticated computer. What kind of precautions can you get to manage this situation?

(05 marks)

(iv) What is the most effective advantage of using LiDAR technology for data capturing to improve the timeliness of data in mapping?

(05 marks)