

සියලු ම හිමිකම් ඇවිරිණි]
 முழுப் பதிப்புரிமையுடையது]
 All Rights Reserved]

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව / இலங்கைப் பரீட்சைத் திணைக்களம் / Department of Examinations, Sri Lanka

Second Efficiency Bar Examination for Officers in Class II, Grade II of the
 Sri Lanka Surveyors' Service (SLSS) – 2017(2018)

(02) Survey Management

Three hours

Answer only **five** questions only including question No. 1.

1. (i) Assume that you are going to establish a simple land administration system and mention the most important components to be considered before commencing it. (07 marks)
- (ii) Explain **three** of above components in relation with existing system in the Survey Department. (06 marks)
- (iii) Explain how new technology and Information Technology has been adapted by new survey professionals to improve the efficiency of current survey work. (07 marks)
2. (i) What are the main functions in the Survey Department of Sri Lanka? (05 marks)
- (ii) What are the main characteristics to be specially maintained while achieving above functions? (05 marks)
- (iii) Mention the main responsibilities of a surveyor in the survey department of Sri Lanka and point out what actions you would take to achieve those. (05 marks)
- (iv) It is observed that the printed version of an approved plan differs from the archived digital data. Describe how a surveyor can manage his work process to avoid this issue? (05 marks)
3. Assume that as a surveyor you are travelling for a field work by the department vehicle and it was met with an accident.
 - (i) Explain the responsibility of a surveyor at the time of an accident and the actions that you have to be taken. (08 marks)
 - (ii) If you are the officer in charge of the vehicle and you were **not** in the vehicle, when the accident occurs, explain the responsibilities and actions to be taken at that time. (10 marks)
 - (iii) Who will appoint the final inquiry board at a vehicle accident? (02 marks)
4. (i) You are given a 1:50 000 map sheet for field revision. Without following normal procedures, you are instructed to do this within a short period of time. Explain the procedure you are going to adapt to complete this task. (03 marks)
- (ii) "The Surveyor is productively engaged in his task". Briefly explain this statement. (05 marks)
- (iii) If you are given all available digital topographic data in the Survey Department of a particular area,
 - (a) Name the indicators to perform the analysis in order to find suitable lands for residential purpose. (05 marks)
 - (b) Propose a methodology to find out the most economical and suitable land for residential purpose without going to the field. (07 marks)

(See page two)

5. (i) "The Survey Department maintains several databases currently. Therefore day to day work has become efficient in the department."
- (a) Write down **five** points to emphasize above statement and explain them with examples. (05 marks)
 - (b) Mention **five** data bases currently operation in the Survey Department. (05 marks)
- (ii)
- (a) As a professional surveyor, write **three** advantages of using printed version of the field book in managerial perspective. (05 marks)
 - (b) Name **three** advantages of keeping field notes only in digital format. (05 marks)
6. (i) As a professional surveyor, Explain the steps you are going to take in each of the following situations.
- (a) You have assigned only one survey field assistant to do an outer boundary survey of less than $\frac{1}{2}$ Hectares area.
 - (b) When you are well prepared for a certain survey work, you are informed that the assigned vehicle for field work has got some urgent repairs.
 - (c) You have observed that in a land acquisition for road expansion, land owners highly protested at the day of survey.
 - (d) The Surveyor's instrument has seriously damaged in the field. (02×4=08 marks)
- (ii) Every surveyor is responsible for maintaining quality of their survey work. What are the methodologies that can be used by a surveyor to maintain the quality of digital data? (05 marks)
- (iii) Propose a methodology that can be adapted to check completeness of a surveyors plan. (03 marks)
- (iv) What are the steps to be taken by a surveyor for the safety of digital data? (04 marks)

* * *

සියලු ම හිමිකම් ඇවිරිණි]
முழுப் பதிப்புரிமையுடையது]
All Rights Reserved]

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව / இலங்கைப் பரீட்சைத் திணைக்களம் / Department of Examinations, Sri Lanka

Second Efficiency Bar Examination for Officers in Class II, Grade II of the
Sri Lanka Surveyors' Service (SLSS) – 2017 (2018)

(01) Land Law and Surveying of Lands

Answer all questions.

Three hours

1. (i) (a) Under what section and Law of Sri Lanka that a Court Commission is issued to Surveyor General by District Courts?
(b) How to mark the boundaries in court commission surveys?
(c) To whom the marked boundaries are pointed out? (06 marks)
- (ii) Explain in detail how to make plans, fixation, lotting and schedule of lots in Court Commission surveys. (08 marks)
- (iii) (a) In which directives the application of acquisition will send to District Survey Office?
(b) What actions to be taken by Surveyor, if more than one claim is involved for a particular land? (06 marks)
2. (i) (a) What are the functions of the Surveyor General according to the Survey Act of Sri Lanka?
(b) In what section of the Survey Act, the powers of the Surveyor General were delegated to any other officer in the Survey Department? (08 marks)
- (ii) (a) Mention the main steps in Title registration and the responsible organizations for each step.
(b) What is the section of the Registration of Title Act, the Surveyor General will prepare cadastral maps? (06 marks)
- (iii) What is the role of the Surveyor in investigation and landmarking of land parcel boundaries in cadastral survey area? (06 marks)
3. (i) (a) What are the modern techniques used at present for surveying and mapping in the Survey Department?
(b) Describe **two** of the surveying techniques.
(c) Describe **two** of the mapping techniques. (08 marks)
- (ii) (a) What types of accuracies to be maintained in control traverses in Cadastral Surveys?
(b) What is the positional accuracy that should be maintained in a Cadastral map area on a subsequent survey? (04 marks)
- (iii) (a) What are the special requirements and limits for data collection in boundary features?
(b) Mention how to prepare the digital data after completing the field surveys using Total station. (08 marks)

[See page two.

4. (i) (a) What are the instances that the registered Surveyor will be found guilty of professional misconduct?
(b) What is the section of the Survey Act for the Professional misconduct? (06 marks)
- (ii) In a new survey, new extent has to be compared with the old extent. Explain the procedure to be adapted in that comparison. (06 marks)
- (iii) What are the basic items to be checked when a supervising officer controls the quality of a certain digital drawing? (08 marks)
5. (i) Mention the Road reservations to be maintained in Middle Class Colonization schemes. (06 marks)
- (ii) (a) What are the areas declared by the Department of Wildlife Conservation as National Reserves under the Flora and Fauna Protection Ordinance?
(b) What is the restricted distance limitation for development activities from the boundary of wildlife reserved areas? (06 marks)
- (iii) What are the duties of the Surveyor in 1:10 000 topographical map field verification activities? (08 marks)

* * *