



**UNIVERSITY OF PERADENIYA
CENTRE FOR DISTANCE AND CONTINUING EDUCATION**

ශාස්ත්‍රවේදී සාමාන්‍ය උපාධි පරීක්ෂණය (බාහිර- නව නිර්දේශය) 300 මට්ටම - 2025
பொதுக்கலை பட்டப் பரீட்சை (வெளிவாரி-புதிய பாடத்திட்டம்) 300 வது தேர்ச்சி மட்டம் - மே 2025
BACHELOR OF ARTS (EXTERNAL- NEW SYLLABUS) EXAMINATION 300 LEVEL- MAY 2025

Geography /භූගෝලවිද්‍යාව/புவியியல்

GGYE 301 – Cartography/සිතියම් විද්‍යාව/படவரைகலை

Instructions to candidates:

- i. Answer four (04) questions, selecting at least one question from each part.
- ii. Marks will be deducted for illegible handwriting, unclear maps and illustrations.
- iii. Use of a calculator is allowed; however, cellular phones are not allowed.
- iv. Horowupotana one-inch topographic map, an aerial photograph, an outline map of the Indo-Sri Lanka region, drawing papers and tracing papers are provided.

Duration: Four (04) hours

Part One

- (1) i. Provide answers for the following: (2x5=
10 marks)
 - a. Name two (02) Greek cartographers.
 - b. Name four instruments that significantly helped for the development of cartography during the Age of Discovery.
 - c. Provide four (04) spatial data acquisition methods for mapping.
 - d. The distance between Peradeniya and Mawanella town is **24 centimetres** on a metric map with a scale of 1:100,000. Calculate the ground distance in **kilometres and miles**.
 - e. Draw linear scale bars for the following scales: 1:31,680 and 1: 190,080.
- ii. Briefly explain the following with suitable illustrations:
 - a. Map scale (05 marks)
 - b. Geographical coordinate system (05 marks)
 - c. Marginal information in aerial photographs (05 marks)

Part Two

- (2) i. Draw a map on a scale of **1:31,680** to show the cultural features located between **8° 31' 30" – 8° 34' 00"** Northern Latitude and **80° 48' 30" – 80° 51' 15"** Eastern longitudes, located in the Horowupotana Topographic map provided. (15 marks)
- ii. Calculate the road density of the area and comment on the results. (10 marks)
- (3) i. Draw a map on the scale of **1:126,720** to show the land use pattern located in the **South-Eastern quadrant** of the Horowupotana topographic map provided (1:63,360). (15 marks)
- ii. Using a suitable quantitative technique, analyse the land use patterns of the mapped area. (10 marks)

Part Three

- (4) i. Using the standard symbols and colours, draw an overlay for the aerial photograph provided to show the paddy cultivation. (15 marks)
- ii. Describe the geographical distribution pattern of paddy cultivation using the drawn overlay. (10 marks)
- (5) i. Describe the key recognition elements used to identify features on aerial photographs. (10 marks)
- ii. Discuss the importance of aerial photographs in geographical studies, highlighting their strengths and limitations. (15 marks)

Part Four

- (6) Using the data given in **Table 01** and the Indo-Sri Lanka weather station outline map provided;
- i. Mark the synoptic weather characteristics prevailing over each meteorological station with appropriate colours and symbols. (10 marks)
- ii. Draw isobars at **4mb** intervals. (10 marks)
- iii. Using the drawn map, describe the prevailing weather pattern of the area. (05 marks)
- (7) With illustrations, write short notes on **two (02)** of the following. (12.5 x 2 = 25 marks)
- i. Spatial concepts and their representation on maps
 - ii. Types of Maps
 - iii. Overlapping in aerial photographs
 - iv. Cartographic techniques for data visualization
 - v. GIS and future of Cartography