

UNIVERSITY OF COLOMBO – SRI LANKA

FACULTY OF ARTS

SPECIAL DEGREE EXAMINATION IN ARTS (GEOGRAPHY) – PART III

SECOND SEMESTER FINAL EXAMINATION – 2017/2018

GYG 4289 – AIR PHOTO INTERPRETATION (PART II)

Three Hours (03)

Answer any **two (02)** questions only, selecting one from each part. Aerial photographs, kodatrace papers and a mirror stereoscope will be provided.

PART I – Aerial Photo Interpretation on Land Cover

01. Three aerial photographs of Sri Lanka have been provided.

Photograph no. : 95, 96 and 97

Scale : 1:20,000

Year : 1992

Answer the following questions using the photograph no. 96

a. Mark the followings on a kodatrace paper using the colour given in parenthesis.

- i. Kodigala and Una Kanda Peak (*Brown*)
- ii. West boundary of the reserve (*Black*)
- iii. TWO areas covered with Mana and Illuk grasses (*Yellow*)
- iv. Woodland with isolated trees (*Yellow fill with black dots*)
- v. TWO areas covered with low bushes (*Light brown*)
- vi. TWO areas covered with Rock forest (*Light brown with black dots*)
- vii. TWO areas covered with Cloud forest (*Dark brown*)
- viii. Dry mixed evergreen forest with large crowns (*Light green*)
- ix. Dry mixed evergreen forest without large crowns (*Light green with cross marks*)
- x. Southern route of wild elephants connecting Wasgamuwa – Minneriya – Girithale – Habarana – Yan Oya and Ritigala (*Arrows in red*)

(12 Marks)

b.

- i. Name FIVE plant species found in Rock forests or Cloud forests of the area.

(02 Marks)

- ii. Explain the ecological adaptations of Rock forest of the area with examples.

(06 Marks)

02.

- i. Examine the limits of using the "Zonnaweld's Reflection Graph" to study the photo characteristics of large scale aerial photographs.

(10 Marks)

- ii. Briefly explain the criteria provided by the "World Land Use Commission" to amend the sub-units of 1988 Land Cover legend.

(10 Marks)

PART II – Aerial Photo Interpretation on Land Use

03. Three aerial photographs of Sri Lanka have been provided.

Photograph no. : 30, 31 and 32

Scale : 1:20,000

Year : 1991

Using the photograph no. 31, answer the following questions.

- a. Mark the followings on a kodatrace paper using appropriate symbols and colours. Prepare a suitable legend for the map.

- i. Main irrigation canal and Hydrometric station.
- ii. Eroded River Valley and Braided River.
- iii. Boundary of Badulla District.
- iv. Two abandoned tanks.
- v. A cluster settlement.
- vi. Waylie Oya and its tributaries.
- vii. Jungle with tall trees.
- viii. Main road pattern.
- ix. Two highlands with illuk grass.
- x. Paddy cultivated area between Waylie Oya and Walawe River.

(12 Marks)

b.

- i. Briefly explain the main characteristics of threshing floors of the area.

(02 Marks)

- ii. How has the water resources affected the uneven spatial pattern of settlements in the eastern part of the area? Explain with examples.

(06 Marks)

04.

- i. Briefly explain the methodology that you could apply for the preparation of sub-components of Land Use legend.

(10 Marks)

- ii. What criteria are applied to differentiate the Land Use legend from Land Cover legend? Explain briefly.

(10 Marks)