

UNIVERSITY OF COLOMBO –SRI LANKA
Special Degree Examination in Arts (Geography) – Part III
First Semester End Examination -2017
GYG 4183- APPLIED METEOROLOGY AND CLIMATOLOGY
Two Hours (02)

Answer **Three (03)** Questions Only

Two Outline World Maps will be provided

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1. “In meteorological and climatological studies, special focus is needed for the tropical atmosphere” Critically examine this idea with specific examples.

(20 Marks)

 2. (i) What is meant by an **Urban Heat Island**?

(06 Marks)

(ii) Examine the different atmospheric factors that contribute to develop urban heat islands.

(14 Marks)

 3. (i) State the salient physical characteristics of an Easterly **Wave**.

(06 Marks)

(ii) Explain the effects of Easterly waves on atmospheric process in the tropical atmosphere.

(14 Marks)

 4. Critically examine the constrains that would arise when doing weather modifications of the Earth’s atmosphere.

(20 Marks)

5. (i) State the salient characteristics of **El-Niño** and **La-Niña** phenomenon.

(08 Marks)

(ii) Do you agree with the view that El-Niño phenomenon is a factor which contributes to develop extreme weather features in different regions of the world? Discuss with specific examples.

(12 Marks)

6. (i) Briefly explain the importance of the **Ground System** on weather forecasting.

(10 Marks)

(ii) Briefly explain the characteristics that should contain in the data which are used for meteorological forecasting and predictions.

(10 Marks)