

**UNIVERSITY OF COLOMBO –SRI LANKA**  
**Special Degree Examination in Arts (Geography) – Part II**  
**First Semester End Examination -2016**  
**GYG 3150- PAST CLIMATE AND CLIMATE CHANGES**  
**Two Hours (02)**

Answer **Three (03)** Questions Only

**Two** Outline World Maps will be provided

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1. (i) What is the utility value of documentary sources that are considered to study the past climate of the Earth?  

(06 Marks)
- (ii) Explain the advantages of studying the changes in the past climate of the Earth.  

(14 Marks)
2. Explain how the following factors contributed to the changes in the past climate of the Earth.
  - (i) Mountains building
  - (ii) Volcanic eruptions.
  - (iii) Sunspots

(20 Marks)
3. (1) What are the reactive halogen gases that contribute to deplete stratospheric ozone?  

(06 Marks)

(11) Do you agree with the view that developed and developing nations have taken appropriate measures to prevent the effect on the ozone layer by human activities? Discuss your answer.

(14 Marks)

4. (i) State the difference between (1) wet deposition and (2) dry deposition of acid rain.

(06 Marks)

(ii) Explain with examples the meteorological and climatological factors that contribute to enhance the acid rain problem.

(14 Marks)

5. (i) Briefly explain one scenario family that has been reported by the Inter-governmental Panel of Climatic Change to project climatic changes on the Earth.

(06 Marks)

(ii) Examine the constraints that can be arisen in projecting the climatic changes of the Earth.

(14 Marks)

6. “Atmospheric aerosols can contribute to significant changes of the Earth’s climate”. Do you agree with this statement? Critically discuss your answer with specific examples.

(20 Marks)

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