



THE OPEN UNIVERSITY OF SRI LANKA  
MASTER OF SCIENCE / POST GRADUATE DIPLOMA IN  
ENVIRONMENTAL SCIENCE -2011/2012  
ENVIRONMENTAL STUDIES UNIT  
NEP 2207 CLIMATE CHANGE  
FINAL EXAMINATION -LEVEL 7

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Date: 25<sup>TH</sup> March 2012

Time 13.30 p.m to 16.30 p.m

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Answer any Four (4) Questions only

1. (i) How does the earth's orientation with respect to the sun change over the course of a year?  
  
(ii) Relate these changes of orientations to the climate at varying latitudes of the earth.
2. There are numerous significant physical interactions among the components of the climate system that are relevant to climate change. Name these components and explain these interactions and feedback mechanisms.
3. (i). Temperate countries use enclosures with glass roofs to grow tropical plants, called greenhouses where inside is kept warm. Explain the mechanism of the greenhouse and similarity of this to the greenhouse effect works on earth.  
  
(ii) What would have been the temperature of the earth without the natural Greenhouse gases?  
  
(iii) Explain the enhanced greenhouse effect giving the reasons for the enhancement

4. (i). Briefly explain from the observations how Climate Change has affected the Asian region.  
  
(ii). Write down five projected Climate Change impacts for Asia.
  
5. (i). What is the main vehicle for promoting international response to climate change?  
  
(ii). Explain briefly how the UN Member States come to an agreement on Long-Term Cooperation Action to Address Climate Change.  
  
(iii). Agreed Member States were split into three groups name these groups and explain their roles.
  
6. (i) In December 1997 Conference of Parties adopted the Kyoto Protocol. Explain the main features of the Protocol.  
  
(ii) Mention the mechanisms established by the protocol for giving credit to parties for reducing emissions in other countries.  
  
(iii) Explain these mechanisms briefly.