



**THE OPEN UNIVERSITY OF SRI LANKA**  
**M.Sc. In Environmental Sciences Level 08 (2017-2018)**  
**ZYPA604NEP 2217-Climate Change**  
**Final examination 2018**

**Date: 02<sup>nd</sup> December 2018**

**Time 09.30 hrs to - 12.30 hrs**

Answer Any **Four (04)** questions

1. (i) Describe the establishment of Intergovernmental Panel on Climate Change (IPCC) and briefly explain the organizational structure of the IPCC and its mandate,  
 (ii) The atmosphere above the earth surface is divided into various spheres. Name these spheres and boundaries showing clearly the location of these spheres and boundaries in your diagram.  
 (iii) Give the reasons for the variation of temperatures in each sphere.  
 (iv) What is the difference between the weather and climate?  
 a) Explain briefly the following:  
     Climatic elements  
     Climatic factors
2. (i) What is meant by Modeling Climate Change?  
 (ii) Explain the ways to find out the reliability of the Models used to make Projection of future Climate Change.  
 (iii) Explain the term "Emission Scenarios". How do you develop emission scenarios and explain its use in predicting global warming?  
 (iv) For the Fifth Assessment Report of the IPCC, the scientific community has defined a set of four new scenarios. What is the name given to these scenarios and how are they identified?
3. (i). Explain briefly how the UN Member States come to an agreement on Long-Term Cooperation Action to Address Climate Change.  
 (ii). Agreed Member States were split into three groups name these groups and explain their roles.  
 (iii) In December 1997 Conference of Parties adopted the Kyoto Protocol. Explain the main features of the Protocol.  
 (iv) Mention the mechanisms established by the protocol for giving credit to parties for reducing emissions in other countries and explain these mechanisms briefly.