



The Open University of Sri Lanka
 Faculty of Engineering Technology
 Industrial Studies (Agriculture) Programme of Study
 Final Examination 2015/2016
 AEI6137 – Impact of Climate Change on Water Resources

Date : 08/12/2016
 Time : 09.30 a.m. – 12.30 p.m.
 Duration : Three (03) hours

Index Number.....

Section 02 – Answer any four (04) out of the six (06) questions. You may use answer books and/or sheets to answer this section.

- 1) a) Discuss the regional, seasonal, and daily temperature variations observed in Sri Lanka.
 b) Discuss the rainfall patterns observed in southwestern regions of Sri Lanka.
- 2) a) Explain why the greenhouse effect is important.
 b) Describe the radiative processes that involve in the greenhouse effect.
- 3) a) Discuss the agricultural activities that emit greenhouse gases into the atmosphere.
 b) Describe the agents that cause stratospheric ozone layer depletion and explain their mechanisms in depleting the ozone layer.
- 4) "The scientific community believes that temperature variations in the atmosphere cause changes in the plant growth and qualitative and quantitative aspects of yield". Critically discuss this statement using examples.
- 5) a) Discuss the international initiatives for climate change control.
 b) Discuss the issues that arise when implementing adaptation measures that should cope with climate change.
- 6) a) Describe the recommendations that ensure high efficiency of water use in agricultural and livestock sectors in Sri Lanka.
 b) Discuss why it is problematic to implement integrated water resources management practices.