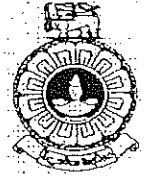


The Open University of Sri Lanka  
Faculty of Engineering Technology  
Department of Agricultural & Plantation Engineering



Study Programme : Bachelor of Industrial Studies Honors  
Name of the Examination : Final Examination  
Course code and Title : **AGX6284/AGI6237**  
**Impact of Climate Change on Water Resources**  
Academic year : 2020/2021  
Date : 03 February 2022  
Time : 1400 -1700 hrs  
Duration : **3 hours**

Registration Number ..... Index Number.....

**Instructions**

1. Contain SIX (06) essay type questions. You are required to answer **ONLY FOUR (04) questions**. You may spend about **two hours** to answer the questions in this section. Answer for each question should commence from a new page.
2. Read the questions carefully before answering.
3. Please note that you should write your registration number and index number in the space provided above. Do not write your name.

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**SECTION 2**

1. a. Discuss the rainfall variability in Sri Lanka. (10 mark)  
  
b. Briefly describe the temperature trend in Sri Lanka. (15 mark)
  
2. Briefly describe the potential effects of climate change on the components of the water balance and their variability over time. (25 mark)
  
3. a. Discuss on different types of greenhouse gases. (10 mark)  
  
b. Briefly discuss influence of agricultural activities on greenhouse gases emission to atmosphere. (15 mark)
  
4. Briefly explain the impacts on the coastal zone arising from sea level rise and in the wider context of climate change. (25 mark)
  
5. Briefly describe the current policies or legislation related to water resources. (25 mark)
  
6. Write short note on following. (25 mark)
  - a. Interactive effects of temperature increase and atmospheric CO<sub>2</sub> concentration
  - b. Climate change scenarios.
  - c. Major water withdrawal types of Sri Lanka.