

平成 30 年度北海道大学大学院国際食資源学院  
修士課程（博士前期課程）【2 次】入学試験問題  
科目名：小論文

In “biogeochemical cycles”, nutrients and elements are recycled through the earth’s air, soil, rock, water, and living organisms. Many scientists now believe human activities disrupt the biogeochemical cycles. Some of the most important biogeochemical cycles are; water cycle, carbon cycle, nitrogen cycle, and phosphorus cycle. Considering this background, answer following questions.

- 1) Choose ONE of the elements presented above (water, carbon, nitrogen or phosphorus) and discuss how human activities impact on the biogeochemical cycle.
  
- 2) Graduate School of Global Food Resources aims to educate students with a broad knowledge of food resources, from food production technology, environment to economics and culture. Discuss why the broad knowledge is necessary to tackle the issue caused by the human activities which you described in question 1.