

**MID EXAM
ODD SEMESTER
ACADEMIC YEAR 2019-2020**

Course : Ekonomi Lingkungan (ECEU606201)
Day/Date : Friday, 25 October 2019
Lecturer : Dr. Alin Halimatussadiah
Time : 150 minutes
Exam Type : *Open Book*

PART I - INSTRUCTIONS

1. This is an open book exam; however, no laptop/smartphone allowed. Cheating will bring you to E score for this course.
2. Please read the instructions (PART I), the study cases (PART II), and the questions (PART III) carefully. I want you to choose two cases out of five cases given below. The two cases you selected should meet the following criteria:
 1. **CASE 1** - One case that can utilize choice modelling
 2. **CASE 2** - One case that can utilize revealed preference or cost-based method (you can pick one specific method, i.e. travel cost method)

PART II - STUDY CASE

Study Case 1:

The cruise ship Caledonian Sky ran aground in waters off Raja Ampat Islands in West Papua province on March 4, 2017, destroying nearly 13,000 sqm of coral reefs in what is often described as a pristine beach paradise. What kind of valuation method you can choose to estimate the damage made to the ecosystem? Your result will be used as the basis of penalty by the court.

Study Case 2:

In December 2012 the Governor of Bali issued a reclamation permit allowing a company to build a huge resort area in Benoa Bay. It created resistance from many NGO and communities in Bali looking at the environmental and social impact of the project. An NGO collaborates with a research institution in Bali would like to show to the government the damage resulted from the project.

Study Case 3:

The Government of South Sumatera want to develop an NCA (natural capital accounting) for two districts where the National Park Sembilang exist. They believe that it will help them to make better economic development plan for the region that reduce the risk of the National park. They want to know also whether there are other development scenarios that yield higher value of the landscape.

Study Case 4:

The Ministry of Marine and Fisheries want to know the benefit of implementing good management practice for MPA (Marine Protected Area). In certain region, the plan is not supported by the local government and communities because it will impact their economy - particularly in the area of no take zone. You suggest to conduct a valuation study to support the plan.

Study Case 5:

The government has plan to close the Komodo National Park to improve the habitat of the Komodo. The closing is hopefully can increase the population of deer and reduce the risk of cannibalism among Komodos. The government has limited funding to perform such plan. You suggest to conduct a valuation study to support the plan.

PART III - QUESTIONS

After reading the cases, answer the following questions. Look at the weight of each question.

CASE 1 (50%)

1. (3%) State the problem.
2. (3%) State the purpose of valuation.
3. (3%) What environmental good(s)/service(s) that need to be valued?
4. (7%) Identify the steps that you have to make to conduct such study.
5. (7%) What kind of attributes that you would like to put in your choice set?
6. (3%) Give suggestion on the level of each attribute.
7. (7%) Give example of two choice sets that you would like to display in the questionnaire.
8. (7%) How you select your sample?
9. (5%) Describe the regression function that fits to your case.
10. (5%) How to find the value of each attribute?

CASE 2 (50%)

1. (3%) State the problem.
2. (3%) State the purpose of valuation.
3. (3%) What environmental good(s)/service(s) that need to be valued?
4. (10%) Identify the typology of the selected ecosystem service(s) and the type of value.
5. (7%) Choose the appropriate valuation method and explain why.
6. (10%) Identify the steps that you have to make to conduct such study.
7. (7%) Identify the data that you need, or the main question of your questionnaire.
8. (7%) What other valuation method(s) that you would like to suggest for this case? Explain why.