***Public Finance (PAF3531)/Public Economics 1 (ECN4121)***

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***Term Paper***

***October 15, 2025***

***November 19, 2025***

For this assignment, you may work in groups of up to Five students. You are advised to start the assignment as soon as possible. Do not hesitate to ask me questions as you are working on this assignment. Answers should be typed with Times New Roman size 12 fonts.

1. A community project (a public good) has the following costs and benefits for its members: (2 points)

 Individual benefits ($) Cost share ($)

 A 900 600

 B 900 600

 C 350 400

 D 350 400

 E 450 500

 F 500 500

 G 600 600

 H 650 600

 I 580 500

 J 520 500

1. Is the project economically feasible? Explain
2. Will the project be approved by a majority of the community? Explain.
3. Does the project meet the Pareto criterion? Explain.
4. Is there any member of the community that is indifferent to the cost and benefit? Why?
5. If possible, revise the cost shares to allow the project meet the Pareto criterion and be approved by a majority of the community.
6. Go about your normal activities and record all the public services you use. Prepare a list of the activities (**about 10**) and indicate how rivalrous and excludable they are on a scale of 1-5 (1 being highly rivalrous, and 5 being non-rivalrous). Indicate your reasons. You may use the following format: (**2 points**).

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| --- | --- | --- | --- | --- | --- |
| # | Service | Rivalrousness | Reason | Excludability | Reason |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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1. Explain the externalities (positive and/or negative) for each of the following: **(2 points)**
2. Exxon-Mobile drills for oil in a coastal region.
3. Individuals buying cars without emission checks.
4. Buying a car with airbags to prevent death or severe injury in case of an accident.
5. Having crying babies on an airplane during flights.
6. Explain why it is necessary for the government to have each of the following (in terms of market failures). **(2 points)**
7. Seat belt requirements for cars
8. Requirement for emission checks on cars
9. Unemployment compensation
10. National Defense
11. Truth-in-lending laws
12. Government ban on the use of illicit drugs
13. Identify **9** economic indicators of Kazakhstan for the past five consecutive years (starting from 2022 backward) and answer the following: **(3 points)**
14. In a tabular form and starting with the most recent year, indicate the economic indicators for each year.
15. In a tabular form, calculate the year-to-year percentage changes for each indicator
16. What are the possible reasons for the year-to-year percentage changes in each indicator?

1. Explain why each of the following is or is not likely to be a Pareto improvement: **(3 points)**
2. Building a park, financed by an increase in the local property tax rate.
3. Building a park, financed by the donation of a rich philanthropist. The city acquires the land from a local resident and compensates the resident at true market value.
4. Increasing medical facilities for lung cancer, financed out of general revenues.
5. Increasing medical care facilities for lung cancer, financed out of an increase in the cigarette tax.
6. Eliminating rent control laws.
7. Assume you are shipwrecked, and there are **11** of you in a lifeboat. It will take **10 days** to reach your shore and there is enough food for **6** of you to survive for **10 days. (2 points)**
8. How would a utilitarian allocate the available food?
9. How would a Rawlsian allocate the available food?

1. The government rations a variety of publicly provided private goods and impure public goods in which there is congestion in a variety of ways. Discuss how each of these is rationed in order to limit economic distortions. **(2 points)**