## MW24.2 Experimental Economics (SS2020) Exam Sample

## Olexandr Nikolaychuk

The following questions are from the last year's exam, which used the multiple choice format. This year, the exam will have the open question format. Simply providing the correct answer won't be sufficient. You should give reasons *why* your answer is correct.

Below, you can find some pointers to have an idea what I expect.

1. How is indirect control achieved in economic experiments?

What is indirect control? Also, as opposed to what? What issue is it aimed at? What can the experimenter do in that regard?

2. As far as the between- and within-subject designs, what are the advantages of the former?

Explain both concepts. Provide several examples where the within-subject design has a potential flaw while the between-subject design does not.

3. You want to investigate, which combination of some four pricing schemes and three quality levels of a product would result in the highest overall adoption rate. If you opt for a fractional factorial design, how many treatments will you need to run?

What is fractional factorial design? Also, as opposed to what? Derive the exact numerical answer using the information provided.

4. What does it mean to say that an experimental study is considered to be internally valid?

Explain the concept of internal validity.

- 5. What is the perspective of experimental economics on intrinsic motivation? What is intrinsic motivation? Also, as opposed to what? What does experimental economics do about it?
- 6. According to some theory, a particular treatment results in more pro-social behavior, and the findings of an experiment actually support that. If the design is likely to suffer from a demand effect, when should those results *not* be trusted?

Explain the concept of demand effect. Describe what the demand effect needs to look like so that there is a conflict with 'more prosocial behavior'.

7. What is meant by the cognitive demand effect?

What is cognitive demand effect? Also, as opposed to what? Provide an example.

8. What is the name of a phenomenon where systematically different behavioral outcomes result from objectively equivalent descriptions of a decision problem?

Name the phenomenon. Explain why it happens. Provide an example.

9. What is a common reference for a simple albeit suboptimal decision making routine?

Name the phenomenon. Explain why it happens. Provide an example.

- How does tit-for-tat play in a finitely repeated Prisoner's Dilemma?
   Explain tit-for-tat as a strategy. Describe the resulting behavioral pattern.
- 11. Which of the following games belong to the class of Prisoner's Dilemma?

A	B	Γ	$\Delta$	E
8,8 7,3	7,7 3,5	2,3 0,1	3,3 5,1	6,6 2,8
3,7 1,1	5,3 $5,5$	1,0 $3,2$	1,5 $4,4$	8,2 3,3

Define Prisoner's Dilemma. Apply the definition to each of the games.

12. If both players are motivated by risk dominance, what is the expected outcome of the following game?

$$\begin{array}{c|ccccc}
L & R \\
U & 3,3 & 1,2 \\
D & 2,1 & 2,2
\end{array}$$

What is risk dominance? Also, as opposed to what? Apply the concept to the game.

13. What can motivate one and the same person to make positive transfers both in the Dictator and Ultimatum games?

Describe both games. How are they different? What is the normative perspective on 'positive transfers'? Provide behavioral reasons (i.e., positive perspective) for positive transfers that would apply to both games.

14. If some subjects are said to be exhibiting reciprocal behavior, what does that imply?

Explain the concept of reciprocity. Provide examples of resulting behavioral outcomes.

15. Consider the following four dictators: (i) selfish; (ii) social welfare maximizer; (iii) competitive; and (iv) inequality-averse. One by one and in that exact order, they choose an option for themselves and their passive partner (while completely ignoring the other dictators and their respective partners). If each option can be taken only once, which one will be left in the end?

	A	B	Γ	$\Delta$	E
Dictator	10	11	11	12	11
Receiver	16	14	8	21	7

Describe the aforementioned behavioral archetypes. Derive the exact answer using the information provided.

16. Will a rational trustee make positive transfers to the trustor?

Identify the implied game. Explain the normative perspective on 'positive transfers'.

17. What makes the public good special?

What is public good? Also, as opposed to what? What should one expect in public good scenarios?

18. The following graph summarizes how much different subjects are willing to contribute to the public good in response to the average contribution of the other group members. What can one learn from the type of behavior denoted by X?



Assume this to be actual experimental data. Describe the observed behavioral pattern. Interpret it by making references to appropriate concepts.