ECON0106: **Microeconomics**

Problem Set 1

Duarte Gonçalves[*]

University College London

Due date: 6 October, 12:30

Question 1. 1. Choice, Preferences, Utility: Exercise 4

Question 2. 1. Choice, Preferences, Utility: Exercise 6

Question 3. Let C be a choice function satisfying the following property P: for any A and any partition of A, $\{A_1, A_2\}$, $C(A) = C(C(A_1) \cup C(A_2))$.

(a) Interpret P. Find examples of choice procedures that fail P.

(b) Prove that if C satisfies HARP, then it satisfies P.

(c) True or false: If C is singleton-valued and satisfies P, then it satisfies Sen's α. Prove it or provide a counterexample.

(d) Find an example of C that satisfies P but fails HARP.

[*] Department of Economics, University College London; duarte.goncalves@ucl.ac.uk. Please do not share these notes with anyone outside of this class.