**NRU HSE-2020, Microeconomics Class-01 (07.09-13.09)**

# Consumer theory

**1.** Alice has utility function, Donna has utility function . Do they have the same preferences?

**2.** Zara has utility function . Derive her demand for good 1.

**3.** Consider an economy with two goods, *x* and *y* with prices *px* and *py*, respectively. We observe the following choices made by Rob: if *px >py* he chooses to consume only *y*, and if *px <py* he chooses to consume only *x* . Suggest a utility function for Rob that represents preferences consistent with the given info.

Is it possible to find another function (one that doesn’t represent a positive monotonic transformation of the proposed above function) that will generate the same demand?

**4.** George is a consumer whose monthly income is $100. Initially, the price of a composite good Y is $1 per unit and the unsubsidized price of a unit of good X is $4 per unit. When a subsidy of $1 per unit is given on purchases of X, George buys 9 units of X per month. If, instead of a per unit subsidy on X, the government gives George 2 units of X free of charge, will George necessarily be worse off in this case compared to the case of the subsidy? Explain your answer.

**5.** Suppose that a per unit subsidy on a good which is being consumed is replaced by an in-kind transfer of the good of equivalent money cost. Analyze the impact of this policy on individual’s welfare.