Test
Advanced Microeconomics: Part II (Uwe Jirjahn)

Summer 2017

Choose **two** questions out of the three questions Q1, Q2 and Q 3.

Q.1 Player 1 and player 2 bargain over sharing 400 dollars. The bargaining procedure follows the Rubinstein bargaining model. Player 1 makes the first offer. Player 1's discount factor is $\delta_1 = 1/2$. Player 2's discount factor is $\delta_2 = 2/3$. Find the bargaining solution.

Q.2 Player 1 and player 2 bargain over sharing 300 dollars. The asymmetric Nash product is: $\Omega = (x_1 - 20)^{1/3}(x_2 - 10)^{2/3}$. Find the bargaining solution.

Q.3 Player 1 and player 2 bargain over sharing 600 dollars. The bargaining procedure follows the Rubinstein bargaining model. Player 1's share is

$$x_1^* = 600 \frac{1 - e^{-0.5\Delta}}{1 - e^{-0.5\Delta}e^{-0.5\Delta}}$$

where Δ is the time interval between subsequent periods. Calculate player 1's and player 2's share if Δ approaches zero.

Note: If you answer all questions, we will only consider Q.1 and Q.2.