|  |
| --- |
| **AY 2017-2018** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surname:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Matricola:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Economics of Money and Banking** **Simulation second mid term test (Monday 18 June)** *Prof. Nicola Dimitri*  **Available time**: 90 Minutes  |

**1. (11 points)**

In the General Equilibrium with banks model discussed in class suppose consumers have the following utility function

$$U(c\_{1},c\_{2})=c\_{1}+logc\_{2} $$

and that the firms production function is

$$f\left(I\right)=log⁡(1+I)$$

where $c\_{1},c\_{2},I\geq 0$. Find the General Equilibrium values of quantities and prices of this economy

**2 (11 points)** Consider the Diamond-Dybvig model for banks as liquidity providers, in case of negative shocks, discussed in class.

Suppose $u(c)=c^{a}$ with $0<a<1$. Find the autharky solution, the market solution and the Pareto Optimal solution for the investment level $I$ and consumption levels $c\_{1},c\_{2}$. Is the market solution Pareto Efficient?

**3 (11 points)** Discuss the lender.borrower loan contract.

**Additional problems**

4) Solve problem 1 with utility function $U(c\_{1},c\_{2})=logc\_{1}+c\_{2} $ and production function$ f\left(I\right)=I^{a}$ with $0<a<1$

5) Solve problem 2 with $u\left(c\right)=-e^{-ac} $ with $a>0$.

6) Discuss the function of banks

**Content 2st mid term**

The content of the second mid-term will concentrate on four topics, discussed in the Microeconomics of Banking classes. A general discussion on the function of banks. A General Equilibrium model with banks, the Diamond-Dybvig model for liquidity provision and the thirs the lender-borrower relationship with symmetric information. All is drawn from the Freixas-Rochet textbook

**Rules 2° mid term test**

We remind that only those students who passed the first mid term can take the second mid term. Those who fail the second part, or pass but reject the grade, will have to re-take the whole test, first part included.

The whole test will be three hours, that is the union of the two mid terms.