### Written Exam for the M.Sc. in Economics winter 2012-2013

# **Family economics**

Final Exam/ Elective Course/ Master's Course

January 8, 2013

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

If you are in doubt about which title you registered for, please see the print of your exam registration from the students' self-service system.

#### Important: Please note that ALL questions should be answered!

#### 1. Gains from marriage

- a) Consider a two-person model with person a and b having incomes  $y_a$  and  $y_b$ , respectively. There are two goods, a private good, q, and a public good, Q. Outline the gains from marriage from the sharing of public goods. In doing so, you may compare the situation when the two persons live as singles versus the situation where they are married.
- b) Focus now on a situation where person a and b can consume two public goods,  $Q_1$  and  $Q_2$ , and there are no private goods. Explain why a possible gain from marriage from the sharing of public goods requires that there is some overlap in a's and b's preferences. You may illustrate graphically.
- c) Discuss the concept of public goods. Give examples of public goods in marriage. Discuss in what way public goods enter individual utility functions of *a* and *b*.
- d) In a two person context, outline the gains from specialisation from living together.
- e) Discuss possible gains from marriage related to risk sharing, imperfect credit markets and coordination of child care.

## 2. Family decision making

- a) Consider a model of a household with a woman (a) and a man (b). The two partners consume a public good, Q, and a private good, q. Present the household utility function. Outline the main features of the collective model of household decision making.
- b) Discuss the characteristics of the collective model compared with two other main types of household models, namely the unitary model and non-cooperative models.
- c) Discuss the role of distribution factors in the collective model. Give examples of distribution factors.
- d) The two partners in the household can have egotistic preferences over their own goods or they may have some form of altruistic preferences over their partner's consumption, e.g. *caring* preferences.
  - Discuss the concept of caring preferences and how such preferences may be reflected in individual utilities and in household utility in a collective model setting.
- e) Explain in what way the test for income pooling can serve as a test of the unitary model versus alternative models of household decision making.