Labor Economics I
Daniel Münich You have 2 hours. Be clear, brief, write legibly!

Final Exam, Feb 7, 2002
CERGE-EI, Fall

Question \# 1 (15\%, 15 minutes): Answer any two of the following questions as True, False or Uncertain and briefly explain your reasoning:
a) The wage differential between hazardous and safe jobs is a good estimate of the compensating wage differential required to get workers in safe jobs to accept the extra hazards on hazardous jobs.
b)General training is valuable in all firms. Specific training is valuable only in the firm that provides the training. Therefore: i) workers pay for and collect the returns from general training, ii) firms pay for the costs of specific training and collect all returns.
c) If mobility decisions are made jointly, by all households members, the migration flow includes number of tied movers. Tied movers suffer a private loss from the migration.

Question \# 2 ( $\mathbf{3 5 \%}$, $\mathbf{3 5}$ minutes): Each entry on the left hand column below is an empirical observation or measurement that has been used in the literature as an observation related to the concept in the right hand side column. For each pair, describe the pitfalls involved in using the observation on the left as a measurement of the concept on the right:

|  | EMPIRICAL OBSERVATION | CONCEPT |
| :--- | :--- | :--- |
| a) | Relation between schooling and earnings | Human capital production function |
| b) | Relation between hours and wages for those <br> who work | Labor supply functions |
| c) | Relation between earnings and age | Life-cycle model of labor supply |

Question \#3 (20\%, $\mathbf{3 0}$ minutes): Indicate the implications of each of the following for estimates of the marginal rate of return on a college education:
a) the signaling hypothesis,
b) the fact that people who go to college are generally more able than those who do not and,
c) the fact that jobs acquired by college graduates generally entail larger fringe benefits than the jobs of high school graduates.
What implications do the ability problem and the signaling hypothesis have for public policy toward education?

Question \#4 (15\%, 20 minutes): Suppose day-care centers charge working parents for each hour their children spend at the centers. Suppose, too, that the government passes legislation that subsidizes half of the hourly cost per child (so that the hourly cost per child now borne by the parents is cut in half). Discuss the effects of this legislation on the labor supply decisions of working parents.

Question \#3 ( $\mathbf{1 5 \%}, \mathbf{2 0}$ minutes): An individual's utility function is $\boldsymbol{u}=\boldsymbol{y}+2 * \boldsymbol{l}^{0.5}$ where $\boldsymbol{y}$ is goods and $l$ is leisure.
a) Derive the labor supply function.
b) What is the reservation wage?

