STOCKHOLM UNIVERSITY Department of Economics

Course name:	Labour market economics
Course code:	EC2102
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Number of credits:	7,5 credits
Date of exam:	Sunday, 16 February, 2014
Examination time:	3 hours

Write your identification number and the number of the question on every cover sheet. Do not write answers for more than one question in the same cover sheet. Explain notions/concepts and symbols. Only legible exams will be marked. No aids are allowed.

The exam consists of 6 questions. One can get 100 points in total. For the grade E 40 points are required, for D 50 points, C 60 points, B 75 points and A 90 points. Question 1 is a credit question. If you received 10 credit points on your assignments, then you should not answer question 1.

If you think that a question is vaguely formulated: specify the conditions used for solving it.

Results will be posted March 7, 2014 at the latest

Good luck!

Question 1. (10 points) This is a credit question which should only be answered if you have NOT received 10 credit points on your assignment. Discuss the "added worker" and the "discouraged worker" effect on labour force participation.

Question 2. (20 points) Use the static model of individual labour supply and show, for two cases, how one can graphically derive the "reservation wage". First, consider the case when there are no costs of working, and thus the worker is indifferent between not working and working a very small amount of hours. Then consider the case when there is a fixed cost of working, and the worker is indifferent between not working and the worker is indifferent between an increase in the non-labour income affects the reservation wage.

Question 3. (**20 points**) Matching models are sometimes used to explain the existence of involuntary unemployment in the labour market. Provide a short description of a matching model. What are the key features of the model? Why don't wages fall so to clear the market? Another type of model that can explain the existence of involuntary unemployment is the Efficiency wage model. Provide a short description of the Efficiency model. What are the key features of the model? Why could such model explain the existence of involuntary model?

Question 4. (20 points)

Check off (kryssa för) the right alternative

1. Under normal circumstances, the equilibrium compensation wage differential is exactly that wage differential that attracts

- A. the average worker into a regular job.
- B. the marginal worker into a risky job.
- C. the average worker into a less risky job.
- D. the marginal worker into the labor market.
- E. the average high-skilled worker into a risky job.
- 2. In the standard theory of compensating differentials, a worker's reservations price is
 - A. the amount of money it takes to entice the worker into accepting a risky job.
 - B. the amount of money it costs a worker to take a risky job.
 - C. the amount of money a worker loses for not taking any job.
 - D. the amount of money it costs a worker to take a safe job.

E. the difference between the wage paid in firms offering risky jobs and the wage paid by firms offering safe jobs.

3. Workers with high earnings potential are likely to earn more and to have better working conditions. This positive correlation

A. makes it difficult to find evidence of compensating wage differentials associated with working conditions.

B. makes it easy to find evidence that workers trade off some earnings in exchange for better working conditions.

- C. suggests low-skill and high-skill workers have similar working conditions.
- D. suggests high-skill workers are typically overpaid.

E. suggests low-skill workers are more efficient per dollar paid in wages plus fringe benefits than are high-skill workers.

- 4. A hedonic wage function could be applied to which of the following job characteristics?
 - A. The probability of being injured on the job.
 - B. The degree to which a job involves monotonous work.
 - C. The degree to which the area surrounding the job location is safe.
 - D. The degree to which a job involves strenuous work.

E. All of the above can be represented with a hedonic wage function.

5. Estimates of the compensating wage differentials associated with particular job characteristics are valid only if:

- A. All other factors that influence worker's wages are held constant.
- B. Non-wage characteristics of the job are allowed to vary by sector.
- C. Firms are willing to pay higher wages to more skilled workers.
- D. The compensation wage equals the worker's marginal cost.
- E. The firm provides non-pecuniary compensation for risks that workers encounter on the job,

Question 5. (20 points)

Check off (kryssa för) the right alternative

- 1. Which correctly describes the shape of the wage-schooling locus?
 - A. The wage-schooling locus is downward sloping because education is generally productive.
 - B. The wage-schooling locus is upward sloping because education is generally productive.
 - C. The wage-schooling locus is downward sloping because education is generally unproductive.
 - D. The wage-schooling locus is upward sloping because education is generally unproductive.
 - E. The wage-schooling locus is horizontal because wages are unrelated to schooling.
- 2. The slope of the wage-schooling locus provides an estimate of what?
 - A. The average years of education as a function of age.
 - B. The average wage or salary of workers for a given level of schooling.
 - C. The economic return to an additional year of schooling.
 - D. The economic cost to an additional year of schooling.
 - E. The marginal cost to an additional year of schooling.
- 3. Present value calculations allow one to determine
 - A. the return to an uncertain asset.
 - B. the present-day costs and/or benefits of various options.
 - C. the utility value of a particular option.
 - D. the social cost of financial calculations.
 - E. the real wage.

4. What is the stopping rule for choosing one's years of schooling?

- A. End one's schooling when the return from more schooling is zero.
- B. End one's schooling when the cost of one more year of schooling is zero.
- C. End one's schooling after college.
- D. End one's schooling when the rate of return to one more year of schooling equals the worker's rate of discount.
- E. End one's schooling when the worker's rate of discount equals zero.

5. If ability is positively related to schooling, then estimating the returns to education directly from the wageschooling profile will likely

- A. under-estimate the return to schooling.
- B. over-estimate the return to schooling.
- C. under-estimate the average wage.
- D. over-estimate the average wage.
- E. under-estimate the average discount rate.

Question 6. (10 points)

- Explain intuitively why both employer taste based discrimination and employer statistical discrimination can imply that two individuals from two different groups, say men and women, can receive different wage levels even if they are equally productive. (5 points)
- (ii) Explain how you would design an empirical study with the purpose to investigate if employers discriminate in the process of calling job applicants to a job interview. (5 points)