Course name:	Labour Market Economics
Course code:	EC2102
Type of exam:	Main
Examiner:	Evelina Björkegren and Ines Helm
Number of credits:	7,5 credits (hp)
Date of exam:	June 1, 2020
Examination time:	09:00-12:00 (3 hours)
Aids:	Calculator, literature and lecture notes.

Write your personal identity number on each answer sheet.

Start each new question/section/part on a new answer sheet.

Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked.

The exam consists of 6 questions with 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.

Your results will normally be made available on your Ladok account (www.student.ladok.se) within 15 working days from the date of the examination.

Good luck!

Q.1) (20 points) Assume that an individual wins a lottery. Assume also that the individual was working before the lottery win and had no other non-labor income before the lottery win.
  a) Using the basic static model of individual labour supply, discuss both graphically and explain in your own words how the lottery win will affect the individual's level of hours worked. Discuss all relevant effects.
  b) Is it possible that the individual decides to stop working following the lottery win? In your answer discuss the concept of reservation wages and add the individual's reservation wage before and after the lottery win to your graph.

Q.2) (18 points) Assume you have a dataset available that includes information on who is playing in a lottery, who wins a lottery and information on how much these individuals work over several time periods (both before and after the lottery).
  a) How would you test whether winning the lottery affects labour supply and hence whether the predictions made in Q.1) hold in the real world? Describe the method you would use and how you would use it.
  b) Would you use the full sample of individuals in the data set or only the individuals that in the first place play lotteries?

Q.3) (12 points) State whether the following statements are true or false. Shortly explain your answer in 1-2 sentences.
  a) If firms are perfectly competitive, firms face an upward sloping labor supply curve.
  b) In the long run the firm chooses the optimal level of output by setting MC=p (i.e. the marginal cost of production equal to the output price).
  c) In a monopsony with a non-discriminating monopsonist the labor supply curve equals the marginal cost of labor.
  d) IT workers and computers are (perfect) substitutes in production.

Q.4) (16 p) In a competitive equilibrium, the equilibrium wage clears the market and everybody that is looking for a job can find one. But in reality, we observe quite widespread involuntary unemployment.

a) Describe how search frictions can generate unemployment in equilibrium.
b) Define structural unemployment and discuss how structural unemployment differs from frictional unemployment.
c) How can the generosity of the unemployment insurance benefit effect the length of the unemployment spell and the accepted wage offer? Use your own words and carefully describe the mechanisms.

Q.5) (16 p) Assume that you are deciding whether to move to Umeå or stay in Stockholm. If you stay you will earn a constant wage wS throughout your career, and if you move you will earn wU throughout your career. Also assume that you live and work forever. Moving costs are equal to M.

a) Derive the condition under which you are indifferent between moving and staying.
b) Explain how changes in moving costs, in the interest rate and in the wage differential ($wU–wS$) would affect your decision.

Q.6) (18 p) Assume that you are interested in estimating the effects of schooling on earnings and that you have individual data on schooling and earnings.

a) Set up an empirical model that captures the correlation between schooling and earnings and describe this. Why are you likely to overestimate the true effects of schooling on earnings with this model?

b) How would you go about to estimate the causal effects of schooling on earnings if you as a researcher had the authority to do whatever you like? You do not need to consider any ethical or financial restrictions. Describe how you would go about and why it would work using your own words.