ECO361: LABOR ECONOMICS
SECOND MIDTERM EXAMINATION
NOVEMBER 16, 2006
Prof. Bill Even

DIRECTIONS.
The exam contains a mix of short answer and essay questions. Your answers to the 23 short answer portion of the exam (3 points each) should be listed on the answer sheet attached to the end of the exam. No credit will be given for answers placed elsewhere. Your answers to the essays (48 points total) should be provided in the blue book provided.
To answer the next 6 questions, refer to the diagram drawn below. The indifference curves for worker types A and B are given by A0, A1 and B0, B1. The iso-profit curves for firm types X and Y are given by X1 and Y1.

1. Suppose that X and Y firms are currently offering the wage/risk bundle given by the point O. At point O, compared to type Y firms, it is
   a. more costly for type X firms to reduce the risk of job injury for workers because type X firms have a flatter iso-profit curves.
   b. less costly for type X firms to reduce the risk of job injury for workers because type X firms have a flatter iso-profit curves.
   c. more costly for type X firms to reduce the risk of job injury for workers because the type of workers that select into type X firms have flatter indifference curves.
   d. less costly for type X firms to reduce the risk of job injury for workers because the type of workers that select into type X firms have steeper indifference curves.

2. Based on the above diagram, which of the following statements is FALSE?
   a. a type A worker would prefer bundle P over bundle R.
   b. a type Y firm would have higher profits if it hired workers for bundle P than bundle R.
   c. a type X firm would have higher profits if it hired workers for bundle R than bundle P.
   d. a type B worker would prefer bundle bundle P over bundle R.

3. Based upon the above diagram, we should expect that type A workers will match with type ___ firms. Moreover, compared to type B workers, the type A workers will be paid (more, less) and have (safer, riskier) jobs.
   a. X; more; riskier.
   b. X; less; safer.
   c. Y; more; riskier.
   d. Y; less; safer.

4. In the above diagram, firms prefer points to the ______ of any given isoprofit curve and workers prefer points to the ______ of any given indifference curve:
   a. northwest; southeast;
   b. northwest; northwest;
   c. southeast; southeast.
   d. southeast; northwest.
5. Suppose that Prof. Smith uses data on job risk to estimate the statistical value of a life to equal $5 million by comparing the annual earnings of workers in job A and job B in which the annual risks of death are .002 and .003, respectively. Based on this information, we could conclude that:

a. type A jobs pay $5,000 more per year than type B jobs.
b. type A jobs pay $5,000 less per year than type B jobs.
c. type A jobs pay $10,000 more per year than type B jobs.
d. none of the above.

6. Consider the information given in the previous question. If Professor Smith compares jobs B and C which have annual risks of death of .003 and .004, we should expect that Professor Smith will estimate the statistical value of a life to be (above, below) $5 million because the gap in earnings between type A and B jobs is likely to be (smaller, larger) than the gap in earnings between type B and C jobs.

a. above; smaller.       b. above; larger.       c. below; smaller.       d. below; larger.

Consider the iso-profit line for a firm considering the optimal mix between fringe benefits and wages.

7. The isoprofit line would become steeper (i.e. larger negative slope) if:

a. a shift of $1 in wages to $1 of fringe benefits made workers more productive.
b. a shift of $1 in wages to $1 of fringe benefits made workers less productive.
c. the tax rate was increased and fringe benefits were tax exempt whereas wages were not.
d. a and c.
e. b and c.

8. If a firm's iso-profit line becomes steeper and employee preferences are unchanged, we would expect the firm would:

a. move to a compensation package that has more fringe benefits and less wages.
b. move to a compensation package that has less fringe benefits and more wages.
c. move to a compensation package that has less fringe benefits and less wages.
d. not change the compensation package since employee preferences didn't change.

9. It is well established that the distribution of college majors chosen by men and women differs fairly substantially. One economic theory of the difference in majors chosen is that women choose majors that accommodate career interruptions due to childbearing by picking majors that lead to jobs

a. with fairly general human capital.
b. with fairly specific human capital.
c. where the rate of change in new technology or information is faster than average.
d. a and c.
e. b and c.
To answer the next 5 questions, consider the diagram below which provides a firm’s zero-iso-profit curve (xx) and a worker’s indifference curve (yy) between the hourly wage rate and the time at which the work day begins.

10. Based on the diagram, for any given wage rate, workers prefer to start their work day:
   a. between 6 & 7 a.m.   b. between 7 & 8 a.m.   c. between 8 and 9 a.m.   d. after 9 a.m.

11. Based on the diagram, for any given wage, firm profits would be lowest if the work day started:
   a. between 6 & 7 a.m.   b. between 7 & 8 a.m.   c. between 8 and 9 a.m.   d. after 9 a.m.

12. Market forces should force the starting time for this firm to be:
   a. between 6 & 7 a.m.   b. between 7 & 8 a.m.   c. between 8 and 9 a.m.   d. after 9 a.m.

13. Suppose that this firm’s customer preferences change and customers prefer to start shopping later in the day, making it more profitable for the firm to open and close later. This is likely to cause:
   a. the zero isoprofit line to shift upward.
   b. the zero isoprofit line to begin sloping downward at a point further to the right.
   c. the zero isoprofit line to begin sloping downward at a point further to the left.
   d. a. the zero isoprofit line to shift downward.

14. If all workers have identical preferences regarding starting times, but firms differ in the start time that maximizes profits for a given wage rate, we should expect the following relationship between wages and start times:
   a. wages would fall as the start time increased beyond 6 a.m.
   b. wages would fall until the start time hit 7:30 a.m., and then rise for start-times after 7:30 a.m.
   c. wages would be constant for start times between 7 and 8 a.m, and then fall for start times after 8 a.m.
   d. wages would rise until the start time hit 7:30 a.m. and then fall for start times after 7:30 a.m.
15. In a monopsonistic model of labor market discrimination, workers with a higher cost of moving have more
a. elastic labor supply and are paid lower wages than workers with low moving costs.
b. inelastic labor supply and are paid lower wages than workers with low moving costs.
c. elastic labor supply and are paid higher wages than workers with low moving costs.
d. inelastic labor supply and are paid higher wages than workers with low moving costs.

16. If there is an inflow of immigrants into the U.S., we should expect:
 a. the wages of all native workers to decline.
b. the wages of native workers to decline if they are gross substitutes for the immigrants.
c. the wages of native workers to rise if they are gross complements for the immigrants.
d. both b and c.
e. none of the above.

17. If there is an inflow of immigrant farm workers into the U.S., we should expect that this would cause a larger
decrease in the wages of native farm workers if:
 a. farming is especially labor intensive since this would make labor demand inelastic.
b. farming is especially labor intensive since this would make labor demand elastic.
c. the demand for farm products is inelastic since this would make labor demand inelastic.
d. both a and c.

18. Which of the following would ALL contribute to an increase in the number of people who choose to immigrate
to the U.S. from China?
 a. lower interest rates, lower wages in China, or an increase in the expected length of a career.
b. higher interest rates, lower wages in China, or a decrease in the expected length of a career.
c. lower interest rates, lower wages in China, or a decrease in the expected length of a career.
d. higher interest rates, lower wages in the U.S., or an increase in the expected length of a career.

19. The largest share of legal immigrants allowed into the U.S. in the past 5 years have been admitted on the basis of:
 a. family reunification.
b. diversity programs.
c. employment based preferences.
d. political refugees.

20. In the past 5 years, the largest share of legal immigrants allowed in the U.S. have come from:
 a. Africa
b. Asia
c. Europe.

21. Efficiency wages could be used to:
 a. reduce employee theft.
b. reduce employee turnover.
c. reduce employee shirking.
d. all of the above.

22. “Just cause “ employment rules should make
 a. employees more willing to accept a deferred pay contract.
b. employees less willing to accept a deferred pay contract.
c. employees less willing to accept an efficiency wage contract.
d. employees more willing to accept an efficiency wage contract.

23. Which of the following would reduce the internal rate of return on education?
 a. a higher interest rate.
b. an increase in the expected age of retirement.
c. an increase in the wages received by a high school graduate.
d. all of the above.
1. (6 points) Many studies have used a comparison of wages for college and high school graduates to estimate the internal rate of return on a college degree. Explain how "twins studies" can be used to improve upon estimates of the internal rate of return. Be sure to describe what "flaw" the twin studies are attempting to correct and how the use of twins for the calculation is likely to affect the estimated rate of return.

2. (6 points) Suppose that you own a restaurant and are trying to decide whether to have your waiters and waitresses each keep their own tips, or whether to have them all pool tips for a given shift and then split the tips equally between the workers. Provide a list of both the advantages and disadvantages of pooling tips.

3. (6 points) Some economists have argued that more corporations should pay their CEOs on the basis of the corporation's "relative" performance instead of absolute performance. Suppose, for example, that Dell computer decided to pay its CEO on the basis of how Dell stock performed relative to an index of companies that compete against Dell.
   a. What is the major advantage of paying on a relative instead of an absolute basis?
   b. What is the major disadvantage?

4. (6 points) Describe how federal nondiscrimination laws regarding the employer provision of fringe benefits could cause the fringe benefits of a worker with a given level of income to depend upon the level of income of his or her coworkers.

5. (6 points) In a cross section of data, Barry Chiswick found that the wages of immigrants were below that of natives for young workers, but were higher than the wages of natives for older workers. Chiswick believed that this result suggested that immigrants “assimilated”. George Borjas had a different interpretation of the wage pattern. Explain how the Borjas interpretation could explain the same pattern in the data that Chiswick found.
Answer 2 of the next 3 questions.

6. (12 points)
a. Define the term "efficiency wage premium" and explain why an efficiency wage premium may be less likely to prevent "shirking" among older workers.
b. Describe a “deferred pay contract” and explain why a firm would prefer a deferred pay contract over a “spot contract” that pays a worker a wage equal to her marginal revenue product every period.
c. Why would workers prefer a spot contract over a deferred pay contract?
d. How do “just cause” employment laws affect the willingness of workers to accept a deferred pay contract?

7. (12 points) OSHA regulates workplace safety in the U.S. Some commentators have argued that these regulations are unnecessary and that job safety concerns should be left for the employer and employee to decide upon. Others have argued these regulations are vital to worker safety and that jobs would be “too risky” in the absence of OSHA.
a. Provide an economic explanation of why employers have an incentive to eliminate some, but not all, job risk for their employees.
b. Explain how an OSHA safety regulation restricting, for example, workplace exposure to harmful chemicals could potentially make workers worse off.
c. Based upon your answer in (a), describe conditions that might lead an employer and an employee to agree to “too much” risk from a social perspective. Be sure that you describe why what’s best for society could be different than what the employer and employee agree to.

8. (12 points) Suppose that you own a local delivery service and currently pay your workers $10 per hour for driving. They drive a company vehicle for deliveries. Based upon historical information, you observe that drivers average 10 deliveries per hour. You have decided that you would like to improve incentives for your workers by switching to a payment of $1 per delivery instead of $10 per hour. Provide a list of both the advantages and disadvantages of switching to the $1 per delivery payment scheme in terms of (a) your ability to recruit or retain workers; (b) work effort; and (c) other considerations.
# ANSWER SHEET

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