## ECON 443 Labor Market Analysis Final Exam (07/20/2005)

### I. Multiple-Choice Questions (80%)

- 1. A compensating wage differential is A) an extra wage that will make all workers willing to accept undesirable working conditions. B) an extra wage that is above the equilibrium wage. C) an extra wage that compensates workers for undesirable working conditions. D) an extra wage that implies firms are no longer maximizing profits.
- 2. When workers' indifference curves are drawn for wage rates versus injury risk A) the indifference curves slope downwards because a higher wage is required to accept a higher risk of injury. B) utility decreases as a worker moves to the right along an indifference curve. C) utility increases as a worker moves to the right along an indifference curve. D) the indifference curves slope upwards because a higher wage is required to accept a higher risk of injury.
- 3 On a graph of wage rates versus risk of injury, indifference curves are convex because A) risk of injury decreases workers' utility. B) each additional dollar of pay increases utility more than the previous dollar. C) utility is constant on indifference curves. D) at low levels of risk, a worker is less willing to give up wages for increased safety.
- 4. A steeply sloped isoprofit curve, with wages on the vertical axis and risk of injury on the horizontal axis, indicates that A) injury levels can be reduced easily and inexpensively. B) it would be very expensive to increase safety in the workplace. C) the industry is very competitive. D) the industry will pay only small compensating differentials.
- 5. Workers' indifference curves for wage rates versus benefits will be A) upward sloping. B) downward sloping. C) downward sloping and concave. D) upward sloping and convex.
- 6. High-paying jobs are also associated with generous benefits because A) benefits which cost \$100 generally increase utility by more than \$100 in cash. B) high-paid workers can benefit from the tax advantages given to benefits. C) employers know how to spend money better than their employees. D) high-paid workers are risk neutral.
- 7. Which of the following is NOT an expense of acquiring human capital? A) purchase of textbooks B) anxiety caused by final exams C) any wages foregone to attend school D) cost of food and housing while attending school.
- 8. Present-oriented people discount future earnings \_\_\_\_\_\_ forward-looking people. A) at the same rate as B) at a lower rate than C) at a higher rate than D) at a higher or lower rate than.
- 9. Before biases are considered, the monetary rate of return to investments in education is A) about the same as that of most other investments. B) higher than that of most other investments. C) lower than that of most other investments. D) higher for women, but lower for men.
- 10. In the labor market, signals are A) any personal characteristic viewed as an indicator of productivity. B) any acquired characteristic viewed as an indicator of productivity. C) any personal characteristic which is proven to increase productivity. D) any acquired characteristic which is proven to increase productivity.
- 11. Efficiency wages are A) designed to increase profits through reduced turnover and increased morale. B) thought to decrease unemployment. C) not profit-maximizing for

- employers because they are paying more than the market wage. D) the lowest wages at which a firm can hire workers.
- 12. For education to serve as a signal A) education must increase productivity. B) the acquisition of education must not increase wages. C) productivity and educational costs must be unrelated. D) productivity and educational costs must be negatively related.
- 13. For educational investment to be explained using hedonic theory, the costs of education A) must be the same for present- and future-oriented people. B) must decrease with age. C) must be identical for all workers. D) must vary between workers.
- 14. The most important determinant of migration is A) education. B) race. C) experience. D) age.
- 15. The earnings of immigrants, when compared to those of similar native workers, A) start out below those of the native workers, but increase more rapidly. B) start out above those of the native workers, and increase more rapidly. C) start out below those of the native workers, and increase more slowly. D) start out above those of the native workers, but increase more slowly.
- 16. Quit rates rise as A) wages increase. B) the unemployment rate increases. C) workers age. D) firm size decreases.
- 17. If skilled and unskilled labor are gross substitutes and if an influx of unskilled immigrants drives down the wages paid to unskilled workers, it will also A) increase the wage of skilled workers. B) decrease the wage of skilled workers. C) either increase or decrease the wage of skilled workers. D) cause no change in the wage of skilled workers.
- 18. As long as immigrants are paid their marginal product and pay more in taxes than they consume in government benefits, then an increase of immigrants will cause A) aggregate income of natives to increase. B) average wages of workers to increase. C) individual incomes of all workers to increase. D) average wages of workers to stay the same.
- 19. Average job tenure is lower in the United States than in most other industrialized countries. Theory predicts that this could be because A) the United States is less densely populated. B) American workers receive higher levels of firm-specific training. C) the costs of residential mobility are lower in the Unites States. D) most American workers have employer-based health insurance.
- 20. A self-enforcing contract requires that A) employees gain from opportunistic behavior. B) one party receives the entire surplus. C) both employees and employers lose by discontinuing their contract. D) the surplus be divided equally.
- 21. The surplus due to specific training of employees is A) shared by the employees and the employers. B) received by the employers. C) used to increase employees' wages above their marginal product. D) received by the employees.
- 22. Higher wages generally A) decrease worker productivity due to the fact that workers have backward-bending labor supply curves. B) decrease worker productivity due to shirking. C) increase worker productivity due to moral hazard. D) increase worker productivity by increasing the quality of the applicant pool.
- 23. Underpayment followed by overpayment is most likely to A) decrease work incentives due to low wages in the first period. B) require greater supervision. C) increase productivity of workers seeking to qualify for later overpayment. D) attract present-oriented workers.

- 24. A promotion tournament is A) a process to assure the most productive worker is paid his or her marginal product. B) a process to motivate several workers to try and win one high-paying job. C) a way to insure that all diligent workers get big rewards. D) a process to help a corporation get rid of "deadwood."
- 25. Which of the following can NOT explain why large firms tend to pay higher salaries? A) Large firms find job vacancies less costly. B) Large firms allow less independence and have more rigid discipline. C) Large firms find monitoring more expensive. D) Efficiency wages work better in large firms.
- 26. Which of the following can NOT explain differences in earnings of men and women? A) experience B) occupation C) unobservable characteristics D) income maximization by all workers.
- 27. Wage discrimination is A) paying less productive workers lower wages. B) paying one group more than another, while paying the same price for productive characteristics in both groups. C) paying one group less than another, although they have the same productive characteristics. D) paying part-time workers less per hour than full-time workers.
- 28. The index of occupational dissimilarity for women and men A) has risen since 1970. B) would be 100 if men and women were randomly assigned to jobs. C) would be 100 if all occupations were completely segregated. D) shows the percentage workers who face occupational discrimination.
- 29. Employer discrimination implies that A) if the group discriminated against is small, there will be a wage differential in the market. B) some employers give up profits to avoid hiring one group. C) there will be no market wage differential. D) co-workers and customers prefer one group of workers over another.
- 30. Customer discrimination will cause A) segregated workplaces. B) no wage differentials.C) firms to give up profits to maximize utility. D) discriminating customers to pay lower prices.
- 31. Suppose that females and males are equally productive and that some employers discriminate against females. If some employers begin discriminating against males, which of these CANNOT happen (assuming that nothing else changes). A) The relative wages of women will rise. B) The relative wages of women will stay the same. C) The relative wages of women will fall. D) The relative wages of women will rise above that of men.
- 32. Employee-based discrimination along racial lines implies all of the following EXCEPT A) workers will be paid more when working in racially integrated work places. B) some work place segregation will occur. C) workers wish to maximize utility rather than wages. D) profit-maximizing employers will seek to hire employees with a preference for discrimination.
- 33. Percentage goals in minority employment A) can be met more quickly for companies that can maintain low quit rates. B) will take longer to achieve in industries with relatively lower turnover rates. C) can always be met quickly if nondiscriminatory hiring is used. D) will not cause changes in the makeup of a company's workforce.
- 34. Racial occupational dissimilarities are \_\_\_\_\_ and have fallen \_\_\_\_\_ over time than gender-related occupational dissimilarities. A) smaller; faster B) smaller; slower C) larger; faster D) larger; slower

- 35. Federal antidiscrimination programs appear to A) have made no difference in raising relative earnings of black workers. B) have made little difference raising relative earnings of black workers, probably because individual programs have had only small effects. C) have helped to raise relative earnings of black workers. D) have hurt the relative earnings of black workers.
- 36. The Equal Pay Act of 1963 A) outlawed sexual discrimination in firing of workers. B) outlawed sexual discrimination in hiring of workers. C) outlawed racial discrimination in hiring of workers. D) outlawed separate pay scales for men and women who perform the same jobs.
- 37. Suppose that the labor force participation of married males is 70% and their unemployment rate is 20%, then their employment ratio A) is 50%. B) is 56%. C) is 80%. D) cannot be calculated without more information.
- 38. Female earnings as a fraction of male earnings tend to \_\_\_\_\_ as age increases and tend to \_\_\_\_\_ as education increases. A) increase; increase B) increase; decrease C) decrease; increase D) decrease; decrease
- 39. Which of the following can NOT explain differences in earnings of men and women? A) experience B) occupation C) unobservable characteristics D) income maximization by all workers
- 40. Which of the following can NOT explain differences in earnings of men and women? A) experience B) occupation C) unobservable characteristics D) income maximization by all workers.

#### II. Essay Questions (20%)

- 1. A firm is considering the adoption of a plan in which it would pay employees less than their  $MRP_L$  early in their careers and more than their  $MRP_L$  late in their careers. For a typical worker at the firm  $MRP_L = 11 + .1T$ , where T = the number of years which the worker has been employed at the firm and  $MRP_L$  is measured in dollars per hour. The worker's wage per hour is W = 8 + .3T. Assume that this wage is high enough to attract workers from alternative jobs, that the discount rate for the firm is 0, and that the expected tenure of a typical worker is 35 years. If workers retire after 35 years, will this plan be profitable for the firm? Explain completely. For how many years will the firm "underpay" it workers?
- 2. Consider the conditions of work in perfume factories. In California perfume factories, workers dislike the smell of perfume, while in New York workers appreciate the smell of perfume, provided that the level does not climb above S\*. (If it rises above S\*, they start to dislike it.) Suppose that there is no cost for firms to reduce or eliminate the smell of perfume in perfume factories and assume that the workers have an alternative wage, W\*. Please draw ONE diagram using isocost and indifference curves that depicts the situation. (The California and New York isocost curves are the same, but their indifference curves differ.) What level of perfume smell is there in the New York factories? In the California factories? Is there a wage differential between the California and New York workers? Please explain your answer completely.

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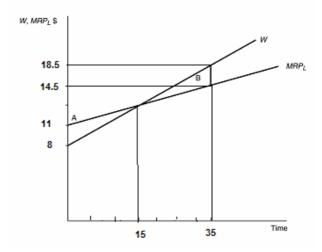
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### I. Multiple-Choice Questions (80%)

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<sup>16.</sup> D	<sup>17.</sup> B	<sup>18.</sup> A	<sup>19.</sup> C	<sup>20.</sup> C	<sup>21.</sup> A	<sup>22.</sup> D	<sup>23.</sup> C	<sup>24.</sup> B	<sup>25.</sup> A	<sup>26.</sup> D	<sup>27.</sup> C	<sup>28.</sup> C	<sup>29</sup> ·B	<sup>30.</sup> A
<sup>31.</sup> C	<sup>32.</sup> D	<sup>33.</sup> B	<sup>34.</sup> A	<sup>35.</sup> C	<sup>36.</sup> D	<sup>37.</sup> B	<sup>38.</sup> C	<sup>39.</sup> D	<sup>40.</sup> D					

### II. Essay Questions (20%)

**1. Answer:** The graph shows the wage and  $MRP_L$  lines, which cross after 15 years. The firm will adopt the plan because it expects to profit from it -- the early underpayments exceed the later overpayments. (Because the discount rate is zero, we can find the present value of underpayments and overpayments by simply adding them up.) Triangle B (the initial underpayment) exceeds triangle A (the later overpayment) when T=35 years. If workers retired after 35 years, Triangle B definfitly exceeds triangle A. It is thus that The firm will not adopt the plan.



2. Answer: See the figure below. The California workers are paid exactly the same as the New York workers.

This wage equals  $W^*$ . The level of smell in California is 0; in New York it is  $S^*$ .

