(5 points) Answer the following essay question, writing only on the paper provided:

1. Carefully define the demand for labor. Illustrate using graphical analysis the impact of a mandated wage increase (such as a minimum wage) upon the market for labor. (Hint: what happens to wages and employment in the market?) What assumptions must you make in order to answer this question? Briefly explain your answer.
(10 points) Answer all of the following 10 multiple-choice questions. Make sure that your answers are coded in the answer sheet provided.

1. Suppose a researcher finds that average male hourly wages are $12.50 while average female hourly wages are $10.50 but that this difference is not statistically significant. What is the implication of the lack of statistical significance?
   A. We cannot reject the hypothesis that male wages are actually higher than female wages.
   B. We cannot reject the hypothesis that male and female wages are actually the same.
   C. We cannot reject the hypothesis that male wages are actually lower than female wages.

2. Suppose that the price of wheat rises. Assuming that potatoes and wheat are substitutes in consumption, what will be likely impact upon the market for potatoes?
   A. The price of potatoes will increase while the quantity of potatoes will decrease.
   B. Both the price and quantity of potatoes will increase.
   C. Both the price and quantity of potatoes will decrease.
   D. The price of potatoes will decrease while the quantity of potatoes will increase.

3. Demand for labor is ultimately derived from:
   A. The utility that firms gain from hiring workers.
   B. The demand that exists for the product that labor produces.
   C. The law of diminishing return.
   D. The productivity of workers.

4. Under what conditions might a monopolist actually pay higher wages than a perfectly competitive firm?
   A. When the monopolist firm is also a monopsonist.
   B. When the monopolist firm is also perfectly competitive in the labor market.
   C. When the market supply of labor is relatively elastic.
   D. When the monopolist is a regulated natural monopoly.

5. Workers pay for a larger portion of payroll taxes when:
   A. Demand for labor is relatively inelastic while supply of labor is relatively elastic.
   B. Demand for labor is highly inelastic.
   C. Supply of labor is highly elastic.
   D. Supply of labor is highly inelastic.

6. The marginal rate of substitution measures:
   A. The price a consumer pays for one good relative to a second good.
   B. The rate at which a consumer would be willing to trade one good for another.
   C. The extra utility a consumer gains by consuming additional units of a good.
   D. The marginal product of labor.

7. Economists assume that for most consumers indifference curves are convex, which means that:
   A. Indifference curves are bowed out from the origin.
   B. Indifference curves are downward sloping lines.
   C. Consumers tend to prefer medium amounts of all goods they consume rather than just consuming a little of one and a lot of another good.
   D. Consumers tend to prefer consuming a little of one good and a lot of another good rather than consuming medium amounts of both goods.

8. Which of the following statements about budget lines are true?
   I. Budget lines reflect a consumer’s preferences.
   II. If a consumer’s income rises then the consumer’s budget line will move out parallel to his original budget line.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

9. Which of the following statements are true?
   I. All firms hire labor where marginal revenue product equals marginal factor cost (marginal expense).
   II. The substitution effect of a wage change results from the impact that changing wages has upon costs of production and output.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

10. Wage elasticity of demand for labor equals:
    A. Change in (∆) wage (W) ÷ ∆ employment (L).
    B. ∆L ÷ ∆W.
    C. %∆W ÷ %∆L.
    D. %∆L ÷ %∆W.