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

1. Briefly define what is meant by a substitution effect and an income effect in labor supply theory. Using the labor supply model developed in class show the impact of a wage increase upon an individual's labor/leisure choices. How much of the total change in hours devoted to leisure (and labor) result from the substitution effect, from the income effect? Using your graph, briefly comment on the directions of both effects (does the effect increase or decrease labor supply?) and their relative magnitudes (which effect is largest?). 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. Employment losses in labor markets caused by mandated wage increases would be larger when:
   A. The Demand for labor is more inelastic.
   B. The Supply of Labor is more inelastic.
   C. The uncovered sector of the labor market increases in size.
   D. The uncovered sector of the labor market decreases in size.

2. Which of the following statements are true?
   I. The scale effect in Demand for labor theory refers to the impact that changing input prices have upon the scale of operations and, hence, demand for labor.
   II. An increase in the minimum wage has been found to have a significant impact on household incomes for the poor.
   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.

Use the following Table to Answer Questions 3 and 4

<table>
<thead>
<tr>
<th>Option</th>
<th>Period 1</th>
<th>Period 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$1,250.00</td>
<td>$737.50</td>
</tr>
<tr>
<td>B</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>C</td>
<td>$800.00</td>
<td>$1,210.00</td>
</tr>
<tr>
<td>D</td>
<td>$500.00</td>
<td>$1,525.00</td>
</tr>
<tr>
<td>E</td>
<td>$400.00</td>
<td>$1,630.00</td>
</tr>
</tbody>
</table>

3. The wage streams in Table 1 above indicate that the present value of Option B is:
   A. $2,000 if the discount rate (r) equals 5 percent.
   B. $1,952.38 if r equals 10 percent.
   C. $1,952.38 if r equals 5 percent.
   D. $1,909.09 if r equals 5 percent.

4. Assume that the Present Value for each of the five options in Table 1 are equal at the current discount rate and that Option B represents the competitive market wage available for all workers. In this case:
   A. All five options would always be equivalent to firms.
   B. All five options would always be equivalent to workers.
   C. Firms would only be willing to pay options C through E if workers must abide by long-term contracts.
   D. All five options are only equivalent to firms and workers if long-term contracts are enforceable for both firms and workers.

5. Which of the following statements about training are true?
   I. Firms would only be willing to invest in General Training but not in Specific Training.
   II. Training costs are quasi-fixed costs.
   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.

6. The quantity of labor supplied by an individual:
   A. always rises when the wage rate rises.
   B. always falls when the wage rate rises.
   C. rises when the wage rate rises at low wage levels because the substitution effect outweighs the income effect.
   D. rises when the wage rate rises at high wage levels because the income effect outweighs the substitution effect.

7. Which of the following statements are true?
   I. Social insurance programs such as unemployment compensation tend to raise reservation wages and reduce labor supply.
   II. Household production refers to the tendency of households to sell their labor for wages in the labor market.
   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.

8. An individual's reservation wage:
   A. Equals the wage where the individual is indifferent to working or not working.
   B. Indicates that the individual will not work if the wage falls anymore.
   C. Equals the implicit value that the individual places upon leisure.
   D. All of the above.

Use the following Graph to Answer Questions 9 and 10

9. Assuming that the individual whose indifference curves and budget lines are shown in the graph above does not have non-labor income, then the individual will choose to be at point:
   A. A
   B. E
   C. F
   D. C

10. Assuming that the benefits of worker's compensation program equal a hundred percent of lost income and that the individual in the graph above is eligible for the program, then the individual would:
    A. Choose not to work at current income.
    B. Still choose to work at current wages.