I. Multiple Choice Questions

(For each of the following questions, choose the best answer and explain clearly why you chose that answer over the other choices)

1. The Coke machine in the basement of Silsby sells sodas for 65 cents. You put in a dollar, but the machine is out of change, spits back your dollar and won't give you a soda. You think to yourself, "Just take my dollar, keep the @#! change and give me my Fresca. If you had gotten the Fresca for 65 cents, then your consumer surplus from the Fresca must have been
   a) at least a dollar
   b) at least 65 cents
   c) at least 35 cents
   d) cannot tell

2. If the utility derived from your last dollar spent on bagels is less than that derived from the last dollar spent on doughnuts, then you
   a) are currently maximizing utility
   b) should buy fewer doughnuts and more bagels to maximize utility
   c) should buy more doughnuts and fewer bagels to maximize utility
   d) should buy more or less doughnuts depending on the price of doughnuts

3. In "If I Had $1000000," Barenaked Ladies sing, "If I had $1000000, we wouldn't have to eat Kraft dinner, but we would!" In economic terms, this might be translated as: "Lots of people think that Kraft dinner is . . .
   a) a normal good, but for me it is an inferior good"
   b) an inferior good, but for me it is a normal good"
   c) relatively elastic, but for me it is relatively inelastic"
   d) relatively inelastic, but for me it is relatively elastic"

4. If prices double and income doubles, the budget constraint
   a) will double
   b) will move inward
   c) will move outward by 50%
   d) will not shift position

5. If a tax cut causes after-tax wage rates to rise, we expect people to respond by working more if
   a) the income effect is larger than the substitution effect.
   b) the substitution effect is larger than the income effect.
   c) the substitution effect and the income effect exactly offset each other.
   d) both the income nor the substitution effect are zero.

6. If a certain consumer good is a Giffen good, then it must be the case that
   a) the good is an inferior good
   b) the income and substitution effects work in opposite directions
   c) the income effect outweighs the substitution effect
   d) all of the above

II. Short Answer Questions

For each of the following, draw an indifference curve map that reflects the described preferences between white bread and pumpernickel bread. If necessary, you can assume that bread is only used to make sandwiches.
1. I will only eat "multicultural" sandwiches, made from one slice of white and one slice of pumpernickel.

2. I believe that "without chemicals, life itself would be impossible" and that whole grains are for farm animals. Thus, white bread is obviously the only way to go when making sandwiches.

3. I am equally happy eating white bread as eating pumpernickel bread.

4. Being the naturalist sort, I refuse to ingest processed white breads. A crusty pumpernickel suits me just fine.

III. In-Depth Problem

Suppose that the following diagram shows the average person's budget line and preferences between years of post-secondary education and all other goods.

![Diagram](image-url)

a) How many years of post-secondary education does this person choose to buy? How much does each year cost? Briefly explain how you obtained your answer.

b) Suppose that the "Education President" proposes a new program that will pay half of people's tuition. Draw in the new budget line. Now how many years of post-secondary education does this person choose to buy? Briefly explain how you obtained your answer.

c) Consider an alternate plan where tuition is full price, but everyone would simply be given $25,000 to spend on education or anything else. Draw in the budget line under this program. Compare the amount of money spent by the government, the amount of education bought, and the level of utility obtained under this program to that under part b). Briefly explain your answer.