

## Short Answer Questions

### Chapter 21.

In the following questions, assume that there are two goods available, coffee and pastries. Coffee is priced at €3 and pastries at €5.

1. Draw a diagram to show the consumers budget constraint in a week if their income was €600 per week.
2. Show on your diagram what would happen if:
  - a. income rose to €750 per week
  - b. income fell to €25 per week
  - c. the price of coffee rose to €4 and income was €600 per week
3. Outline the four key properties of indifference curves.
4. Given the properties of indifference curves, explain why it is not possible for two indifference curves to cross.
5. Assuming an indifference curve which is convex to the origin, what can this tell us about a consumer's marginal rate of substitution between coffee and pastries?
6. Explain why the consumer's optimal choice occurs where the marginal rate of substitution is equal to the relative price of the two goods.
7. Draw a diagram showing a budget constraint for coffee and pastries assuming an income of €600 per week and the price of coffee being €3 and pastries €5 each. Draw on an indifference curve to show the consumers optimal choice. Show what to consumer equilibrium in each case if:
  - a. the consumer's income increases to €750 per week
  - b. the price of pastries falls to €4 each.
8. Distinguish between the income and substitution effects of a change in the price of pastries.
9. Recalling your initial diagram drawn for Question 7, assume that the price of coffee rises to €4 per cup. Draw the new consumer equilibrium and clearly show the income effect and substitution effect of this price change on your diagram as a result of the new equilibrium.
10. We know from Chapter 4 that demand curves are downward sloping showing an inverse relationship between price and quantity demanded. Explain, using appropriate diagrams, how indifference curve analysis can help prove why a demand curve is shaped in this way.