Chapter 21: Consumer Behavior and Utility Maximization
Extra Multiple Choice Questions for Review

1. When the price of a product falls for a normal good, the:
   A) income and substitution effects will encourage consumers to purchase more of the product.
   B) income and substitution effects will encourage consumers to purchase less of the product.
   C) substitution effect will encourage consumers to purchase less of the product and the income effect will encourage them to purchase more.
   D) substitution effect will encourage consumers to purchase more of the product and the income effect will encourage them to purchase less.

2. The reason the substitution effect works to encourage a consumer to buy less of a product when its price increases is:
   A) the real income of the consumer has been increased.
   B) the real income of the consumer has been decreased.
   C) the product is now relatively more expensive than it was before.
   D) other products are now relatively more expensive than they were before.

3. George consumes only two goods, pizza and compact discs. Both are normal goods for George. Suppose the price of pizza decreases. George's consumption of compact discs will:
   A) increase due to the income effect.
   B) increase due to the substitution effect.
   C) increase due to a negative income elasticity.
   D) remain unchanged, since the income elasticity of pizza is greater than 0.

4. The total utility of a product is calculated by:
   A) summing the marginal utility from the first unit of a product that is consumed and the last unit of a product that is consumed.
   B) multiplying the marginal utility of a unit of the product consumed times the average quantity consumed.
   C) summing the marginal utilities for each successive unit of the product that is consumed.
   D) multiplying price times quantity and dividing by the marginal utility.

5. Which of the following defines marginal utility?
   A) the change in total utility divided by the price of a product
   B) the maximum amount of satisfaction from consuming a product
   C) the total satisfaction received from consuming as much of the product that is available for consumption
   D) the additional satisfaction received from consuming one more unit of a product
6. Which best expresses the law of diminishing marginal utility?  
   A) The more consumption of a product, the smaller is the total and marginal utility from the consumption.  
   B) The less consumption of a product, the greater is the total and marginal utility of the consumption.  
   C) The more consumption of a product, the smaller is the marginal utility from consuming an additional unit.  
   D) The more consumption of a product, the smaller is the total and marginal utility from the consumption.  

7. Which situation is consistent with the law of diminishing marginal utility?  
   A) The more pizza Henry eats, the more he enjoys another slice.  
   B) The more pizza Henry eats, the less he enjoys another slice.  
   C) Henry's marginal utility from eating pizza becomes positive after eating three slices.  
   D) Henry's marginal utility from eating pizza reaches a maximum when total utility is zero.  

8. Children who refuse to eat Brussels sprouts at dinner are making the statement that the marginal utility of Brussels sprouts is:  
   A) zero.  
   B) negative.  
   C) positive, but decreasing.  
   D) less than the total utility.  

9. When marginal utility is decreasing but positive, total utility is:  
   A) increasing at a decreasing rate.  
   B) decreasing at a decreasing rate.  
   C) increasing at an increasing rate.  
   D) decreasing at an increasing rate.  

10. A consumer with a fixed income will maximize utility when each good is purchased in amounts such that the:  
    A) total utility is the same for each good.  
    B) marginal utility of each good is maximized.  
    C) marginal utility per dollar spent is the same for all goods.  
    D) marginal utility per dollar spent is maximized for each good.  

11. If a rational consumer is in equilibrium, then:  
    A) the marginal utility obtained from one product is equal to the marginal utility obtained from any other product.  
    B) a reallocation of income would increase the consumer's total utility.  
    C) the marginal utility per last dollar spent is the same for all goods consumed.  
    D) total utility becomes zero.
12. If you know that the marginal utility per dollar spent on product Alpha is less than the marginal utility per dollar spent on product Beta, consumers who spend all their income on these two products can:
   A) maximize total utility but not marginal utility.
   B) maximize marginal utility but not total utility.
   C) increase total utility by buying more of Beta and less of Alpha.
   D) increase total utility by buying more of Alpha and less of Beta.

Use the following to answer questions 13-15:

Answer the next question(s) based on the table below showing the marginal utility schedules for product X and product Y for a hypothetical consumer. The price of product X is $4 and the price of product Y is $2. The income of the consumer is $20.

<table>
<thead>
<tr>
<th>Product X</th>
<th>Product Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>MU&lt;sub&gt;x&lt;/sub&gt;</td>
</tr>
<tr>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
</tr>
</tbody>
</table>

13. Refer to the above table. If the consumer can only buy product X, how much will the consumer buy and what will be the total utility?
   A) 4X and 20   B) 4X and 104   C) 5X and 16   D) 5X and 120

14. Refer to the above table. If the consumer buys both product X and product Y, how much will the consumer buy of each to maximize utility?
   A) 4X and 2Y   B) 3X and 4Y   C) 4X and 3Y   D) 5X and 3Y

15. Refer to the above table. When the consumer purchases the utility-maximizing combination of product X and product Y, total utility will be:
   A) 72.   B) 84.   C) 136.   D) 156.

16. A consumer is in equilibrium and is spending income in such a way that the marginal utility of product X is 40 units and Y is 16 units. The unit price of X is $5. The price of Y is:
   A) $1 per unit.   B) $2 per unit.   C) $3 per unit.   D) $4 per unit.

17. Which is an explanation for why the demand curve is downsloping?
   A) normal goods
   B) the law of supply
   C) the law of diminishing marginal utility
   D) the law of increasing opportunity cost
Answer Key -- ch21

1. A
2. C
3. A
4. C
5. D
6. C
7. B
8. B
9. A
10. C
11. C
12. C
13. D
14. B
15. D
16. B
17. C