Exam 2 – Version A (Green)

Name: ______________________

- Each problem is worth 2.5 points unless otherwise indicated.
- This exam ends promptly at 9:52. The late penalties for turning it in late are:

  1 minute late: - 3 points
  2 minutes late: - 6 points
  3 minutes late: - 9 points
  4 minutes late: not accepted

1. (4 pt) Indicate (√) which of the following is generally considered by economists to be a positive (i.e. good) feature of markets? Check any, all, or none.
   ____ Markets, with little or no government intervention, **usually get individuals to do things which benefit others.**
   ____ Markets, with little or no government intervention, **tend to be highly effective at dealing with pollution.**
   ____ Markets, with little or no government intervention, **tend to result in a relatively uniform distribution of income.**
   ____ Markets, with little or no government intervention, **tend to solve relatively complex problems of production and distribution in efficient ways.**

2. ____ Which economists discovered (or invented) the theory of supply and demand?
   a. Karl Freidrich Gauss   b. Martin Luther
   c. Alfred Marshall   d. David Ricardo
   e. Adam Smith   f. William Stanton

3. (5 pt) Indicate (√) which of the following, ceteris paribus, would result in an **increase in demand** for airline tickets to Corpus Christi, Texas. Check any, all, or none.
   ____ a **decrease** in the price of airline tickets to Corpus Christi, Texas.
   ____ an **increase** in the price of airline tickets to Corpus Christi, Texas.
   ____ a **decrease** in the price of hotel rooms and admission to attractions in Corpus Christi, TX.
   ____ a **decrease** in the price of aviation fuel.
   ____ an **increase** in the price of aviation fuel.

4. (5 pt) Indicate (√) which of the following, ceteris paribus, would result in an **increase in supply** of airline tickets to Corpus Christi, Texas. Check any, all, or none.
   ____ a **decrease** in the price of airline tickets to Corpus Christi, Texas.
   ____ an **increase** in the price of airline tickets to Corpus Christi, Texas.
   ____ a **decrease** in the price of hotel rooms and admission to attractions in Corpus Christi, TX.
   ____ a **decrease** in the price of aviation fuel.
   ____ an **increase** in the price of aviation fuel.
5. _____ It is 1,200 A.D. in ancient Mexico. Toltec traders are supplying Obsidian to people farther to the south. Then, the demand for obsidian decreases. How will the suppliers of obsidian know how to react to this?
   a. The will find their obsidian sells much more quickly than before and that there are more buyers than they have obsidian. They will naturally want to produce more and raise price.
   b. The will find their obsidian sells much less quickly than before and that they have more obsidian than there are buyers. They will naturally want to produce less and lower price.
   c. Some institution will tell them how to react. The institution could be a sellers’ guild, a buyers’ guild, or the government. Some such institution will naturally arise in any market.
   d. Individual seller’s estimates of market supply and demand will change. Although many sellers will calculate the wrong equilibrium, on average the sellers will be correct.
   e. This pre-dates the discovery of the laws of supply and demand. It will probably many years or even generations before they react or even that there was a change.

6. _____ Billy Bob’s Boat Manufacturing Inc. used to employ 300 workers and run its factory for three shifts a day. Most workers earned some overtime. Recently however, fishing has fallen out of fashion. In reaction to this, Billy Bob’s Boat Manufacturing has laid off 20 workers, cut workers’ hours, eliminated overtime, now only runs the factory 2 shifts per day, and produces fewer boats. This is typical of all boat manufacturers. Which best describes what happened to Billy Bob’s and other boat manufacturers? Check any, all, or none.
   a. only an increase in quantity supplied
   b. only a decrease in quantity supplied
   c. an increase in supply
   d. a decrease in supply
   e. No change in either quantity supplied or supply.
   f. It depends on how much production and sales drop.

7. _____ In the above question (# 6) what best described what happened to Demand? Check any, all, or none.
   a. only an increase in quantity demanded
   b. only a decrease in quantity demanded
   c. an increase in demand
   d. a decrease in demand
   e. no change in either quantity demanded or demand
   f. It depends on how much production and sales drop.

8. _____ Amanda Lovett has drawn one of her first demand curves (shown at right). What is true of the (own price) elasticity of demand along this demand curve?
   a. demand is unit elastic
   b. demand is elastic
   c. demand is inelastic
   d. the elasticity of demand varies along the curve. It is most elastic towards the top (ex. pt. A)
   e. the elasticity of demand varies along the curve. It is most elastic towards the bottom (ex. pt. B)
9. (9 pt) Assume the market for bicycles in the U.S. is initially in equilibrium. At right, draw the market for bicycles in the U.S. Make sure you:
   • Label your axes
   • Draw a Supply curve. Label it $S_0$.
   • Draw a Demand curve. Label it $D_0$.
   • Label the equilibrium point, price, and quantity ($E_0$, $P_0$, and $Q_0$ respectively)

Now, assume that the price of steel and aluminum used in bicycles greatly increases. Nothing else changes.
   • Draw and label the new curve(s). Use a 1 subscript.
   • What market condition will result if the price does not change (if $P$ stays at $P_0$)? ________________
   • Label new equilibrium point ($E_1$, $P_1$, and $Q_1$ respectively)

10. (9 pt) Assume the market for bicycles in the U.S. is initially in equilibrium. At right, draw the market for bicycles in the U.S. Make sure you:
    • Label your axes
    • Draw a Supply curve. Label it $S_0$.
    • Draw a Demand curve. Label it $D_0$.
    • Label the equilibrium point, price, and quantity ($E_0$, $P_0$, and $Q_0$ respectively)

Now, assume that the number of and ease of access to bike paths greatly increases. Nothing else changes.
    • Draw and label the new curve(s). Use a 1 subscript.
    • What market condition will result if the price does not change (if $P$ stays at $P_0$)? ________________
    • Label new equilibrium point ($E_1$, $P_1$, and $Q_1$ respectively)
11. Assume that 北京小吃 is an inferior good. Consumer incomes decrease greatly. Ceteris paribus, what is the likely result?
   a. The quantity of 北京小吃 sold increases. 北京小吃’s relative price decreases.
   b. The quantity of 北京小吃 sold increases. 北京小吃’s relative price increases.
   c. The quantity of 北京小吃 sold decreases. 北京小吃’s relative price decreases.
   d. The quantity of 北京小吃 sold decreases. 北京小吃’s relative price increases.
   e. More information is needed to answer this.

12. (5 pt) In 2008 several things happen in the market for airline travel. Consumer incomes rise. Also, airline pilots, flight attendants, and mechanics all negotiate significantly higher wages. Nothing else changes. Airline travel is, by the way, a normal good.
   Based on this information what will happen to the quantity of airline tickets sold?
   a. The quantity of airline tickets sold increases.
   b. The quantity of airline tickets sold decreases.
   c. More information is needed to answer this.

Based on this information what will happen to the price of airline tickets?
   a. The price of airline tickets increases.
   b. The price of airline tickets decreases.
   c. More information is needed to answer this.

13. (5 pt) In 2008 several things happen in the market for beef. Several medical journals report that consuming bone meal made from cattle bones greatly decreases one’s risk of prostate cancer. Also, several medical journals report that eating beef definitely increases one’s risk of developing Alzheimer’s disease. Assume that one does not ingest bone meal when eating beef. Nothing else changes.
   Based on this information what will happen to the quantity of beef sold?
   a. The quantity of beef sold increases.
   b. The quantity of beef sold decreases.
   c. More information is needed to answer this.

Based on this information what will happen to the price of beef?
   a. The price of beef increases.
   b. The price of beef decreases.
   c. More information is needed to answer this.

14. (4 pt) Kandi’s Candy, Inc. now sells 850 lbs. of KC lemon bars per day at a price of $4.50/lb. They estimate that if they raise their price to $5.50/lb, they will sell 750 lbs. Assume this estimate is correct.
   • What is the [(own) price] elasticity of demand for KC lemon bars?
   • How would an economist describe the [(own) price] elasticity of demand for KC lemon bars?
15. (4 pt) Kandi’s Candy, Inc. still sells 850 lbs. of KC lemon bars per day at a price of $4.50/lb. They still estimate that if they raise their price to $5.50/lb, they will sell 750 lbs. Assume these estimates are correct. Now, however, they wish to convert to kilograms and Mexican Pesos. Assume the following ratios:

\[ 2.2 \text{ lb} = 1 \text{ kg} \quad \text{and} \quad \$0.09 = 1 \text{ peso} \]

- What is the (own) price elasticity of demand for KC lemon bars when kilograms and Pesos are used?

- How would an economist describe the (own) price elasticity of demand for KC lemon bars when kilograms and Pesos are used?

16. Entrail’s hot dogs have long had a reputation for being the cheapest hot dog on the market, both in terms of price and quality. It’s old price was $1.50 per pack (or $1.00 with a coupon). Uncle’s decides to raise it’s price to $2.00 ($1.50 with a coupon) and change its label. Sales soon increase by 20%. No other brands of hot dogs, or any other meat for that matter, have changed their prices. Buyers’ income have not changed. The number of potential buyers has not changed. Which of the following is true?
   a. This violates the Law of Demand but follows the Law of Supply.
   b. This question is talking about an upward sloping demand curve. This will only occur if demand is perfectly elastic.
   c. This question is talking about an upward sloping demand curve. This will only occur if demand is perfectly inelastic.
   d. This question is talking about two different demand curves.

17. Brenda likes to make rocking chairs. Currently, working out of a small shop, she makes 10 chairs per week and sells them for $200 apiece. She barely makes a profit. She is planning on opening a small factory with better equipment. This will allow her to produce 60 chairs per week. Further, she will be more efficient and can sell the chairs for as low $150 and still make a profit. Which of the following is true?
   a. This violates the Law of Supply but follows the Law of Demand.
   b. This question is talking about a downward sloping supply curve. This will only occur if supply is perfectly elastic.
   c. This question is talking about a downward sloping supply curve. This will only occur if supply is perfectly inelastic.
   d. This question is talking about two different supply curves.

18. It’s 2020 and there are 6 major producers of American lager beers. Three industry studies are released. Study 1 indicates that the price elasticity of demand for all American lager beers, combined, is 0.92. Study 2 indicates that red uniforms make workers work harder. Study 3 indicates that buyers are not terribly loyal to any particular brand. **What will likely result if Duff Beer, one of the 6 major firms, raises its price?**
   a. Duff’s total revenues will likely fall.
   b. Duff’s total revenues will likely be unchanged.
   c. Duff’s total revenues will likely rise.
19. **Behold!** Amanda Marie Lovett (2½ years old) has just drawn her second demand curve (below). Smart little kid. However, she forgot to label the market. What can you say about the good in question’s elasticity of demand (over the range she drew)?
   a. Probably nothing. Firms which raise their price while keeping output fixed can usually prosecuted under U.S. anti-trust laws.
   b. Nothing. Elasticity cannot be calculated without numbers for price and quantity demanded.
   c. Demand for the good is perfectly inelastic over this range.
   d. Demand for the good is unit elastic over this range.
   e. Demand for the good is perfectly elastic over this range.

20. **It’s 2020 and the world is still dependent on oil.** Attempts by the U.S., Japan, and Europe to develop alternative energy sources have, so far, not succeeded. Alternative energy sources still cannot compete with gas and oil. OPEC (the Organization of Petroleum Exporting Countries) is meeting. Their decision is whether or not to attempt to raise the price of oil. Which country is the most likely to support increasing price?
   a. Nigeria with proven reserves of 22.5 Billion barrels and a government that tends to be replaced by coup every few years.
   b. Saudi Arabia with proven reserves of 264 billion barrels and a very stable government.
   c. There’s no reason to believe the two nations would favor different strategies.

21. (5 pt) In the world market for hogs, the \((own)\) price elasticity of demand is 0.82.

   Based on this information which of the following would be a way for all hog farmers to increase total revenues?
   a. all hog farmers decrease quantity produced
   b. all hog farmers increase quantity produced
   c. More information is needed to answer this.

   Based on this information which of the following would be a way for hog farmers in and around Ava, Missouri to increase total revenues?
   a. Ava, Missouri hog farmers decrease quantity produced
   b. Ava, Missouri hog farmers increase quantity produced
   c. More information is needed to answer this.

22. **You’ve gotten a job estimating elasticities for the Turf Grass Institute of Florida (TGIF).** Lawn fertilizer is your first good. Scotts fertilizer is considered to be higher quality than most lawn. Which is likely to have the more elastic demand \((own)\) price? 
   a. all lawn fertilizers combined (Scotts, Vigaro, GreenThumb, etc)
   b. Scotts lawn fertilizer
   c. \(E_D\) should be the same for both
23. _____ Each week, Gwendolyn typically buys 5 bagels from Einstein’s and a pack of gum (5 sticks) from 7–11. She considers both bagels and gum to be exactly half-way between a luxury and a necessity. Both, in her opinion, have the same number of reasonable substitutes. Which is likely to have the **more elastic** demand [(own) price]?
   
a. Bagels 
   b. Gum 
   c. $E_D$ should be the same for both 
   d. Dude! Gum loses its elasticity if you chew it long enough. 
   e. But check out the bagel I left in my car all summer! Like totally inelastic, man!

24. _____ Yee haw! You’ve just been offered a job as city manager for Ava, Missouri. Your first job is to increase the amount of taxes the city collects by levying a 10% tax on one good. The goods from which you can choose are shown below. Which good should you tax if **your only goal is to bring in the most tax revenues**?

<table>
<thead>
<tr>
<th>Good</th>
<th>Pre-tax Quantity</th>
<th>Pre-tax Price</th>
<th>ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Fishing licenses</td>
<td>800</td>
<td>$10</td>
<td>2.14</td>
</tr>
<tr>
<td>b. Hunting licenses</td>
<td>400</td>
<td>$20</td>
<td>1.00</td>
</tr>
<tr>
<td>c. Boating permits</td>
<td>200</td>
<td>$40</td>
<td>0.51</td>
</tr>
<tr>
<td>d. Under 16 Marriage permits</td>
<td>100</td>
<td>$80</td>
<td>0.82</td>
</tr>
</tbody>
</table>

25. _____ What did the assigned readings say with regarding to the U.S. tax system and male versus female labor?
   
a. Getting married often bumps couples into higher tax brackets. Since female labor supply is, on average **elastic** and that of males is **inelastic**, these higher tax rates discourage **female** labor but leave male labor relatively unaffected. 
   
b. Getting married often bumps couples into higher tax brackets. Since female labor supply is, on average **inelastic** and that of males is **elastic**, these higher tax rates discourage **female** labor but leave male labor relatively unaffected. 
   
c. Getting married often bumps couples into higher tax brackets. Since female labor supply is, on average **elastic** and that of males is **inelastic**, these higher tax rates discourage **male** labor but leave female labor relatively unaffected. 
   
d. Getting married often bumps couples into higher tax brackets. Since female labor supply is, on average **inelastic** and that of males is **elastic**, these higher tax rates discourage **male** labor but leave female labor relatively unaffected. 

26. _____ All your hard work has paid off. You have gotten a high paying job with lots of foreign travel working for Ballard, Inc. Your boss has given you responsibility for pricing 北京小吃, one of Ballard’s best selling products in Asia. Ballards goal is to maximize total revenues from 北京小吃. The [(own) price] elasticity of demand for 北京小吃 is **0.45**? What should Ballard do?
   
a. raise 北京小吃’s price 
   b. leave 北京小吃’s price unchanged 
   c. lower 北京小吃’s price 
   d. more information is needed
27. _____ All your hard work has paid off. You have gotten a high paying job with lots of foreign travel working for Ballard, Inc. Your boss has given you responsibility for pricing $\triangle \square \gamma_2$, one of Ballard’s best selling products in ancient Egypt. Ballard’s goal is to maximize total revenues from $\triangle \square \gamma_2$. The [(own) price] elasticity of demand for $\triangle \square \gamma_2$ is 2.45? What should Ballard do?
   a. raise $\triangle \square \gamma_2$ ’s price  
   b. leave $\triangle \square \gamma_2$ ’s price unchanged  
   c. lower $\triangle \square \gamma_2$ ’s price  
   d. more information is needed  
   e. Dude! What’s with the time travel thing?

28. _____ The U.S. Marines are deciding whether or not to increase the years of education required (currently high school equivalent, i.e. 12 years) required to enlist. Colonel “Bulldog” Granger and Major “Killer” Gauss have estimated that; “the elasticity of # of enlistments with respect to years of education required is relatively elastic”. Assume Granger and Gauss are correct and that it is elastic. Which of the following is true?
   a. If the number of years required is increased a bit, say by 1 year (about 8%), the # of enlistments will not change noticeably.
   b. If the number of years required is increased a bit, say by 1 year (about 8%), the # of enlistments will only fall a small amount, say by 3%.
   c. If the number of years required is increased a bit, say by 1 year (about 8%), the # of enlistments will fall by the exact same percent (8%). This is highly unlikely and Granger and Gauss are probably wrong.
   d. If the number of years required is increased a bit, say by 1 year (about 8%), the # of enlistments will fall significantly, say by 16%.
   e. Any change in the number of years required will result in enlistments falling to zero.