

INSTRUCTIONS: Please answer all questions to the best of your ability within the allotted time of 100 minutes. You are required to **show your work** to receive credit. For multiple choice and true/false questions, please circle the appropriate answer. 100 possible points.

Section 1: Basic Comprehension 20 points

1. Indicate whether the following statements represent a normative (N) or positive (P) statement. Two points apiece.

P N A flat tax on income would result in lower taxes for higher income families.

P N A flat tax on income would be unfair since higher income families would pay less than under the current system of proportional taxation.

2. Yes No Assume that the price of butter is \$2.25 a pound in Atlanta and \$1.75 a pound in Birmingham, Alabama. Assume that the transportation cost is equal to 2% of the cost of butter per pound. Is there room for arbitrage between the two markets? 4 points

3. T F As the slope of a demand curve increases, the price inelasticity of the good the demand curve represents decreases. 4 points

4. Which of the following statements is most accurate? 4 points

- a. All else remaining equal, if supply increases and demand decreases, price will decline and quantity will increase.
- b. All else remaining equal, if supply decreases and demand increases, price will increase and quantity will decrease.
- c. All else remaining equal, if supply increases and demand increases, price will be ambiguous and quantity will decrease.
- d. All else remaining equal, if supply decreases and demand decreases, price will be ambiguous and quantity will decrease.

5. Assume that goods A and B are complements. All else remaining equal, if the price of good B increases, then the demand for good A will: 4 points

- a. Remain stable
- b. Increase
- c. Decrease
- d. Demand does not change, Quantity Demanded changes

Section 2: Calculation and Demonstration of Intermediate Knowledge

20 Points

1. When the average price of laser jet printers is \$525, the quantity demanded for 450-MHz computers is 1,850,000 units per quarter. When the average price of laser jet printers increases to \$550, the quantity demanded for 450-MHz computers declines to 1,725,000 per quarter. What is the cross price elasticity of demand for 450-MHz computers with respect to laser jet printers? 5 points

2. You have been hired as a consultant for the city of Atlanta and are tasked to provide policy solutions that would help assist townhouse developers in the city of Atlanta with the objective of luring more developments within the city and thus create a supply of townhouses for people to move into the city of Atlanta. Using housing data, you determine that the equilibrium rent for 1,500 square foot townhouses in Buckhead is \$1,500 a month for 10,500 units rented, while 1,500 square foot townhouses near the airport rent for \$1,200 a month for 5,500 units rented. A motion is before the city council to set the minimum rent for 1,000 (or greater) square foot townhouses in the city of Atlanta at \$1350 per month. What policy advise would you offer and how would you back up your conclusions? 5 points.

3. Assume that the market for airline tickets between Atlanta and San Francisco is in equilibrium at a average price of \$345 per ticket with a equilibrium quantity of 225,000 round trip tickets sold per month. Your research staff has informed you that the price elasticity for the Atlanta-San Francisco airline ticket market is estimated at 0.85 while the income elasticity is estimated at 1.5. Furthermore, they have estimated that the cross-price elasticity between the market for Atlanta-San Francisco airline tickets and the Amtrak rail tickets is 0.95. Answer the following questions based on this information. 10 points
 - 3.1 Assuming all else remaining equal, should you lower the price per airline ticket from Atlanta to San Francisco from \$345 to \$300? Provide a rationale for your answer. 3 points

- 3.2 Your sources in Washington D.C. have informed you that personal income is expected to increase by 3% in the coming year. Assuming all else remaining equal, what action should you take based on this information? What is the expected impact, all else remaining equal, on quantity demanded? 4 points
- 3.3 Amtrak announces a 50% price reduction in the price cross-country train tickets as a method of spurring the demand for train tickets. All else remaining equal, what impact can you expect this to have on the market for airline tickets between Atlanta and San Francisco? 3 points.

Section 3: Demonstration of Learning and Conceptual Knowledge 60 Points

1. Explain in your own words the relationship the concepts of absolute and comparative advantage? 15 points.
2. In your own words, explain how the substitution and income effects are related to demand. 15 points.

