Questions: economics

One: (10 points)

Tom leases a farmer's field and grows pineapples. Tom hires students to pick and pack the pineapples. The following table sets out Tom's total product schedule. Labor (students) Total Products (pineapples/per day) 2 220 3 4 5 6 420 7

1. Calculate the marginal product of the third student;

2. Calculate the average product of three students;

3. Over what numbers of students does marginal product increase?

4. When marginal product increases, compare average product and marginal product.

Two: (10 points)

Tulip growing is a perfectly competitive industry, and all tulip growers have the same cost curves. The market price of tulip is $15 a bunch, and each grower maximizes profit by producing 1 , 500 bunches a week. The average total cost of producing tulips is $21 a bunch, and the minimum average total cost is $18 a bunch.

1. How does the number of tulip growers change in the long-run?

2. What is the price in the long run?

3. What is a tulip grower's economic profit in the long-run?

Three: (10 points)

1. What is market share test?

2. What is tie-in sales?

3. What is horizontal merger?

4. What is antitrust law?

Four: (10 points)

The following table shows the total revenue of the 50 firms in the tattoo industry Name of firms Total revenue (dollars) Bright Sports 450 Freckles 325 Love Galore 250 Native Birds Next 16 firms (each) 50 Next 30 firms (each) 20 Total Revenue 2625

1. Calculate the four-firm concentration ratio;
2. How would you answer to part 1 change if the 50 firms in the tattoo industry in different cities spread across the nation?

Five: (10 points)

The following table depicts the output of a firm that manufactures computer printers. The printers sell for $100 each Labor Input (Workers Per Week)

Total Physical Output (printers per week) 10 200 11 218 12 14 260 15 270 16 278

1. Calculate the marginal physical product and marginal revenue product at each hires 15 workers?
2. The weekly wage paid by computer printer manufacturers in the perfectly competitive market is $1 , 200. How many workers will the profit maximizing employer hire?
3. Suppose that there is an increase in the demand for personal computer system. Explain the likely effects on marginal revenue product, marginal factor cost, and the number of worker hired by the firm.

Six: (10 points)

Country Poorest 40% Next Richest Bolivia 13 21 26 Chile 1 Uruguay

1. Draw a Lorenz Curve for Bolivia

2. Draw a Lorenz Curve for Chile

3. Draw a Lorenz Curve for Uruguay

Seven: (10 point)

1. Information product

2. Interactive marketing

3. Search good

4. Direct sale

Eight: (10 points)

Draw a graph for monopolistic competition, explaining why its quantity

supplied is below the market equilibrium

Nine: (10 points)

Village, a small isolated town, has onedoctor. For a 30-minute consultation,

the doctor charges a rich person twice as much as a poor person.

1. Does the doctor practice pricediscrimination?

2. Does the doctor's pricing system redistribute consumer surplus?

3. If so, explain how?

4. If the doctor decided to charge everyone the maximum price that he or

   she would be willing to pay, what would be the consumer surplus?

5. In part 4, is the market for medical service in Village efficient?

Ten: (10 points)

Bud and Wise are the only two producers of aniseed beer, a New Age product designed to displace root beer. Bud and Wise are trying to figure out how much this new beer to produce. They know that if they both limit production to 10, 000 gallons a day each, they would make the maximum attainable Joint profit of $200, 000 a day - $100, AAA day each.

They also know that if either of them produces 20, 000 gallons a day while the other produces 10, 000 a day, the one that produces 20, 000 gallons will make an economic profit of $1 50, 000 and the one that sticks with 10, 000 gallons will incur an economic loss of $50, 000. They also each know that if they both increase production to 20, 000 gallons a day, they will both earn zero economic profit.

1. Construct a payoff matrix for the game that Bud and Wise must play;
2. Find the Nash equilibrium;
3. What is the equilibrium if the game is played repeatedly?
4. If they cooperate, what will happen to them legally?