Part A: Essay Questions of Microeconomics

1. Bob values the utility of a single scoop of Baskin-Robbins ice cream at $1.50. A double scoop gives total utility of $2.25, while a triple scoop yields $2.60. Baskin-Robbins charges $1.35 for a single, $1.95 for a double, and $2.35 for a triple. How many scoops will Bob buy? And why?

2. What are the main determinants of demand elasticity? Explain their importance.

3. A minor-league baseball team is trying to predict ticket sales for the upcoming season and is considering changing ticket prices.
   a. The elasticity of ticket sales with respect to the size of local population is estimated to be about 0.7. Briefly explain what this number means. If the local population increases from 60,000 to 61,500, what is the change in ticket sales?
   b. Currently, a typical fan pays an average ticket price of $5. The price elasticity of demand for tickets is -0.6. Management is thinking of raising ticket price to $5.50. Compute the predicted change in tickets sold. Would you expect ticket revenue to rise or fall?
   c. The typical fan also consumes $4 worth of refreshments at the game. Thus, at the original $5 average price, each admission generates $5 + $4 = $9 in total revenue for team management. Would raising ticket price to $5.50 increase or reduce total revenue? Provide a careful explanation of your finding.

4. A 200-pound steer (a young male of domestic cattle) can be sustained on a diet calling for various proportions of grass and grain. These combinations are:

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<tr>
<th>Pounds of Grass</th>
<th>Pounds of Grain</th>
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<tr>
<td>50</td>
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<td>56</td>
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<td>80</td>
<td>54</td>
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<td>88</td>
<td>52</td>
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   a. Plot the isocost (production indifference curve) corresponding to the inputs necessary to sustain a 200-pound steer. Comment on its shape.
   b. The rancher’s cost of grass is $0.10 per pound; the cost of grain is $0.07 per pound. He prefers a feed mix of 68 pounds of grass and 60 pounds of grain. Is this a least-cost mix? If not, what is? Explain.
   c. The rancher believes there are constant returns to scale in fattening cattle. At current feed prices, what input quantities should he choose if he wants to raise the steer’s weight to 250 pounds?

5. What are the factors that contribute productivity growth in the market economy and which of them is considered most important?
Part B: Essay Questions of Macroeconomics

(總體經濟學試題，每題十分，共五題，佔五十分)

6. The total expenditure schedule in Macroland begins with these initial levels (in billions of dollars): Income = 1,000; Consumption = 900; Investment = 200; Government = 300; Net Exports = -100. If the MPC = 0.75 and income increases in increments of 200, find the equilibrium level of income. If full employment requires an income level of 2,000, what (if anything) should the government do? Indicate both the direction of the spending change and the size of the spending change.

7. Describe the main explanations for the downward rigidity of wages in the modern macroeconomy. Evaluate their probability of being correct and important.

8. The nominal interest rate on taxable bonds is 8%, while on municipal bonds (which are not taxable) it is 5%. The expected inflation rate is 3% and the tax rate on interest income is 40%. Calculate the expected after-tax real interest rate on both bonds. Which would be the better investment? Now suppose the actual inflation rate turned out to be 6 percent. Which bond was the better investment? Would your answer change if inflation had turned out to be 0%?

9. Suppose that a tariff is imposed on imports of maxivans. Show graphically what the effect is in terms of price and quantity of imports. Be sure that your graph is completely and correctly labeled. What determines how much of the tariff is paid by the buyers of the maxivans?

10. Compare the effectiveness of monetary policy in an open economy with mobile international capital to monetary policy in a closed economy. Why is it different? Use an appropriate diagram to illustrate your answer.