Instructions: You must answer TWO of THREE questions in Part I; ONE of TWO questions in Part II; and ONE of TWO questions in Part III. You may find it useful to use mathematics or graphs in your answers; these are not necessary, however, as long as you can clearly communicate the relevant concepts from the assigned readings and classroom discussion.

Part I. ANSWER TWO OF THE FOLLOWING THREE QUESTIONS

1. In the developing country of Freedonia, the currency (called the Groucho) is substantially overvalued. The Cabinet gets together to debate whether or not the Groucho ought to be devalued. The Finance minister argues that there are serious deadweight losses associated with an overvalued Groucho, and hence an immediate devaluation is called for. The Minister of Agriculture also thinks that the Groucho should be devalued on the grounds that producers of cotton (Freedonia’s major export) are being harmed by the overvaluation. The Interior Minister argues that a devaluation should not be undertaken. His reasoning is that devaluation would significantly increase the cost of imported rice, the dominant food staple consumed by the country’s urban dwellers, and would be particularly harmful to poor people.

Which Minister is correct? What should the government do? (25 points)

2. The government of a developing country needs to increase its revenues, and is considering imposing a tax of 1 Shilling on every kilogram of rice sold. A heated debate ensues within the Cabinet over whether or not this would be a sound policy. The Minister of Interior argues against the tax, claiming that a tax on rice would be very unfair to consumers, especially since rice is the dominant staple food in the country. The Minister of Agriculture argues against the tax on the basis that it would be very unfair to farmers, since rice is the most important agricultural commodity produced in the country. The Minister of Finance argues in favor of the rice tax on the grounds that because both supply and demand of rice are very inelastic, the tax would create relatively less distortions within the economy than taxing any other commodity.

Which of the Ministers should the President pay most attention to? Is it possible that more than one of the ministers is correct? Explain. (25 points)
3. The following table gives three different measures of the degree to which agricultural production is taxed or subsidized in two hypothetical countries. Use these data to answer this question.

<table>
<thead>
<tr>
<th>Country</th>
<th>Nominal Protection Coefficient</th>
<th>Real Protection Coefficient</th>
<th>Real Effective Protection Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>0.90</td>
<td>1.05</td>
<td>1.15</td>
</tr>
<tr>
<td>Country B</td>
<td>1.30</td>
<td>1.05</td>
<td>0.85</td>
</tr>
</tbody>
</table>

a. Which country has an overvalued exchange rate? (7 points)
b. Which country effectively taxes agriculture? (7 points)
c. Which country subsidizes inputs used in agriculture? (6 points)
d. In which country is agriculture more profitable? (5 points)

Part II. ANSWER ONE OF THE FOLLOWING TWO QUESTIONS

4. Consider a semisubsistence agricultural household that both produces and consumes wheat. If the price of wheat rises, will wheat consumption increase or decrease? Will marketed surpluses of wheat increase or decrease? Does it matter if the household is a net seller or net purchaser of wheat? (25 points)

5. We generally expect the uncertainties associated with farming to have a negative effect on the output of agricultural households in developing countries. Why is this so? Does it matter if the household is risk averse or risk neutral? Under what conditions would household supply under uncertainty not be less than household supply under certainty? (25 points)

Part III. ANSWER ONE OF THE FOLLOWING THREE QUESTIONS

6. Support or refute the following proposition: Because most successful agricultural innovations have been developed for favored production environments, farmers living in marginal production environments of developing countries have been systematically bypassed by improvements in agricultural technologies. Therefore, the best way to alleviate rural poverty in developing countries is to develop technologies that can be adopted by people living in marginal production environments. (25 points)

7. Support or refute the following proposition: A very large proportion of rural households in developing countries appear to be highly unresponsive to price policies and other attempts to provide incentives for increasing the marketed supply of agricultural commodities. The reason for this is that these households are not really interested in producing for the market; instead, they choose to produce only enough to feed themselves so that they can maximize the amount of leisure time that they enjoy. Because of this, the agricultural sector represents a poor choice as an “engine of growth” in developing countries. (25 points)